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Critically Endangered Parakeet Population Grows on Predator-Free Island Reserve

By John R. Platt | January 10, 2013



© Luis Ortiz-Catedral

Few people have ever seen a critically endangered Malherbe's parakeet (*Cyanoramphus malherbi*) in the wild. Luis Ortiz-Catedral has not only seen more of the birds than just about anyone else, one of them has landed on his head.

He has also witnessed something that almost no one else has ever seen



among this species: mating. Ortiz-Catedral—now head of the ecological restoration group at the Charles Darwin Foundation and Durrell Wildlife Conservation Trust—was on New Zealand's remote Maud Island in 2009, where he was studying the rare birds. "I was observing a nest with a friend," he

recalls. "We were interested in estimating how long the incubation stints of females lasted. We were very still and attentive. Then a male came and landed on the nest entrance and called. The female came out and they started some courtship behavior and they mated. We were speechless—I can only think of maybe two other people who have seen Malherbe's parakeets mating in the wild."

The experience, he says, was "very humbling because I am a foreigner—born in Mexico—who is granted access to all these sites to study species unknown to the general public."

Malherbe's parakeets are one of the world's rarest and least-studied birds, with fewer than 300 wild individuals on Earth and a total population of maybe 1,000. Endemic to New Zealand, the birds were only recognized as their own species in 2000 after many decades of being considered a colorful variant of the orange-fronted parakeet (*C. auriceps*). Unfortunately, the 10 years leading up to that new taxonomic declaration were devastating to Malherbe's parakeets, as an invasion of rats and stoats took their toll on the tiny (23-centimeter) birds.

Early this century the New Zealand Department of Conservation brought most of the remaining Malherbe's parakeets into a captive breeding program. Then, in 2007 they started moving some captive-bred birds to Maud Island, a predator-free 320-hectare island that also serves as a nature reserve for other endemic species, including the kakapo (*Strigops habroptila*) and Maud Island frog (*Leiopelma pakeka*). The first 11 parakeets came to the island in March 2007. Seven more translocations followed later that year and in the first half of 2009 until a total of 68 birds had been transferred to the island.

During that time Ortiz-Catedral—then a PhD student at Massey University—was one of three scientists conducting regular surveys of

the parakeets on Maud Island. They found that not only were the birds doing well on the island, they were also successfully breeding. By the end of their survey period, they estimated that the island held a maximum of 97 birds, quite a growth rate in that short period. Their research was published this past December in *Conservation Evidence*.

"The population increase is astounding and it really surpassed our expectations," he says. "Breeding of parakeets on the island started really soon, shortly after the first birds were released. Within two months after release of the first flock two pairs had found a nest and laid eggs." Only two chicks out of the first 10 hatchlings survived but "it told us that these birds had a huge breeding potential."

Not much is known about the breeding and nesting habitats of Malherbe's parakeets, but Ortiz-Catedral says that similar New Zealand parakeets can lay large clutches and raise up to nine chicks at once. Chicks reach sexual maturity in just five months, "so in a 'good year' these chicks and their parents might be breeding in the same breeding season," he says.

Ortiz-Catedral says he had some apprehension about releasing captive-bred birds onto the island. "I feared that New Zealand falcons—which are also endangered—might prey them to extinction. However, I noticed that the parakeets quickly became used to avoiding aerial predators. Although they are tame under the tree canopies, even large pigeons flying overhead would entice them to flutter and seek cover."

Although they avoided predators, the released birds were still somewhat acclimated to humans—hence the male parakeet that kept landing on Ortiz-Catedral's head—but the researchers limited observation time to avoid disruptions to their behavior. That doesn't mean it was easy to observe them. "There were days when not a single parakeet was seen or heard, and our surveys might have seemed like a waste of time or money," he says. "In the end we continued with the systematic surveying and coming across a single parakeet was great. As more and more parakeets were encountered it became clear that all I needed was patience."

Unfortunately, there have been no systematic surveys of the parakeet populations on Maud Island since Ortiz-Catedral and his fellow researchers ended their work there in 2009. He says their paper about their surveys was delayed while he finished his PhD and then took a job in the Galápagos Islands to help with a reintroduction program for another endangered species, the Floreana mockingbird (*Mimus trifasciatus*). Meanwhile, the parakeets have been released in a few other predator-free New Zealand islands. "I am in the process of getting some funding to extend the work on Maud Island and include other sites to produce an overall assessment of the reintroduced populations on Chalky, Maud, Blumine and Mayor islands," he says, adding that it will be interesting to see how the birds born in the wild relate to humans in the coming years.

Ortiz-Catedral says his work on Maud Island reinforced his desire to study and conserve rare birds. "In many ways working with Malherbe's parakeets reaffirmed my commitment to study island birds and to work towards improving their conservation status," he says. "The most important lesson I learned while studying them was that one should never give up."

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About the Author: Twice a week, John Platt shines a light on endangered species from all over the globe, exploring not just why they are dying out but also what's being done to rescue them from oblivion. Follow on Twitter @johnrplatt.

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