



## AN UPDATE ON THE STATUS AND TRENDS OF ACAP- LISTED ALBATROSSES AND PETRELS IN THE CCSBT AREA

### ACAP & BirdLife International

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### INTRODUCTION

Estimates of bycatch in global longline fisheries indicate that 160,000 – 320,000 seabirds, mostly albatrosses, petrels and shearwaters, are killed each year (Anderson *et al.* 2011). These estimates may be understated by as much as 50% or more due to lack of observer data, under-estimates in observer data, or under-reporting (Brothers *et al.* 2010, Anderson *et al.* 2011). Such levels of incidental mortality are known to have resulted in, or are contributing to, population declines for a number of these species (e.g. Wanless *et al.* 2009; Weimerskirch *et al.* 1997).

Of the 22 species of albatrosses found globally, 18 overlap in distribution with the Southern Bluefin Tuna (SBT) fishery, as do seven of the nine petrel species also listed under the Agreement on the Conservation of Albatrosses and Petrels (ACAP). This paper provides a summary of the status and trends of albatross and petrel species listed under Annex 1 of ACAP that breed or forage in areas where Southern Bluefin tuna are fished (**Table 1**).

### CONSERVATION STATUS

Of the 18 species of albatrosses with distributions that overlap with the SBT fishery, the International Union for Conservation of Nature (IUCN) lists:

- two as *Critically Endangered* (CR),
- five as *Endangered* (EN),
- six as *Vulnerable* (VU) and
- five as *Near Threatened* (NT).

Of the seven ACAP petrel species with distributions that overlap with the SBT fishery, the International Union for Conservation of Nature (IUCN) lists:

- four are listed as VU,
- one as NT and
- two as *Least Concern* (LC).

There have been no changes in IUCN status of any ACAP species since ERSWG11 in 2015, because IUCN updates for ACAP species scheduled for 2016 have been postponed to 2017.

## STATUS OF KNOWLEDGE RELATING TO POPULATION SIZE AND TRENDS

Comprehensive knowledge of population size, trend and demographic parameters is fundamental to many aspects of albatross and petrel conservation, and is vital to monitoring the effectiveness of management actions. ACAP collates breeding site, trend and other data for all albatrosses and petrels listed under the Agreement, in addition to information held by BirdLife International, the IUCN Red List authority for all birds. Although the size of most populations has been determined at some point in time, the trend and current demographic statistics for many populations are less well known, due to the high level of resources required to access remote sites at appropriate intervals. Determination of global trends can also be difficult because populations of the same species at different sites may show different trajectories.

At its second meeting in September 2014, ACAP's Population and Conservation Status Working Group (PaCSWG) examined the current (1993-2013) global trends of species listed under the Agreement. The approach combines census information submitted to the ACAP database ([data.acap.aq](http://data.acap.aq)) and results of any available population models. The time span of two decades was considered appropriate to reflect the trend of these long lived species, some of which breed only every two years, and which may show high annual variation in breeding numbers. The confidence of the assigned trend reflects both the accuracy and extent of the population data.

Of the 18 species of albatrosses with distributions that overlap with the SBT fishery, the PaCSWG assessed:

- Eight as *declining* over the last 20 years
- Six as *stable*
- Two as *unknown*
- Two as *increasing*

Of the seven ACAP petrel species with distributions that overlap with the SBT fishery, the PaCSWG assessed:

- Three as *declining* over the last 20 years
- One as *stable*
- Three as *increasing*

The trends are reviewed on a triennial basis or sooner if significant new information becomes available for any of the species. Following this approach, the trend for the Shy Albatross (*Thalassarche cauta*) was revised to declining at the third meeting of the PaCSWG in May

2016. The next full review assessing the 1997-2016 trends will be discussed at the fourth meeting of the PaCSWG in September 2017.

A review of the conservation status and priorities for albatrosses and large petrels was recently published in *Biological Conservation* (Phillips *et al.* 2016). Further information can also be found in the species assessments developed by ACAP (<http://www.acap.aq/en/acap-species>) which provide comprehensive information on the distribution, biology and threats facing all ACAP species. These are currently being updated. Species information used in the IUCN Red List can also be found in the BirdLife International Factsheets (<http://www.birdlife.org>).

