

# MOUSE attacks INCREASE

Many seabirds that breed at remote, mammal-free islands struggle to cope when predators such as rats or cats are introduced. However, it is only during the past decade or so that we've come to realise that house mice – one of the most ubiquitous of human commensal species – also pose a serious threat to seabirds.

In 2001, Richard Cuthbert, a joint Fitz-RSPB post-doctoral student who was the first bird biologist to spend a year on Gough Island, suspected that mice were responsible for the worryingly large numbers of Tristan Albatross chicks dying during winter. This was confirmed by Ross Wanless, who filmed mice attacking albatross chicks more than a hundred times larger than themselves, as part of his PhD at the Fitz.

Ross concluded that mice are particularly problematic on islands where they are the sole introduced predator, because their numbers can grow unchecked by competition and predation by larger species.

South Africa's Marion Island, the larger of the two Prince Edward Islands, is one such area. Mice were introduced to Marion in the early 1800s by sealing parties. A weather station was established there after the islands were annexed by South Africa in 1947, and cats were taken to Marion to keep the station free of mice. But the cats soon acquired a taste for birds, and by the 1970s some 2 000 cats were killing an estimated 450 000 seabirds each year, greatly reducing the numbers of burrowing petrels, and even driving a few species to local extinction.

In a sustained conservation effort led by Professor Marthan Bester and colleagues from the University of Pretoria, the cats were finally eradicated in 1991. Initially all seemed fine; burrowing petrel breeding



PETER RYAN

success increased – especially of winter-breeding species that were hardest hit by the cats. But by 2003 the first mouse attacks on Wandering Albatross chicks were reported, and in 2009 one-third of the chicks at an isolated Sooty Albatross colony in the south-western corner of the island were attacked. And although there is still no definitive evidence of mouse attacks on petrels, Fitz student Ben Dilley recently concluded that the post-cat recovery of burrowing petrel numbers around the weather station has been much slower than anticipated, with mice being the most likely culprits.

In view of these worrying signs, Ross Wanless, now head of BirdLife South Africa's Seabird Conservation Programme, recruited New Zealand expert John Parkes to assess the feasibility of eradicating mice from Marion Island. John visited the island during the annual relief voyage in April–May 2015.

Coincidentally, this period also saw a marked increase in the extent of mouse attacks on albatrosses on the island. The first attack on a Grey-headed Albatross chick was recorded during the annual chick census in April 2015, and subsequent checks found that all three of the island's summer-breeding albatross species were under attack. Roughly five per cent of Grey-headed, Sooty and

*A Grey-headed Albatross fledgling with a severe head wound, typical of the damage caused by house mice. This bird died on the night after this photograph was taken.*

Light-mantled albatross chicks were attacked, with at least a third of the chicks that could be checked repeatedly, dying as a result of their wounds. Most worrying was the fact that incidents occurred all around the island.

John Parkes' draft report concludes that mice can be eradicated from Marion Island with a high probability of success, provided experienced personnel run the operation. Almost 40 years ago the decision was made to tackle the cats, and Marion remains the largest island from which cats have been eradicated. We now have the opportunity to effect the largest mouse eradication yet undertaken; we just need sufficient political will to ensure that we act expeditiously to protect our globally important seabird populations.

For more information, contact  
The Director, Percy FitzPatrick  
Institute of African Ornithology,  
University of Cape Town,  
Rondebosch, South Africa 7701.  
E-mail [fitz@uct.ac.za](mailto:fitz@uct.ac.za),  
tel. +27 (0)21 650 3291 or  
visit [www.fitzpatrick.uct.ac.za](http://www.fitzpatrick.uct.ac.za)

