WANDERING ALBATROSS | Diomedea exulans

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Conservation Status:	Vulnerable
Southern African Range:	Waters off Namibia, South Africa, southern Mozambique
Area of Occupancy:	Unknown
Population Estimate:	Approximately 8,500 breeding pairs globally
Population Trend:	Stable, increasing in southern Africa, declining elsewhere
Habitat:	Open ocean
Threats:	Longline fisheries, marine debris

DISTRIBUTION AND ABUNDANCE

This is the world's largest species of albatross. Adults wander the southern oceans extensively from their breeding islands at South Georgia, Prince Edward and Marion islands, Crozet Islands and Kerguelen Islands, Macquarie Island (Gales 1998) and occasionally at Heard Island (Ryan 2005a), with nonbreeding birds foraging over a huge area encompassing the entire southern Atlantic, Pacific and Indian Oceans. This species is rarely seen in inshore waters of southern Africa, but is more numerous at the shelf edge and beyond (Ryan & Rose 1989, Boyer & Boyer 2005). Estimates of the number of birds visiting Namibian waters are lacking, but satellite tracking data from breeding and non-breeding individuals suggest that they are uncommon (BirdLife International 2010)



and sighting records need to be carefully scrutinised to rule out confusion with the similar Tristan Albatross *D. dabbenena*.

Since the first comprehensive counts were made in the 1960s and 1970s, the global breeding population has undergone a sharp decline to an estimated 8,500 breeding pairs, or about 28,000 mature individuals in the 1990s (Gales 1998) and to about 6,100 pairs (or 20,000 mature individuals) by 2012 (IUCN 2012a). All populations have shown decreases at some stage in the last 25 years. About 44% of the global population breeds on the Prince Edward Islands Group, including Marion Island (ACAP 2009b). Numbers at Marion Island decreased between the mid-1970 to the mid-1980s, increased through the 1990s and declined again between 1998 and 2007 (ACAP 2009b).



Wandering Albatrosses are biennial breeders on just six oceanic islands or island groups that are scattered throughout the southern ocean (Croxall & Gales 1998, ACAP 2009b). Birds normally start breeding at nine to 12 years of age and have an average life span of 30 to 40 years (BirdLife International 2004). At Marion and Prince Edward islands, birds as young as five to seven years old have bred, but their success is lower than that of older birds (Nel *et al.* 2003). A successful breeding attempt extends over roughly one year; a single egg is laid during December or January and the chick fledges the following December (ACAP 2009b). This species forages over the entire southern ocean, undertaking spectacularly long journeys covering thousands of kilometres to capture squid and fish before returning to its breeding islands (Jouventin & Weimerskirch 1990). Breeding birds may forage up to 4,000 km from their breeding colony and foraging strategies tend to change throughout the breeding season (Weimerskirch *et al.* 1993, Weimerskirch 1998a). They readily follow fishing vessels for fisheries discards, sometimes in large groups (ACAP 2009b).

THREATS

This long-lived, wide-ranging species with a complex life history that includes late maturity and a slow reproductive rate, is killed as incidental bycatch during fishing activities in its southern ocean range (Gales 1998). Birds attempt to remove bait from hooks during setting operations as they sink below the surface of the water, and consequently drown as the line continues to sink. This has reduced adult survival and juvenile recruitment (Rolland et al. 2010). In southern African waters, current extrapolated estimates of mortalities due to longline operations are small, with an estimated nine Wandering Albatrosses killed between 2000 and 2003 (Petersen 2005). However, a further 341 unidentified albatrosses were reported in the same period (Petersen 2005), some of which were undoubtedly this species. Apart from directly affecting survival rates, this threat also influences other aspects of population dynamics, for example decreased breeding success and disruption of pair bonds following the death of a partner (Ryan 2005a).

Adult survival estimates at some colonies, including at Marion and Prince Edward islands, have increased since 1997, partly because the longlining effort has been reduced around the breeding islands, but especially because of an overall reduction in the effort of Japanese longline fleets in the southern Indian Ocean (Nel et al. 2003). However, the recovery of the species continues to be hampered by low survival rates of juvenile birds that forage predominantly in subtropical waters of the southern Indian Ocean, where the tuna longline fishery continues to expand (Weimerskirch et al. 2006). Due to the small number of Wandering Albatrosses likely to forage in waters off Namibia, few are likely to encounter the fishing fleets operating there. Chicks are vulnerable to the ingestion and subsequent accumulation of marine debris and fishing gear, including plastics pieces, fishing line and fish hooks (Nel & Nel 1999).

CONSERVATION STATUS

The Wandering Albatross has been evaluated as *Vulnerable* in Namibia, based on the observed and inferred rates of decline of some populations. Although all populations have decreased at some stage since the 1980s, those breeding in southern African waters (Prince Edward and Marion islands) appear relatively stable and their regional conservation status may need to be re-evaluated. The species is listed as *Vulnerable* globally (IUCN 2012a) and in South Africa (Taylor *et al.* in press),

based on an overall decline of more than 30% in the last three generations, spanning 70 years. The Wandering Albatross is listed in Appendix II of the Convention for the Conservation of Migratory Species of Wild Animals (CMS), in Annex 1 of the Agreement on the Conservation of Albatrosses and Petrels (ACAP) and should be given *Specially Protected* status in Namibia.

Most of the actions required for this species are the same as those for other albatrosses listed in this book. The most urgent research action is to continue the gathering of reliable statistics on the extent of fisheries-induced mortalities in Namibian waters. The draft National Plan of Action (NPOA) for seabirds, together with draft regulations regarding the implementation of mitigation measures to reduce bycatch needs to be ratified by the Namibian government and strictly enforced. Mitigation measures outlined in the NPOA stipulate:

- Setting lines at night (after nautical dusk, before nautical dawn).
- Reducing deck-lighting.
- Using bird-scaring lines with fluttering streamers (tori line) next to the baited longline or trawl warps (the steel cables that tow nets).
- Using appropriate and adequate weights to ensure a fast sink rate for the baited hooks;
- Discarding offal without posing an additional bycatch risk.
- Thawing bait completely to prevent baited hooks floating to the surface.
- Using a deck-delivery system, where possible, that introduces the baited line directly into the ocean without exposure to foraging birds.

Every fishing vessel operating in Namibian waters (and outside territorial waters) should, by law, carry a trained observer and implement all of the recognised actions to reduce seabird mortalities, before being allowed to fish under Namibian license.

There are well-publicised efforts to reduce the bycatch of longline vessels under the agreements with the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLAR) and the Agreement on the Conservation of Albatrosses and Petrels (ACAP). The area outside territorial waters off Namibia, where Wandering Albatrosses are most likely to interact with fisheries, is covered by international agreements with the International Commission for the Conservation of Atlantic Tuna (ICCAT) and the South East Atlantic Fisheries Organisation (SEAFO), but concrete seabird bycatch mitigation guidelines and legislation for these agreements are lacking.