## REFERENCES

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Table 1. 2016 summary of status and trends of ACAP species breeding/foraging in the SBT fishery area.

Species	Common name	Number of sites <sup>1</sup>	Breeding sites responsibility	Breeding Frequency <sup>2</sup>	Annual breeding pairs (latest census year) <sup>1</sup>	Current Trend 1993-2013 <sup>3</sup> (trend confidence)	IUCN Status 2016 <sup>4</sup>	IUCN Status Justification <sup>4</sup> and other notes <sup>5</sup>
<i>Diomedea amsterdamensis</i>	Amsterdam Albatross	1	France	B	46 (2014)	↑ (High)	CR	Extremely small population, confined to a tiny area on one island. Although numbers have been increasing since 1984, the species has been CR on the basis of its very small population and projected impact of disease. A discussion is underway in 2016-17 regarding potential downlist to EN.
<i>Diomedea dabbenena</i>	Tristan Albatross	1	UK	B	1,109 (2016)	↓ (High)	CR	Extremely small breeding range and a projected extremely rapid population decline over three generations (70 years). Modelled population declines are a consequence of very low adult survival owing to incidental mortality in longline fisheries, compounded by low fledging success caused by predation of chicks by introduced mice.
<i>Diomedea sanfordi</i>	Northern Royal Albatross	5	NZ	B	5,781 (1995-2016)	?	EN	Restricted to a tiny breeding range in which severe storms in the 1980s resulted in a decrease in habitat quality, which led to poor breeding success. Based on this low breeding success, the population is estimated and projected to be undergoing a very rapid decline over three generations (1985-2069). Work is underway in 2016 and 2017 to assess trend using satellite imagery.
<i>Phoebastria fusca</i>	Sooty Albatross	15	France, South Africa, UK	B	12,103 (1974-2015)	↓ (Very Low)	EN	Very rapid decline over three generations (90 years), probably owing to interactions with fisheries. Since 1980, three sites (Crozet, Marion and Gough) have witnessed severe declines, although the population at Prince Edward may have increased between 2002-2009. However, high variability in population counts between years necessitates caution and further data are required before a change in status should be considered.
<i>Thalassarche carteri</i>	Indian Yellow-nosed Albatross	6	France, New Zealand, South Africa	A	39,320 (1984-2009)	↓ (Medium)	EN	Estimated very rapid ongoing decline over three generations (71 years), based on data from the population stronghold on Amsterdam Island. This decline is thought to be the result of adult mortality and poor recruitment owing to interactions with fisheries and disease.
<i>Thalassarche chlororhynchos</i>	Atlantic Yellow-nosed Albatross	6	UK	A	33,650 (1974-2011)	↔ (Low)	EN	Very small breeding range and estimated to be undergoing a very rapid ongoing decline projected over three generations (72 years), thought to be the result of incidental mortality in longline fisheries. Population models updated in 2016 (i.e. since the most recent ACAP PaCSWG meeting) predict annual decreases of between 1.5-2.8% on Gough Island and 5.5% on Tristan da Cunha. Counts at a small monitoring site on Tristan indicate a stable population from 1984 – 2015, but it is thought that this may be due to immigration. Updated population counts from Tristan da Cunha and Gough Island will be available in 2017.

