GOUGH ISLAND blues

PETER RYAN

Before the eradication attempt, the number of house mice on Gough Island peaked at over one million each summer.

It was 14 December 2021 and I was feeling pretty good. I was at Oliver Tambo Airport, waiting to fly home. In addition to some useful work in Mozambique, I'd finally tracked down two of the handful of southern African birds that still eluded me. I was looking forward to a couple of weeks with the family over the festive season. Then I got a call from Mark Anderson.

He jumped straight in: 'I've got devastating news. They've photographed a mouse on Gough.' I felt sick. Few things could have elicited such a visceral response. Maybe the collapse of the West Antarctic ice sheet or the outbreak of nuclear war. But this was closer to home. I was indeed devastated.

The Gough Island Restoration Programme attempted to eradicate mice from Gough during the winter of 2021. I was part of the team tasked with establishing insurance populations of captive Gough Buntings and Gough Moorhens ahead of the eradication attempt. But my involvement stretched back 20 years to when Richard Cuthbert first discovered the unusually low survival of Tristan Albatross chicks and suspected mice must be the cause.

I supervised Ross Wanless's PhD, when he and Andrea Angel got the first grainy photos of the mice in action, nibbling away at hapless albatross chicks at night. I helped a succession of dedicated field workers learn about the biology of house mice on Gough, an essential first step to an eventual eradication attempt. I got rhodamine-stained hands from spreading dyed bait to ensure all mice would eat it and I abseiled down cliffs to check how much bait spread by helicopters was caught by the cliff-side vegetation. I helped to negotiate the use of the SA *Agulhas II* as the support vessel for the eradication attempt. I was *invested* in the project.

Gough was a particularly challenging operation. I was most concerned that there wouldn't be enough good-weather days to bait the entire island. Helicopters can only spread bait on clear days that are not too windy, a tall order on a cloud-shrouded mountainous island at the edge of the Roaring Forties in winter. However, the weather played ball and the first baiting of the island was completed by the end of June. It rained for most of July, but finally the weather cleared and by early August the job was done.

Over the following months, the captive buntings and moorhens were released and the seabirds flourished in the apparently mouse-free conditions. Most petrel chicks, which typically suffer heavy mouse predation, survived. But then came Mark's news that a mouse had been photographed by a baited camera trap near the research station. Hope that this was an isolated event was dashed when more mice were caught at several sites. It seems that the eradication attempt failed.

This is devastating, given the enormous time and effort invested in the project. It also has ramifications for Mouse-Free Marion, which still has to raise a substantial amount of funding to mount an eradication attempt on that island. Over the past 15 years, more than 90 per cent of rodent eradication attempts have succeeded, but there is always a chance of failure. Objectively, the failure on Gough does not materially affect the likelihood of success on Marion, but we need to learn as much as possible about the causes of the failure on Gough (see *www.goughisland.com*) and, where contributing factors can be identified, work to ensure that these are avoided on Marion.

Critically, we cannot give up on the attempt at Marion. To do so would send the message that mouse eradications are too risky, setting back the restoration of Marion Island and other eradication attempts. To secure the island's globally important seabirds, we need to make sure that Marion goes ahead and has the best possible chance of success. And eradicating mice from Marion will provide further impetus for another attempt at Gough Island, as it remains one of the highest priority islands for rodent eradications worldwide.

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