to the edge and back

CELEBRATING SEABIRDS

PHOTOGRAPHS **PETER RYAN**

FLOCK AT SEA 2017 promises to be the largest ever group of people birding together over a period of several days. **Peter Ryan** considers what attracts thousands of birders from all corners of South Africa and beyond to gather for the mother of all pelagic birding trips. >

THIS APRIL BirdLife South Africa's annual 'Flock' gathering involves chartering a massive cruise liner to travel to the edge of the Agulhas Bank, south of Africa. The main aim is to search for oceanic seabirds that seldom venture close to the continent. Flock at Sea 2017 builds on the success of the event held in 2013, when some 1000 birders took a scheduled cruise from Cape Town to Walvis Bay and back. Despite the fact that the route hugged the coastline most of the way, sufficient birds were seen to convince the organisers that a dedicated seabird cruise is possible on one of these floating palaces.

Undoubtedly part of the appeal of a Flock at Sea is the opportunity to catch up with friends you might otherwise only see at the occasional twitch. But for most birders the main attraction is the chance to connect with some of the extralimital seabirds that are not usually seen during one-day pelagic trips – and to do so in considerably more comfort than from a small boat (albeit at the cost of not getting nearly as close to the birds). Most birders don't have the opportunity to visit oceanic waters and can only dream of seeing a Sooty Albatross, Grey Petrel or Leach's Storm Petrel.

But pelagic seabirds are more than just another tick. They have a strong inherent appeal linked to their fascinating lifestyles as well as their inaccessibility. They are the most mobile organisms on earth, undertaking the longest migrations on record. Many species breed in impressive aggregations and their young spend several years at sea before they finally return to their natal islands to start the long process of finding a mate. Recent advances in technology have given us unprecedented insights into how pelagic seabirds manage to thrive in what is a fairly hostile environment for birds.

The oceans occupy more than 70 per cent of the world's surface, yet less than four per cent of all bird species forage at sea and barely two per cent exploit oceanic waters. A key reason for the low diversity of seabirds relative to landbirds is the obligation to nest ashore, which limits breeding seabirds to foraging within commuting distance of land.

Seabirds that exploit oceanic waters are the ultimate central-place foragers, travelling hundreds or even thousands of kilometres from their nests to find food for their chicks. For example, Wandering Albatrosses and White-chinned Petrels breeding at the Prince Edward Islands, nearly 2000 kilometres south-east of South Africa, routinely travel to the edge of the continental shelf to feed. Once breeding is complete, seabirds are free to roam more widely and many species choose southern African waters in which to forage. Shy Albatrosses may breed at islands off Australia and New Zealand, but many individuals spend most of their lives feeding off the southern African coast. >

right *Birders crowd for a vantage spot on the* MV Madagascar *during a mega-pelagic up the Mozambique Channel. Hopefully the ratio of birds to birders will be better on Flock 2017.*

opposite *By studying seabirds, we obtain a window into the health of the oceans. This pair of post-moult Macaroni Penguins enthusiastically greet each other after being fitted with satellite tags to track their winter movements.*

previous spread *A Great-winged Petrel is silhouetted against a glassy sea on a rare calm day in the Agulhas Retroflection south of Africa.*

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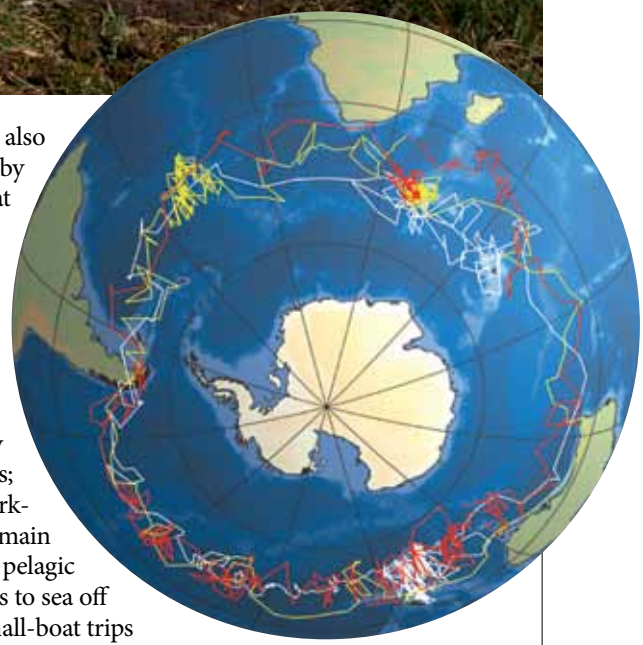
Indeed, southern Africa is a Mecca for seabirds. The paucity of safe, predator-free breeding sites – islands and coastal cliffs – limits the number of species that breed in the region to 13. But more than 120 species have been recorded from these waters; disproportionately more than would be expected given the size of the region and its avifauna. The main reason for this rich diversity of seabirds is the varied and dynamic nature of the oceans flanking southern Africa.

Off the west coast, southerly winds combine with Coriolis force to push surface waters offshore, creating a local drop in sea level. This is balanced by the upwelling of cold, nutrient-rich bottom water that promotes the dense blooms of phytoplankton upon which all pelagic organisms rely for food. The east coast is characterised by the warm Agulhas Current, a vast stream of tropical water that turns back on itself as the Agulhas Return Current. Tropical waters generally support few birds because they are nutrient poor as a result of limited vertical mixing between the warm surface waters and colder, deeper waters. However, shear >

The Grey Petrel is a rare but regular visitor to the waters south of the Agulhas Bank, and one of the targets for Flock 2017.

above *South Africa's Marion and Prince Edward islands are home to more than 40 per cent of the world's Wandering Albatrosses, with Albatross Valley having the greatest breeding density globally.*



right *Some Wandering Albatrosses from Marion Island live up to their name and circle the Southern Ocean. This map shows three successive circumnavigations (each a different colour) made by a male during his sabbatical year between successful breeding attempts.* (Map courtesy Francis Taylor)

forces along the edge of the Agulhas Current bring nutrients to the surface, driving an unusually productive system for such warm waters.

Having a rich base to the food chain is only the first step. In order to sustain large numbers of seabirds, there must be the efficient transfer of energy to larger organisms such as crustaceans, squid and fish. Historically, the vast schools of sardines and anchovies associated with the Benguela upwelling system off the west coast were the key resource for most seabirds. These fish are particularly crucial for many of the local breeding species such as African Penguins, Cape Gannets and Cape Cormorants. Sadly, with the depletion of fish stocks off the west coast their numbers have dwindled; only the south coast now supports large volumes of these important forage fish, but the lack of safe breeding sites in this region limits the ability of breeding bird species to exploit this resource.

Fisheries can also benefit seabirds by providing food that would otherwise not be available to them. The hake trawl fishery dumps large quantities of offal and non-target fish species that are eagerly consumed by a diversity of seabirds; indeed, finding a working trawler is the main aim of the one-day pelagic trips that take birders to sea off the Cape. But the small-boat trips can only access the trawl grounds off the Cape Peninsula, where the fishing grounds are relatively close to shore.

The aim of Flock 2017 is to travel along the fishing grounds from Cape Town to Cape Agulhas and beyond in search of some of the more elusive seabird species that have until now been accessible only to the fortunate few able to spend time on trawlers or research vessels.

It remains to be seen how successful Flock 2017 will be. Manoeuvring a cruise liner among the trawl fleet will be an interesting exercise and pointing out rare birds to a large crowd of keen birders is going to challenge the guides to the utmost. But irrespective of the number of rarities seen, the opportunity to spend time with pelagic birds in their true environment is something to be cherished. ◆