

Target Kiwi Paul R. Ehrlich

The approach to the airstrip of remote, hilly Stewart Island at the southern end of New Zealand, was squirrelly in strong winds, but the pilot expertly dropped the Cherokee Six on the runway. Anne and I and two companions had come to see a conservation project of a foundation, Dancing Star, run by our friend Michael Tobias. One of my hopes was to see a kiwi, a flightless "ratite" relative of ostriches, emus, rheas, and (of course) the now-extinct moas that once graced New Zealand. Stewart Island is a classic place to accomplish the relatively difficult task of seeing a kiwi in the field -- the local population is almost 10,000 strong, but it takes some luck to see this nocturnal bird on a short visit. But we had more than luck, we had Kari and Brent Beaven to guide us. They work for the foundation and the New Zealand Department of Conservation respectively, a great couple with two charming boys 1.5 and 4 years old. Both of those scientists have the same goal, protecting the declining New Zealand native fauna and flora by restoring habitat -- especially by removing introduced pests such as rats, house cats, and deer from islands of fenced areas.

On our first afternoon, they showed us the 3km fence the foundation had constructed near the only town, with 400 permanent residents and a summer tourist influx. The fence was designed to prevent deer, rats and cats from entering an enclosed area of some 150 hectares, or prevent them from returning once they were removed. We examined the fence in a cold rain, impressed by its sturdy construction: tight mesh some two meters high, topped by an anti-rat bar that would exclude even those crafty rodents and a wire that would sound an alarm should a tree fall on the fence and provide a bridge for rats or cats. More impressive were the results of the removal program. Inside the enclosure, native plants were regenerating; outside, a depauperate flora featuring bracken dominated.

That night, Brent took me and Glenda Lewis, one of our New Zealand scientist friends, out on a kiwi hunt. Around 10:30 pm, when it was dark enough for the nocturnal kiwis to begin foraging,

we drove around for about an hour in the hope that we might spot one feeding on a road verge as they sometimes do. In the cold and miserable weather, that seemed like an ideal birding strategy. But no such luck. So we left the car and clambered down to a beach and walked along it in cold rain and hail, using a single flashlight to search for kiwis. Then we waded up a small stream and along the fence for a stretch while Brent tried to spot a kiwi. Finally our search was crowned with success, and zipping past our feet was a brown kiwi, *Apteryx australis*, which the Maori call tokoeka. It was a thrill for both of us; made all the more satisfying since the cold, hail, thunder, and lightening had made us work for it.

That thrilling night was followed by a thrilling day, thanks to Kari. We took a water taxi over to Ulva Island, a famous reserve. That 270-hectare small island next to Stewart has been kept ratfree by assiduous effort and watchfulness, and maintains populations of endemic New Zealand birds now declining over much of the country. Despite off-and-on showers, I was delighted to be able to photograph the New Zealand robin, an endemic species (*Petroica australis*) that has disappeared from many areas because of deforestation and the introduction of exotic predators by European settlers. But, unlike many New Zealand passerines, it has surviving populations even in some unprotected areas, as well as on Ulva Island where members of the Stewart Island race of the robin enjoys a habitat that has been cleared of rats and is free of other predators. We attracted the color-banded bird in the picture by scraping an area of leaf litter; perhaps a habit its species acquired when moas roamed the forest disturbing invertebrates as big grazers today do for cattle egrets.

We saw several other very interesting species -- the kaka, a big parrot (*Nestor meridionalis*), which largely ignored us while it tore strips of bark off a tree trunk searching for grubs). Flocks of this endemic parrot are still found on both North and South Islands, but the species is considered threatened with fewer than 10,000 individuals remaining. We had a quick look at a saddleback (*Philesturnus carunculatus*), another threatened endemic, but my color-blindness did not allow me to appreciate its bright red "saddle." And too many hours of flying in open-cockpit airplanes had removed my ability to appreciate the high-pitched calls of New Zealand's smallest bird, the tiny green rifleman (Acanthisitta chloris). Stewart Island is a magic place, and rumors abound that an attempt will be made to rid the entire 650-square mile (1680 square kilometers) island of the introduced predators. That will be a big job, but the basic plan sounds "doable," and I wish them luck.

The Stewart-Ulva situation is a microcosm of the New Zealand avian biodiversity, and to a degree analogous to the situation in certain other parts of the world – a general decline in native fauna but hope of rebuilding populations in restricted areas. Some of New Zealand's most prominent birds have been irretrievably lost, but their absence does not appear to have had any dramatic effect on most of the ecosystem services biodiversity supplies to society. The major exceptions are the esthetic-ethical services increasingly valued by people.

One need only imagine the increase in those values (including monetary ones associated with ecotourism) if giant moas were still browsing in New Zealand woods, being hunted by the giant Haast's eagle, the largest eagle ever (capable of snatching away a child). And what if hopping through the branches above them were abundant stitchbirds and saddlebacks and now-extinct huias (with long, curved bills in the females and short stout ones in the males)? Think of peoples'

interest if weird kiwis, with their nostrils at the ends of their bills, were frequent shadowy figures after dark in towns and along roads, and "booms" of male kakapos (flightless giant nocturnal parrots) echoed over spring landscapes almost everywhere! New Zealand has lost much of its precious avian heritage, but it has a chance of saving at least a small sample.

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