

Update: readymade feral cat bait trial, Rakiura 2023

Project summary

The Department of Conservation (DOC) is trialling a new toxin to protect native animals from feral cats on NE Rakiura/Stewart Island in winter 2023. This research advances knowledge and tools to eradicate feral cats on our precious islands like Auckland Island and Rakiura/Stewart Island. During the study, DOC staff will hand-lay a toxic meat bait on a ~2500 ha grid and monitor it with trail cameras and follow GPS collared cats. Previous research gives us confidence that feral cats will eat the bait and there is low risk to animals such as native birds and deer. We will remove all bait at the end of the trial. Some hunting blocks will be closed during the 8-week treatment period. People can still recreate in the area and should follow all signs and warnings. We have consulted with local iwi, hunting groups, government, NGOs and other community groups. We shared information and worked to reduce impacts to people. Contact us with any questions.

Progress summary

- March 2023: Permission received from Environmental Protection Agency and Ministry for Primary Industries to carry out operation as proposed on the northeast coast of Rakiura 2023.
- March 2023: Fourteen feral cats trapped inside treatment area and fitted with GPS-VHF collars.
- March-ongoing 2023: Community and hunter notification and engagement.
- May 2023: Fifteen Rakiura tokoeka (kiwi) caught inside treatment area and fitted with VHF transmitters.

March 2023: feral cat collaring

In late March 2023, a team of 6 (including two vets) were dropped into Christmas Village Hut to set soft jaw leg-hold traps to capture feral cats and fit them GPS-VHF collars. During the bait trial we will monitor the cats via radio telemetry and identify them on trail camera footage.

The camera footage from the non-toxic bait palatability trial in autumn 2021 showed that feral cats were more commonly detected near the coast, so that's where we focused our trapping effort.

Upon capture, feral cats were sedated to make handling safer. Black cats were also marked with hair bleach to make them individually identifiable for the camera monitoring study.

In total, 14 individual feral cats were captured, and 5 individuals were recaptured (19 captures in total). Overall cats were in good condition, weighing on average 3.2 kg (range 1.7 – 5.1 kg). Six females and 8 males were captured and collared. Of the 14 cats captured 5 were black and 9 were tabby.



Recaptured collared black female cat with hair bleach marking for individual identification in soft jaw leghold trap – Rakiura 2023.

May 2023: Rakiura tokoeka tagging

In early May 2023, a team of 5 experienced kiwi handlers were dropped into Christmas Village Hut to catch Rakiura tokoeka (kiwi) and fit them VHF transmitters. We will monitor the tokoeka via radio telemetry during the bait trial and trail camera footage will reveal how tokoeka interact with bait.

No one had studied tokoeka at this site before, so we didn't know how many birds may be in the area or how easy they would be to catch. In the end, the biggest obstacle to catching birds was the weather – there were few weather windows that allowed catching, but fortunately the team were capable and took opportunities when they arose. Some birds were lured using playback of tokoeka calls and then caught. During the day, the team used radio telemetry to track into burrows where tagged birds were roosting and were able to capture their untagged partners.

Fifteen adult or subadult Rakiura tokoeka were captured in total and fitted with VHF transmitters. These 15 individuals are likely to represent 9 different family groups/pairs. Of the birds caught, 8 birds were adult females, 4 were adult males, and 3 were could not be sexed.



Adult Rakiura tokoeka in hand, ready to have a VHF transmitter fitted – Rakiura 2023

Next steps

- May 2023: Bait will be manufactured.
- May 2023: Final DOC permission applications to be submitted.
- June 2023: Controlled rainfall bait degradation study (to inform baiting operations) undertaken at Manaaki Whenua.
- July 2023: Camera deployment & prefeed begins in early July.
- July-August 2023: Baiting & camera monitoring; monitoring of collared cats and tagged Rakiura tokoeka following toxin application.
- December 2023: Data analysis and reporting will be completed.



DOC vet Kate performs a health check on a sedated feral cat before it is collared – Rakiura 2023



Readymade feral cat bait, as will be deployed in the field trial on Rakiura in winter 2023

NE Coast Rakiura

This map shows the area proposed for pest control. Lucky, Christmas and Rollers hunting blocks will be closed during the treatment period 1 July – 31 August 2023. The boundaries may change subject to consultation and other operational planning requirements.

