



SWIFT TERNS

DAVIDE GAGLIO

bucking THE trend

Many seabirds forage in unpredictable environments and have evolved strategies to buffer the changes that characterise marine ecosystems. However, recent alterations in the distribution and abundance of small pelagic fish populations in the Benguela current along the west coast of southern Africa, driven in part by localised fishing pressure, have influenced the foraging ecology and survival of seabirds in the region. The endemic birds that rely on these fish – African Penguins, Cape Gannets and Cape Cormorants – are all now categorised as threatened. But the Swift Tern *Thalasseus bergii* is bucking this trend: it is the only locally-breeding seabird species with a specialised diet of small pelagic fish whose numbers are increasing.

Swift Terns are nomadic in southern Africa. Breeding has been recorded at 27 localities from Namibia to Algoa Bay, but most occurs on islands off the Western Cape, the same region where other seabirds have suffered

the most dramatic declines during the past decade or so. In a bid to understand how Swift Terns manage to find enough food when other species are struggling to do so, Fitz researcher Davide Gaglio has spent the past two breeding seasons monitoring the large colony on Robben Island.

At face value, Swift Terns make for an unlikely success story. When breeding, they carry prey back to their chicks in their bills. This restricts the amount of food they can provide from each sortie, encouraging them to forage close to their colony and exposing them to the attentions of piratical skuas and gulls. Davide has taken advantage of this behaviour by using photography to record their diet. With virtually no disturbance to the birds, he has identified 13 000 prey samples.

His preliminary results show that although anchovy comprises the bulk of its diet, the Swift Tern feeds on a wide variety of prey, ranging from juvenile sharks, puffer fish,

ENGRAVED COLOUR-RINGS

Rings in 2014 are orange or yellow (with black text) and green or blue (with white text), and are engraved with an 'A' followed by a letter and a number (for example, AY7).

Rings from 2013 are yellow and white (with black text) and green and blue (with white text), and bear a code of one letter and one number (for example, Y7).

If you see any ringed Swift Terns, please record their location as accurately as possible (ideally GPS), the date and time of sighting, the ring colour, letters on the ring (if legible) and age class (juvenile or immature). If a bird is found dead, please also record the number of the metal ring. Send the information to Davide Gaglio at swift.terns@gmail.com

sole and octopus to two species of crickets. Almost half the species captured occur on or just above the seabed, suggesting that this tern exploits diverse habitats, including very shallow water. This adaptability helps to explain why its breeding success is high on Robben Island.

Another difference between the Swift Tern and other local seabirds is that it delivers extended post-fledging care. Parents continue to feed their chicks for several weeks after they leave the colony, during which time the young birds may travel long distances.

To better understand the chicks' dispersal and survival, during the past two breeding seasons 1 000 of them were fitted with individually engraved colour-rings. Gathering dispersal records relies on assistance from volunteers throughout southern Africa and so far, records of resightings have been received from Namibia to the Eastern Cape.

The ultimate goal of Davide's ongoing research is to understand how the Swift Terns cope with variable food availability. Investigating to what degree the tern's behaviour flexibility underlies its success is crucial to comprehending these conflicting trends. His findings may help us to assess how commercial fisheries and environmental changes impact on marine ecosystem dynamics.

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