50th ANNIVERSARY 1960–2010

NEWS FROM THE **PERCY FITZPATRICK INSTITUTE**

Seabird research through the years

Seabirds offer several advantages for ornithological research. Most species breed in colonies, where they are readily observed and can be caught, facilitating the rapid collection of large data sets. As top predators, they also provide an efficient way to assess the health of the oceans. Given the wealth of seabirds off southern Africa, it is not surprising that studies on them have played an important role in the development of the Fitztitute.

The list of Fitz alumni and publications (see *www.fitzpatrick.uct.ac.za*) reveals how seabird research has evolved over the past 50 years. Initial studies were largely land-based, considering the behaviour and ecology of breeding seabirds. Mike Jarvis, one of the first PhD students at the Fitz, worked on Cape Gannets. But it was when Roy Siegfried was appointed Director that seabird research really accelerated, thanks to his enthusiastic support of South Africa's Antarctic programme.

Research was not limited to the birds themselves, but also considered the importance of seabirds in shaping the environments where they breed. The amounts of guano and feathers and the number of carcasses estimated to be deposited by penguins and other seabirds at sub-Antarctic Marion Island are truly astounding and play a significant role in shaping the island's vegetation. Seabirds are also major agents of erosion, with trampling by Macaroni Penguins having removed more than 300 000 tonnes of peat and soil at a single colony.

The 1980s saw a marked increase in seabird research at the Fitz, and this laid the foundation for our current work. The Antarctic programme was bolstered by the appointment of John Cooper as coordinator of seabird research, and a separate programme led by David Duffy was established to understand the interactions between seabirds and fisheries in the Benguela ecosystem. John instituted long-term monitoring studies of several key species breeding at Marion and Gough islands, which continue to the present. As well as laying the foundations for studies to understand the demography of these long-lived species, they provide an invaluable window into global change in the region.

The Benguela Upwelling Programme was a revolutionary study that brought together physical oceanographers, biologists and fisheries managers to understand and ultimately better manage the exploitation of the region's resources. The Fitz played an integral part in the study and was able to show how commercial fisheries had changed the structure of the system since Bob Rand conducted initial research on seabirds there in the 1950s. However, like all good science, the programme also generated new ideas and research approaches. PhD student Rory Wilson arrived with a passion for penguins. He developed novel speed- and depth-meters that provided unprecedented insights into what these fascinating birds do at sea, making him one of the fathers of bio-logging research.

PETER RYAN

Richard Cuthbert and Brian Bowie ring a Tristan Albatross chick on Gough Island. A long-term ringing programme started by the Fitz has shown this species to be Critically Endangered.

With changes in research-funding strategies, the 1990s were a lean period for seabird research, but much of the long-term monitoring established during the 1980s was able to continue through collaboration with Marine and Coastal Management. Research was boosted in the late 1990s, when it became evident that many albatross and petrel populations were suffering from fishing mortality. More problems emerged in the early 2000s, linked to range changes in key prey species in the Benguela system and the discovery of the impacts that introduced mice have on seabird populations at Gough Island – threats familiar to regular readers of *Africa – Birds & Birding*.

In all our studies, we foster a strongly collaborative approach, with partners in other South African institutions and overseas. Just as seabirds range across national boundaries, so their conservation requires the efforts of multinational teams of researchers.

If you would like to be part of our 50th Anniversary celebrations and our bursary and research fund-raising drives, please contact the Institute's Director, Prof. Phil Hockey, Percy FitzPatrick Institute, University of Cape Town, Rondebosch, South Africa 7701. E-mail ***phil.hockey@uct.ac.za***, fax +27 (0)21 650 3295, tel. +27 (0)21 650 3290/1 or visit ***www.fitzpatrick.uct.ac.za***