New tool: protecting our native animals from feral cats through toxin trial on Rakiura, Winter 2023

Project Summary

The Department of Conservation (DOC) is trialling a new toxic meat bait to protect native wildlife from feral cats on north-east 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 and is part of work towards the achievement of Predator Free 2050. 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 trial. 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.

Threat – Feral cats

Feral cats kill native birds, lizards, bats, and insects. On Rakiura/Stewart Island feral cats threaten ground nesting birds like tūturiwhatu/southern NZ dotterel, and have contributed to the local extinction of 32 native bird species on Auckland Island.

Current tools are limited

Current tools (live or kill traps and toxic baits) for eradicating or controlling feral cats are limited, expensive, and ineffective for use at scale. There are only two feral cat baits registered in New Zealand (sodium fluoroacetate fishmeal polymer pellets & para-aminopropiophenone paste in mince balls) - but they are too labour-intensive for large areas, or their success has been mixed.

The Southern NZ dotterel lives on Rakiura. Only about 127 birds remain because of predators like feral cats.

Solution – New bait

DOC is researching new tools to eradicate feral cats to save precious species on our most important islands for nature – including Rakiura and Auckland Island, and to control cats on mainland New Zealand. Building on recent field trials on Auckland Island, we are furthering our understanding of the best way to use this new cat bait.

Expanding the tool box

DOC and Orillion have developed an 18 g meat sausage bait that contains 4.5 mg of the toxin sodium fluoroacetate (1080; 0.025%). We have done extensive research on this novel bait. Research trials of both the non-toxic and toxic versions of the bait showed that feral cats eat it and animals like native birds and deer did not. We are doing this follow up trial because our research suggests the bait will be a powerful and accurate tool for eradicating and controlling feral cats.

Department of Conservation Te Papa Atawhai
PEOPLE—NATURE TOGETHER WE FLOURISH TUIA TE TAIAO
PREDATOR FREE RAKIURA
New Zealand Government

Timing and location

The trial will run through July and August 2023 on public conservation land on the NE coast of Rakiura/Stewart Island. The research team chose Rakiura as a trial location because there is a high density of cats. Winter is the ideal season for this research because cats are more likely to eat bait and this timing will have the least impact on hunters and trampers.

Method

New feral cat bait for DOC trial

DOC field staff will hand lay bait on a grid monitored by trail cameras. They will use trail camera footage to observe and record how animals interact with the bait. They will also follow GPS-collared cats through the trial. Staff will recover all unconsumed baits at the end of the trial. DOC will compare the results from the trial site before and after the bait application to test differences in impacts to feral cats and wildlife. After the trial, we expect to see a significant reduction in feral cat populations at the site.

Outcomes

The trial will allow DOC to determine:

- What percent of feral cats eat bait
- What reduction in feral cat populations the trial can achieve
- What other predators (e.g. rats, possums) eat bait
- If any other animals (e.g. kiwi, deer) eat bait

We will share the results of this research through reports, scientific papers and the DOC website.

Managing risk

People risks

- **Visitors:** DOC will place warning signs at key trailheads, information sheets at huts and visitor centres, and online warnings. Lucky, Christmas and Rollers hunting blocks will be closed during the treatment period 1 July – 31 August 2023.
- **Landowners:** This research is in remote backcountry on public conservation land within the National Park, so will have no impact on landowners.
- **Workers:** All involved DOC staff are trained in placing toxins and will wear protective equipment.

Environmental risks

DOC staff will use bait at a very low density (1 bait per 3 hectares) and monitor baits using trail cameras. They will collect all uneaten baits from the bush after the trial. Previous research on Rakiura has shown the risk of non-target species such as kiwi and deer eating the bait is low.

Poisoning risks

The toxin is poisonous to humans and domestic animals. Observe these rules whenever you see warning signs placed at the public access ways. Warning signs indicate that pesticide residues may still remain in baits and carcasses, possibly for more than six months. Always remember:

- DO NOT touch or eat the bait
- WATCH CHILDREN at all times
- DO NOT EAT animals from this area
- Toxic baits and carcasses are DEADLY to DOGS

If you suspect poisoning always contact: Your local doctor or local hospital or the National Poisons Centre: 0800 764 766 or dial 111.

