short-tailed shearwaters
in the Atlantic Ocean

The Short-tailed Shearwater *Ardenna tenuirostris* is one of the world's most abundant seabirds. Despite only breeding at islands off Tasmania and southern Australia, the total population is of the order of 30 million individuals. Like its close relative the Sooty Shearwater, it is a trans-equatorial migrant, wintering in the North Pacific Ocean and Bering Sea. During the austral summer, the birds travel south to about 60–68°S from the mouth of the Ross Sea to roughly 50°E.

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Confusion with Sooty Shearwaters meant that it was only in the 1980s that researchers realised that Short-tailed Shearwaters ventured so far south. The two species are tricky to separate at sea and the presence of Short-tailed Shearwaters in Antarctic waters was only confirmed by examining birds that had died after colliding with research vessels. Initially it was assumed that these birds were non-breeders, but tracking and stable isotope studies in the late 1990s confirmed that breeding birds routinely forage in Antarctic waters.

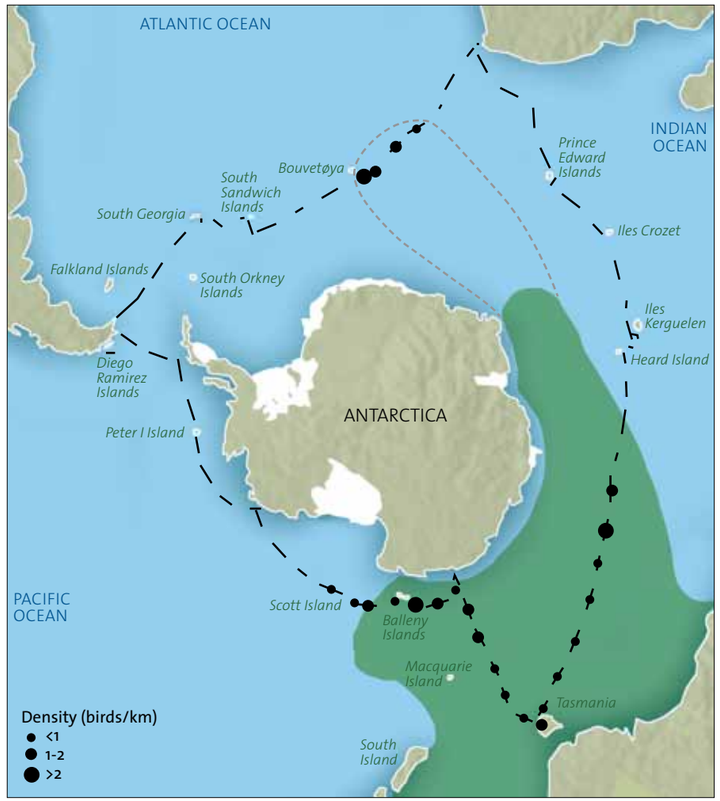
Breeding adults travel south from their colonies to around 60–68°S, then disperse west along the edge of the retreating sea ice to 50–60°E, feeding mainly on Antarctic krill. They travel back east at slightly lower latitudes than on their outward journeys to take advantage of the prevailing westerly winds in the Furious Fifties. These prodigious foraging trips, which can involve travelling up to 5000 kilometres from the colony and last as long as 30 days, are among the most extended of any birds provisioning chicks, although adults do undertake short foraging trips close to their colonies in between these long trips to feed their chicks more frequently. After breeding, adults undertake one final trip to Antarctic waters to build up their fat reserves before they embark on their long migration through the western Pacific to their wintering grounds. They need enough fat stores to carry them through the food-poor tropics.

above and left *Short-tailed Shearwaters appear more compact than Sooty Shearwaters, with shorter bills and longer toe projection.*

Until recently, the westernmost record of a Short-tailed Shearwater was an adult female equipped with a satellite transmitter that abandoned her breeding attempt and was last detected heading west at 64°S 37°E, roughly due south of South Africa's Prince Edward Islands, on 7 April 1997. In April 2008 I observed several flocks of birds that I initially thought were Short-tailed Shearwaters south of the Conrad Rise (56°S 40°E). However, I eventually wrote them off as Sooty Shearwaters as I lacked first-hand experience of Short-taileds.

In summer 2016–2017 I was fortunate to join the Antarctic Circumnavigation Expedition (ACE), which travelled from Cape Town to Hobart, Punta Arenas and back to Cape Town. This gave ample opportunity to become familiar with Short-tailed Shearwaters in the eastern Indian Ocean and western Pacific Ocean sectors of the Southern Ocean. I was therefore well placed to identify the species when we encountered flocks of hundreds of birds from 0–8°E near Bouvetøya in mid-March 2017. This is more than 2000 kilometres farther west than the previous westernmost record of the species and the first record from the Atlantic Ocean sector of the Southern Ocean.

Short-tailed Shearwaters are slightly smaller than Sooty Shearwaters and, with the aid of a good photograph, can be separated by their shorter bill, more rounded head and longer toe projection. Most have somewhat darker underwings and lack the indistinct darker lines across the inner underwing coverts found in Sooty Shearwaters, although underwing colour varies greatly with light conditions and among individuals. In terms of their jizz, Short-taileds look more dumpy than Sooty Shearwaters, with a shorter neck that usually is raised slightly, not extended straight ahead. But perhaps their most distinctive feature is their more frenetic flight action, flapping faster and arcing higher after controlling for wind strength than Sooty Shearwaters do. That said, it is hard to identify lone birds without the help of good images. We relied on photographs to confirm the identity of birds and more distant individuals could not be identified with certainty.



The track of the ACE cruise (black dashed line) showing where we saw Short-tailed Shearwaters (black circles) in relation to the species' known summer range (green shaded area) and the likely range in March 2017 (grey dashed line).

The presence of large numbers of Short-tailed Shearwaters in the central Atlantic sector of the Southern Ocean in late summer raises the possibility that some birds migrate into the North Atlantic Ocean, accompanying flocks of Sooty and Great shearwaters. A few might also stray into African waters. Barrie Rose and Ian Sinclair were pretty confident that they observed one from an oil rig near Mossel Bay in the 1990s, but the record was not accepted given the limited understanding of how to separate the species from Sooty Shearwater in those days. It remains to be seen whether the westward irruption in 2017 was an unusual event or whether the species routinely travels this far west in late summer.

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Reference

Ryan, P.G., Le Bouard, F. and Lee, J. 2017. 'Westward range extension of Short-tailed Shearwaters in the Southern Ocean.' *Polar Biology* DOI 10.1007/s00300-017-2146-8