

Seabird recovery after rat removal

By Dr Michael Brooke who was in the Falkland Islands in December/January 2012.

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Conservationists busy themselves doing good works, often with little evidence that their efforts bear fruit on the ground. Such is broadly true of island restoration programmes. Over 1000 islands have now been cleared of invasive vertebrates, principally cats, rats and goats, and this is presumed to be good news for seabirds. Probably it is, but the evidence remains sketchy. Therefore I reckon it would be good to gather that evidence so that, if funders come asking for facts, conservationists are not put in the position of goldfishes gasping for air.

But assuming the rat eradication does aid the population recovery of seabirds, there still remain interesting issues. Which islands are more likely to be re-colonised? One would guess that it is those closer to established colonies, and this might inform future prioritisation. Is the colony growth driven by immigration? That must be true initially if there are no seabirds present in the first place. Or is the colony growth driven by more successful breeding and enhanced recruitment several years later when the youngsters mature?

These are issues that have meandered through my mind, sometimes at my desk in the Zoology Department at Cambridge and sometimes in the field, for instance on Henderson Island in the South Pacific where Polynesian rats munch their way through nearly all the chicks of the surface-nesting petrels. To get answers to those questions needs work on a batch of islands from which rats of been removed, ideally islands in reasonably close geographical proximity. The Falklands, with over 60 island rat removals to its credit, is a candidate area for the study. But how easy would island-hopping be? And how easy would it be to detect petrels, not just the larger white-chinned petrels and sooty shearwaters but the smaller more cryptic species like grey-backed storm petrel, diving petrel and prion. The only way to assess the feasibility was to come here myself, armed with decades of experience (don't ask how many!), some mist nets and poles (thank you FIGAS for tolerating those poles) and some digital recorders for picking up the birds' calls at night.

SAERI NEWS

Grey Backed Storm Petrel



Thanks to the organizational efforts of Paul, Rachael and Tiphonie at SAERI, I was able to visit 10 smaller islands, 3 never-ratted and 7 de-ratted, with enough tussac to satisfy my tussac cravings for all of 2013. While I have yet to listen to the recordings, about 150 hours' worth, here are the observational basics. Diving petrels zilch. Prions frustration; one probable seen in a net on Rat Island in Salvador Waters but the τύ\$%^ escaped before I could reach it. Grey-backed storm petrels; caught on the 2 never-ratted islands where I netted but on none of the 6 de-ratted where netting was possible, from which I conclude that any return by this elusive species to islands after rat eradication is too slow to allow meaningful study. White-chins found on Kidney (as expected) but it is debateable whether this species is influenced by rats at all, while it is certainly suffering from long-lining. That leaves sooty shearwaters as the most promising candidate for further study, via acoustic monitoring, but I need to check the New Zealand literature to understand better whether the species is adversely affected by rats.



Sooty Shear Water

These wonderful three weeks have flown by and I should end by thanking my island companions, Claudio (best-behaved dog), Alicky Davey (loudest girly shriek in the face of a grumpy sealion), Jacob Gonzalez-Solis (most luggage), Tiphonie May (best 4WD driver), and Nick Rendell (companion on the sea crossing which led up to the shortest flight check-in time ever).

*Michael Brooke, Department of Zoology, Cambridge CB2 3EJ, UK
m.brooke@zoo.cam.ac.uk*