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<i>Thalassarche chrysostoma</i>	Grey-headed Albatross	29	Australia, Chile, France, New Zealand, South Africa, South Georgia (Islas Georgias del Sur)*	B	98,096 (1982-2016)	↓ (Medium)	EN	Data from some major colonies, in particular South Georgia (Georgias del Sur)*, which holds around half the global population, suggest that overall declines are taking place at a very rapid rate over three generations (90 years), even if colonies lacking trend information are assumed to be stable. The major driver of declines is likely to be incidental mortality on longline fisheries.
<i>Diomedea antipodensis</i>	Antipodean Albatross	6	NZ	B	7,029 (1995-2013)	↓ (Medium)	VU	Largely confined to three small islands when breeding and is therefore highly susceptible to stochastic effects and human impacts. Recent data (2005-2008) from the Auckland Islands indicate declines in adult survival, productivity and recruitment. Population models (Francis et al. 2015; Edwards et al 2016) indicate a reclassification of EN or CR is likely. The IUCN status will be reassessed in 2017.
<i>Diomedea epomophora</i>	Southern Royal Albatross	4	NZ	B	7,929 (1989-2015)	↔ (Medium)	VU	Although current population trends are assumed to be stable, this species has a very small range, breeding on four islands, although largely confined to just one, therefore highly susceptible to stochastic effects and human impacts.
<i>Diomedea exulans</i>	Wandering Albatross	39	Australia, France, South Africa, South Georgia (Islas Georgias del Sur)*	B	8,176 (1981-2016)	↓ (High)	VU	Overall past and predicted future declines amount to a rapid population reduction over a period of three generations. At South Georgia (Islas Georgias del Sur)*, this species has undergone a rapid decline over three generations (70 years). On the Crozet and Kerguelen Islands, the populations rapidly declined between 1970-1986, then stabilised, but have recently declined again. Longline fishing is believed to be a main cause of decline in this species, causing reductions in adult survival and juvenile recruitment, and this threat is ongoing.
<i>Procellaria aequinoctialis</i>	White-chinned Petrel	73	Falkland Islands (Islas Malvinas)*, France, New Zealand, South Africa, South Georgia (Islas Georgias del Sur)*	A	1,202,568 (1984-2015)	↓ (Very Low)	VU	Suspected rapid declines, although almost no reliable estimates of historical populations exist. Very high rates of incidental mortality in longline fisheries have been recorded in recent years; the probability that these circumstances will continue and its susceptibility to predation and the degradation of breeding habitat indicate that a rapid and on-going population decline is likely. An updated assessment of the population on South Georgia (Islas Georgias del Sur) (c. 75% global population) is needed in order to fully assess the overall trend, and has been conducted in early 2017, with results available late 2017.
<i>Procellaria conspicillata</i>	Spectacled Petrel	1	UK	A	14,400 (2010)	↑ (High)	VU	Owing to its very small breeding range, it is highly susceptible to stochastic events and human activities.

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<i>Procellaria parkinsoni</i>	Black Petrel	2	NZ	A	1,500 (1998-2016)	↓ (Medium)	VU	Breeds on just two very small islands where introduced predators are a potential threat.
<i>Procellaria westlandica</i>	Westland Petrel	1	NZ	A	2,827 (2011)	↔ (Low)	VU	Restricted to one very small area when breeding, rendering the population highly vulnerable to stochastic events and other potential threats.
<i>Thalassarche eremita</i>	Chatham Albatross	1	NZ	A	5,245 (2011)	↔ (Medium)	VU	Very small breeding range (restricted to one breeding site) rendering it susceptible to stochastic events and human impacts. A 2016 population count will be available in 2017.
<i>Thalassarche impavida</i>	Campbell Albatross	2	NZ	A	21,648 (2012)	↔ (Low)	VU	Breeding is restricted to a single location, where it is susceptible to potential human impacts and stochastic events. Numbers decreased steeply between the 1970s and 1980s owing to interactions with fisheries. The population was then thought to be stable or slightly increasing between 1984 – 1997 (Waugh et al. 1999). More recently, numbers have shown an uncertain trend with a non-significant decrease 2006-2012 compared to 1995-1997 (Sagar 2014).
<i>Thalassarche salvini</i>	Salvin's Albatross	12	NZ	A	41,214 (1986-2014)	↓ (Low)	VU	May have undergone a rapid decline, but different census methods make a comparison of the available data potentially misleading. However, breeding is largely restricted to one tiny island group, where it is susceptible to stochastic events.
<i>Procellaria cinerea</i>	Grey Petrel	17	Australia, France, New Zealand, South Africa, UK	A	75,610 (1981-2015)	↓ (Very Low)	NT	Although there are no current trend data, this species is susceptible to introduced mammalian predators, and today it is the most commonly caught bycatch species in longline fisheries in New Zealand waters. Evidence from Gough Island, formerly thought to contain the largest population of this species, suggest that the species is likely to be subjected to considerable predation from introduced mice that are a major predator on other winter-breeding seabirds. The population on the Kerguelen Islands may also be in decline due to fishery bycatch. Based on these data a moderately rapid decline is suspected, but further data are urgently required in order to more accurately assess its population numbers and trends.
<i>Thalassarche bulleri</i>	Buller's Albatross	10	NZ	A	29,941 (1971-2014)	↔ (Low)	NT	Although the species is restricted to a tiny small area when breeding, the population is stable and the islands on which it breeds are moderately widely spread.

