

resetting THE system

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The FitzPatrick Institute's mandate is to conduct cutting-edge research while educating the next generation of ornithological researchers and conservation leaders. Our work is divided into two main themes: understanding and conserving biodiversity. We try to ensure that the lessons learned from our studies reach the relevant management authorities and, wherever possible, work with them to implement conservation solutions. However, much of the time it feels as though we are merely slowing the inevitable – we have our fingers in the dyke, but no one is coming to patch the hole.

Occasionally, though, we are involved in a project that can result in a lasting gain for conservation. The Gough Island Restoration Programme is one such project. The story will be familiar to

above *The mysterious deaths of Gough Albatross chicks first drew attention to the impacts of mice on the island's seabirds.*

most readers of *African Birdlife*. House mice were introduced accidentally to the island by sealers in the 19th century. In addition to having major impacts on the island's invertebrate fauna, the mice acquired a taste for seabird chicks – a startling finding by researchers sent to the island by the Royal Society for the Protection of Birds (RSPB) and the Fitz in the early 2000s. Since then we have worked closely with the RSPB to assess the feasibility of eradicating mice on Gough.

It has been a long road. The cost of the project was substantial, so as well as testing the feasibility of the project, we documented the magnitude of the threat. Importantly, we obtained graphic images of mouse attacks to help loosen purse strings. And just when we were all set to go – the bait was on its way to Cape Town and the initial construction team was already on the island – Covid struck, forcing the project to be postponed for a year.

But, finally, in winter 2021 the project

came to fruition. I was fortunate to be able to spend three months on Gough prior to the actual baiting, helping to catch Gough Buntings and Gough Moorhens for the captive 'safeguard' populations. These endemic landbirds could be at risk during the operation, so individuals were taken into temporary captivity to keep them safe for the duration of the baiting exercise. I was thus there to see the main team arrive in June. It was an impressive sight: four helicopters, more than 200 tonnes of bait and a team of dedicated helicopter personnel, bait loaders, GIS experts and logisticians.

For the project to succeed, bait has to be delivered throughout the island. This is done using spreader buckets slung beneath helicopters, which fly precise lines across the island to ensure complete coverage. From the outset, I was most worried about having sufficiently good weather. The eradication was scheduled for winter, when mice are most hungry and hence likely to eat the bait and the impact on non-target

species is least, but the weather is also at its worst. Gough is mountainous and its peaks are normally shrouded in cloud, even in summer. Add to that the need for moderate winds and no rain during the baiting flights and it seemed like a tall order to have enough good-weather days to get the job done.

The first bait run was completed within a few weeks of the team's arrival, but July saw a series of cold fronts bringing wind and rain to the island, delaying the second bait drop. Fortunately Pete McClelland, the operations manager, is an old hand at this kind of project and was able to calmly wait for good weather windows to arrive. Finally, on 2 August 2021, the last of the bait was spread. It will take several years to confirm whether the eradication has been successful, because the only way to be sure that the mice have gone is to continue to find no evidence of them on the island. The initial signs are encouraging – intensive monitoring in the area around the base shows no evidence of any mouse activity since baiting was completed.

For me, the most exciting aspect of the project is that this one-off intervention will have a massive and lasting conservation benefit. If mice have indeed been eradicated from Gough, the island's bird populations will begin to recover. We can effectively turn back the clock and allow Gough to once again stake its claim as being the world's greatest seabird island.

The lessons learned from the Gough Island Restoration Programme have reinforced the belief that we can now attempt to eradicate mice from South Africa's Marion Island. Gough is around four times larger than New Zealand's Antipodes Island, which was the largest island cleared of mice prior to Gough. Marion is nearly five times larger than Gough, but the terrain is less severe and the baiting intensity in the interior can be less, given the much lower mouse densities there. The Mouse-Free Marion project is a collaboration between the Department of Forestry, Fisheries and



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above *The Gough Bunting is one of the many bird species that will benefit from the mouse eradication.*

top *A bait bucket is unloaded from the SA Agulhas II at Gough Island.*

the Environment and BirdLife South Africa, with support from the Fitz, the RSPB and others.

The kernel of the Mouse-Free Marion project team has already been appointed and a non-profit organisation has been set up by BirdLife South Africa to handle the operation's finances. It is now just the matter of raising the balance of the funds. You can support the project by sponsoring a hectare and ultimately help Marion Island's Wandering Albatrosses and other seabirds (<https://mousefreemarion.org/>).

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