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FACT-SHEET ON:

Albatrosses of South Georgia

UK Overseas Territory: South Georgia and the South Sandwich Islands (SGSSI)

South Georgia is a very important breeding area for several species of globally threatened albatross species. These include Grey-headed Albatross *Thalassarche chrysostoma* (Endangered), Wandering Albatross *Diomedea exultans* (Vulnerable), and Light-mantled Sooty Albatross *Phoebastria palpebrata* (Near-threatened). The Black-browed Albatross *Thalassarche melanophrys* also breeds there, but in smaller numbers than its main breeding area, the Falkland Islands.

Wandering Albatross *Diomedea exultans*

The Wandering Albatross has a circumpolar breeding distribution with large populations at four island groups: South Georgia in the Atlantic, and Prince Edward Islands, Îles Crozet, Îles Kerguelen, all in the S Indian Ocean, and a very small population on Macquarie Island in the SW Pacific.

Nesting is mainly in gently undulating tussac grasslands. Pairs nest on a 2-year cycle: adults return to colonies in November, about a month before egg-laying. Incubation is December-March, brood period March-mid-May, and post-brood chick rearing from May-December. Monitoring at Bird Island, which supports about 60% of the South Georgia population, demonstrates a decrease from an average of 1714 pairs in 1962-1964, to 772 pairs in 2014/15. The rapid decline in numbers between the mid-1990s and the mid-2000s (>4% per annum) has since ceased, with numbers relatively stable over the last 7-8 years, albeit at a level substantially reduced from the 1960s.

IUCN-listed globally as Vulnerable but, given their steep decline, the South Georgia population meets the IUCN criteria for Endangered status at regional level. This decline has led to it being identified as one of the Agreement on the Conservation of Albatrosses and Petrels (ACAP) high priority populations.

Incidental fisheries mortality (bycatch) is currently the main threat. The Government of SGSSI has collaborated with the fishing industry to protect albatrosses in the waters around South Georgia. Modern fisheries management techniques have all but eliminated seabird by-catch in the maritime zone, and supported the designation of the toothfish fishery as the highest-scoring Marine Stewardship Council certified fishery in the world. But the wide range of these and other albatrosses, over many thousands of miles, takes them into contact with other, less well-managed, fisheries, presenting the residual threat.

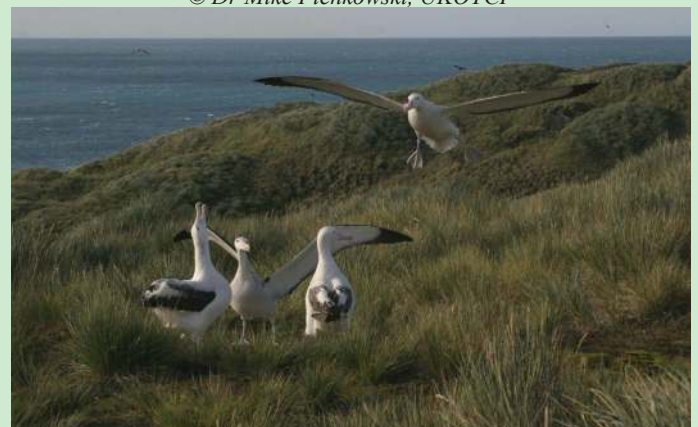
When breeding, Wandering Albatrosses from South Georgia range widely in the south-west Atlantic, between southern Brazil (25°S) and the Antarctic Peninsula (68°S), and between waters off Tristan da Cunha (19°W) to the Patagonian Shelf in the west and up to 85°W off the Pacific coast off southern Chile, mostly in pelagic waters. During the brood-period, however, (March- mid-May), foraging trips are mostly restricted to the South Georgia shelf and shelf-slope areas. In May-December,



Above: Wandering Albatross over nesting islet off South Georgia, with the main island behind. Below: Display as bird lands with others.

Bottom: On nest on islet, with South Georgia beyond.

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foraging trips of chick-rearing adults of both sexes are much more dispersed, extending to upwelling areas over the outer slope of the Patagonian Shelf. During chick-rearing, females tend to disperse further north than males into subtropical waters. The southern Patagonian Shelf is also utilised by non-breeding birds, and hence is an important foraging area year-round.