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<i>Thalassarche cauta</i>	Shy Albatross	3	Australia	A	13,834 (2015-2016)	↓ (Low)	NT	Breeds on just three islands and may be susceptible to stochastic events and human activities, although one nesting site is moderately widely separated from the other two. Albatross Island holds c. 30% of the global population. Historically, numbers have been recovering after cessation of feather exploitation. However, data from 2005 – 2014 indicate a decline at this site. Few data are available from Mewstone Island (65% global population).
<i>Thalassarche melanophris</i>	Black-browed Albatross	65	Australia, Chile, Falkland Islands (Islas Malvinas)*, France, New Zealand	A	691,194 (1982-2016)	↑ (High)	NT	Data from the Falkland Islands (Islas Malvinas)*, holding over 70% of the global population, showed population increases during the 2000s and possibly since the 1980s. However, there remains a considerable degree of uncertainty over population trends for a significant part of the global population, and trend estimates are heavily influenced by the extrapolation over 65 years of data from a ten-year period. In addition, high levels of mortality of this species are reported from longline and trawl fisheries in the South Atlantic. Moderately rapid ongoing declines over three generations since 1980 are precautionarily suspected until further data are forthcoming.
<i>Phoebastria palpebrata</i>	Light-mantled Albatross	71	Australia, France, New Zealand, South Africa, South Georgia (Islas Georgias del Sur)*	B	11,003 (1954-2015)	↔ (Very Low)	NT	Population status, trends and threats are poorly known, but the population may have declined over a 3-generation period, owing to bycatch on longline fisheries and perhaps the impacts of introduced predators.
<i>Thalassarche steadi</i>	White-capped Albatross	5	NZ	?	95,917 (1995-2015)	?	NT	The population trend of this albatross remains poorly known, as there is high inter-annual variability in breeding numbers and estimates prior to 2007 are not comparable with those made since. Analysis of recent data suggest that the trend may in fact be stable, but the species remains categorised as Near Threatened given the continuing uncertainty over its trend and because, given its longevity and slow productivity, and a high rate of mortality recorded in longline and trawl fisheries, it may be declining at a moderately rapid rate.

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<i>Macronectes giganteus</i>	Southern Giant Petrel	119	Antarctic Treaty, Argentina, Australia, Chile, Falkland Islands (Islas Malvinas)*, France, South Africa, South Georgia (Islas Georgias del Sur)*, UK	A	47,746 (1958-2016)	↑ (Medium)	LC	Recent analysis of trend data for the global population over the past three generations (64 years) gives a best case estimate of a 17 % increase and a worst case scenario of a 7.2 % decline (Chown <i>et al.</i> 2008 unpubl. report to SCAR).
<i>Macronectes halli</i>	Northern Giant Petrel	50	Australia, France, New Zealand, South Africa, South Georgia (Islas Georgias del Sur)*	A	10,608 (1973-2015)	↑ (Medium)	LC	Had been predicted to undergo a moderately rapid population decline in the near future but has instead shown a significant increase during the past two decades (probably owing to greater availability of carrion from expanding populations of fur seals, increased waste from commercial fishing operations, and the use of measures to reduce seabird bycatch around some breeding colonies).

\*A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Islas Malvinas), South Georgia and the South Sandwich Islands (Islas Georgias del Sur e Islas Sandwich del Sur) and the surrounding maritime areas.

<sup>1</sup> **Site:** usually an entire, distinct island or islet, or rarely, section of a large island (>3,000km<sup>2</sup>). ACAP database. <[data.acap.aq](http://data.acap.aq)>. 13 February 2017.

<sup>2</sup> **Breeding Frequency:** A = Annual, B = Biennial

<sup>3</sup> **ACAP Trend:** ↑ increasing, ↓ declining, ↔ stable, ? unknown

<sup>4</sup> **IUCN Status:** CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern. The IUCN Red List of Threatened Species. Version 2016-3. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 13 February 2017.

<sup>5</sup> BirdLife International (2017) Species factsheets. Downloaded from <http://www.birdlife.org> on 16/02/2017