Contact Us

We are happy to meet and discuss this trial with you. Please contact us with any questions:

National Eradication Team
03 211 2400
nationaleradicationteam@doc.govt.nz

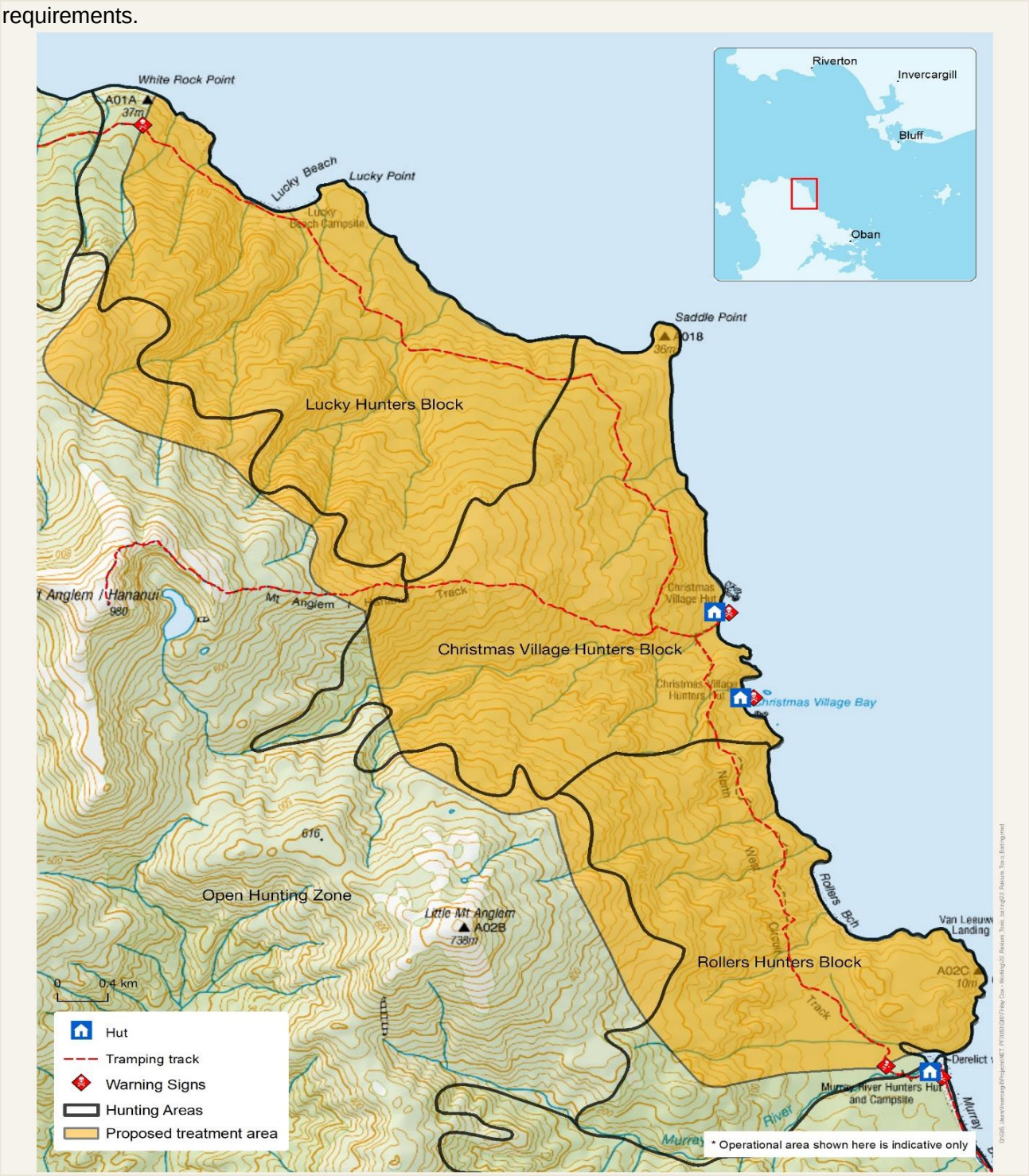
National Eradication Team
Department of Conservation
33 Don St
Invercargill 9810

March 2023

Phone: 03 211 2400
Email: nationaleradicationteam@doc.govt.nz
www.doc.govt.nz

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.



National Eradication Team
Department of Conservation
33 Don St
Invercargill 9810

March 2023

Phone: 03 211 2400
Email: nationaleradicationteam@doc.govt.nz
www.doc.govt.nz