news from the PERCY FITZPATRICK INSTITUTE



The carnivorous behaviour of the introduced house mice on Gough Island has been in the news a fair bit, and rightly so. The harrowing video of mice eating a Tristan Albatross chick alive brought the issue to life for everyone who has seen it. And just as surely as those mice nibbled away the life of the hapless albatross, so mice are gradually reducing the vast capital of breeding seabirds that resulted in Gough being called the most important seabird island in the world.

But it's not just seabirds that are suffering. Gough is home to two species of endemic land birds: the Gough Moorhen and Gough Bunting. The moorhen is a recent arrival and, although its wings have shrunk and its legs have grown more robust, it is still capable of dealing with pesky mammals that come poking round its eggs or chicks. Indeed, a small group of Gough Moorhens released on Tristan in 1956 have multiplied successfully in the face of rats and mice, and moorhens now occur over much of the island.

Unfortunately, the Gough Bunting is not as lucky. Derived from vagrant South American finches, it has evolved into one of the largest finches in the world, with a versatile long, slender bill. Gough Buntings occur at much lower densities than related buntings at predator-free islands in the Tristan archipelago, and it has been suggested that mice might be responsible for this. The buntings are most numerous in the highlands, where mice are less abundant, and the few pairs that persist in lowland areas breed exclusively on cliffs, where their nests are less likely to be raided by the rodents.

However, it was only during a visit to Gough in 2007 that the severity of the situation became apparent. Surveys found very few buntings in the northern highlands, with none in the distinctive, streaky juvenile plumage. Just as mice eat most albatross chicks in this area, so they also seem to destroy virtually all bunting nests. And even in the south, where they still manage to rear some chicks, the density of buntings has fallen by roughly half since 1990.

The change in bunting numbers is most marked in the lowlands. Early visitors to the Glen, a sheltered landing on the east coast, commented on the abundance of 'sparrows' that hopped along the beach. Even in 1990 there were five pairs breeding on the steep slopes above the Glen. But last year we saw only one bird during several hours ashore. The contrast with Penguin Island, a small offshore stack free of mice, was marked. There buntings were common, with four males singing Gough Buntings retain their streaky juvenile plumage for up to two years. Historically, juveniles made up roughly half of the population, but now they comprise only 20 per cent. Predation of eggs and chicks by mice probably accounts for the unsustainably low production of young birds.

in the immediate vicinity of where we scrambled ashore.

The plight of the Gough Bunting adds impetus to calls to exterminate mice from Gough. Joining the annual relief voyage last year was John Parkes, an expert in the control of introduced mammals on islands. His brief was to assess the feasibility of eradicating mice by using helicopters to spread poison bait across the island. Although his report is still being finalised, he was cautiously optimistic that there were no technical obstacles. Fitz student Ross Wanless, who recently received his PhD for work on this problem, has already conducted some small-scale bait trials, and more extensive trials are planned to be sure that a full-scale elimination will work. With a price tag of around £3-million, the UK government isn't likely to fund more than one attempt, so it has to work the first time.

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