The diet is diverse, with fish, a wide variety of squid, and crustaceans all important. Wandering Albatrosses are well known followers of fishing vessels, and compete for discards.

Successful eradication of introduced Norway Rats *Rattus norvegicus*, House Mice *Mus musculus* and Reindeer *Rangifer tarandus* have recently (2015) been completed. Although there is no evidence that any of these introduced mammals were a threat to albatrosses at South Georgia, their eradication is a significant contribution to conservation. The devastating impact of House Mice on Tristan Albatrosses *Diomedea dabbenena* at Gough Island highlights the potential for rodents to become a threat to albatrosses at South Georgia, especially if introduced.

Grey-headed Albatross

Thalassarche chrysostoma

Grey-headed Albatrosses nest in colonies on several islands in the Southern Ocean, with large colonies on South Georgia in the South Atlantic, and smaller colonies on Islas Diego Ramírez, Kerguelen Islands, Crozet Islands, Marion Island, & Prince Edward Islands in the Indian Ocean, Campbell Island & Macquarie Island S of New Zealand, and Chile. While breeding, they forage within or S of the Antarctic Polar Frontal Zone.

At sea the Grey-headed Albatrosses are highly pelagic, more so than other mollymawks (the smaller albatrosses, including 3 of the species breeding here, but not the larger Wandering), feeding in the open oceans rather than over the continental shelves. Food is predominantly squid, with some fish, crustacea, carrion, cephalopods and lampreys. They are capable of diving as deep as 7 m (23 ft) to chase prey, but do not do so frequently.

A single egg is laid in a large nest, typically on steep slopes or cliffs with tussock grass, and incubated for 72 days. Studies at South Georgia's Bird Island have shown that the growing chick is fed 616 g of food every 1.2 days, increasing weight to around 4,900 g. Chicks then tend to lose weight before fledging, which happens after 141 days. Young will generally not return to the colony for 6–7 years after fledging, and will not breed until several years after that. If a pair has managed to raise a chick, they will not breed the following year, taking the year off. During this time spent away from the colony, they can cover great distances, often circling the globe several times.

IUCN classifies this bird as Endangered, due to rapidly declining numbers in South Georgia, which holds around half the world's population, with 48,000 pairs. Bird Island numbers have reduced 20% to 30% in the last 30 years. Overall, the world trends look like a 30-40% reduction over 90 years (3 generations). Illegal or unregulated fishing in the Indian Ocean for the Patagonian Toothfish *Dissostichus eleginoides* resulted in 10-20,000 dead albatrosses, mainly this species, in 1997 and 1998. Longline fishing is responsible for other deaths.

Light-mantled Sooty Albatross

Phoebastria palpebrata

The Light-mantled Sooty Albatross has a circumpolar pelagic distribution in the Southern Ocean. It ranges in latitude from the pack-ice around Antarctica (to 78°S) to about 35°S. When foraging during the breeding season, the birds remain closer to their nest sites.

About 30% of the declining world population of 24,000 pairs nest at South Georgia, the island with the largest number. Nesting habitat and breeding distribution are fairly similar to, but the latter slightly wider than, the Grey-headed.



Above: Grey-headed Albatrosses feed off South Georgia.



Left: Light-mantled Sooty Albatross near South Georgia.

Below: Mixed colony of these two species at South Georgia.

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A single egg is incubated alternately by both parents in shifts that vary from a day or two up to nearly a month in length. The incubation period is 65-72 days. After hatching in December-January, chicks are brooded in shifts for about 20 days, following which they are left alone in the nests while the adults forage, returning to feed the chicks by regurgitation every 2 to 3 days. The entire nestling period from hatching to fledging, which occurs in May-June, lasts 140-170 days. Pairs form committed pair-bonds which may last for decades, being renewed through complex courtship displays at the breeding site. On average, birds begin breeding when they are 8-15 years old, after which they breed biennially, fledging a chick every five years or so. They are capable of breeding until at least 32 years old and living to 40 or longer.

The principal diet consists of squid and krill, though other crustaceans and fish are taken as well as seal, penguin and petrel carrion. They sometimes feed in association with pilot whales and southern right whale dolphins, and occasionally follow ships.

At sea they are threatened by bycatch in the longline fishery and through starvation by eating plastic marine debris.