

Consulting on the protection of native species on Stewart Island/Rakiura

The Department of Conservation (DOC) wants to increase predator control to protect native species including pukunui/southern New Zealand dotterel

Native wildlife needs protection here

Rakiura is home to a wide array of native birds, reptiles, and bats. Some are not found anywhere else in the country, including the pukunui/southern NZ dotterel, Rakiura tokoeka kiwi, and harlequin gecko.

With its diverse birdlife and wild beauty, it is easy to believe the island is thriving. But many of its natural values are in decline – and the culprit is introduced mammalian predators.

Feral cats, possums, and three rat species cover the island, eating birds, eggs and chicks, as well as the fruit, leaves and seeds that nurture the forest ecosystems.

The bush wren and Stewart Island snipe have already been lost forever. The tīeke/saddleback and kākāpō have been evacuated to offshore islands for their survival. The pukunui remains, but it is on the brink of extinction because of predation by feral cats. We must act now using the best tools and methods available to protect pukunui and other native species before it's too late.

The Pukunui Recovery Project

The Pukunui Recovery Project has been controlling predators and monitoring the pukunui population since 1994. The last 30 years have been a roller coaster, with periods of population recovery and decline.

Initially, ground-based control of feral cats using 1080 bait proved effective. Pukunui numbers grew from just 62 individuals in 1992 to 290 in 2009. However, despite ongoing control, the population later fell to 126 in 2016.

Additional predator control measures were put in place, including the reduction of other predator species, new trap types and ground-based hunting.

Through adaptive management, another period of growth was achieved, with the population recovering to 173 birds by 2020.

Unfortunately, over the past four years there has been a steep decline to just 101 birds. This has prompted the need for an urgent predator control operation using aerially-applied 1080 bait.

The Pukunui Recovery Project is aiming to rebuild the pukunui population to at least 300 birds by 2035.



Pukunui/Southern NZ dotterel

The plan to control introduced predators

The DOC team on Rakiura, in partnership with Zero Invasive Predators (ZIP), is planning to reduce feral cats across approximately 40,000 hectares of Rakiura National Park. This will cover a variety of terrain in and around the Tin Range, including alpine shrublands where pukunui breed and lower lying kamahi/podocarp forest. The operational boundaries include buffer zones outside of the pukunui breeding area to account for feral cats, as they have large home ranges.

How we will achieve this

The most effective way to control predators over large areas is to use bait pellets containing sodium fluoroacetate (1080). Helicopters distribute the bait across the forest along pre-determined and GPS-monitored flight paths. Possums and rats eat the bait, and feral cats are controlled as they eat the poisoned rats.

This is the only way to control these predators across vast, remote and rugged landscapes. Ground-based trapping and bait stations are effective in smaller, more accessible areas. However, the number of predators can overwhelm trapping networks. The toxin brodifacoum will not be used in this aerial predator control operation.



Department of
Conservation
Te Papa Atawhai



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Predator Free Rakiura

Update on eradication trial

ZIP, on behalf of Predator Free Rakiura, had originally proposed to carry out a predator eradication trial across 10,000 hectares at the southern end of Rakiura during autumn 2025. This trial is now proposed to take place in 2026. It will be informed by ongoing discussions and research throughout 2025.

Additional, smaller-scale trial

While the pukunui recovery operation is a standalone response to an immediate conservation crisis, it also presents an opportunity to gain critical insights into predator behaviour and control methods on Rakiura.

ZIP is designing a small-scale eradication trial to be conducted alongside the pukunui operation, within the proposed operational area.

This trial involves an additional application of non-toxic prefeed and toxic bait, followed by intensive predator detection. This method has been used to successfully eradicate predators from large areas in South Westland and Te Manahuna Aoraki.

This trial will help us to learn about the effectiveness of aerially-applied 1080 to eliminate rats in the Rakiura context, before the eradication gets under way.

Deer repellent research

Predator Free Rakiura is continuing to work through stakeholder interests and concerns around the project.

In response to requests from experienced hunters, ZIP wants to trial the use of deer repellent during the first stage of the eradication. In support of this proposal, work is underway to understand how effective deer repellent is for reducing the impact of 1080 on white-tailed deer, and whether it reduces the effectiveness of the bait on the target rat species.

Manaaki Whenua is leading a trial with field support from ZIP rangers. From March 2025, non-toxic cereal baits containing deer repellent are being applied by hand in front of monitoring cameras, to observe deer interactions.

These and other trials, along with ongoing discussions with the community, will help guide the design of future eradication operations.

Partnering with ZIP to protect pukunui

This predator control operation is being led by the DOC team on Rakiura. Zero Invasive Predators (ZIP), a not-for-profit organisation, has been engaged to help deliver the operation and provide support with community engagement and consultation.

Proposed timeframe and sequence

The pukunui predator control operation is planned to occur between June and September this year. It will be carried out in two phases. The exact timing is weather dependent as at least 48 hours of fine weather is required to deliver each application of bait.

The operation begins with the distribution of pre-feed non-toxic bait to prepare predator species to eat the toxic bait that will be applied afterwards.

Phase 1: From June – Two applications of pre-feed non-toxic bait within the smaller eradication trial block, followed by toxic bait. This will be repeated in phase two.

Phase 2: From August – One application of pre-feed non-toxic bait across the entire operational area of approximately 40,000 hectares, followed by one application of toxic bait.

The proposed operational area

The map on page five shows the proposed area of approximately 40,000 hectares for predator control, and the elimination trial site within this area.

The map on page six shows where recreational hunting areas intersect with the operational area.

Given the scale of the operational area, multiple helicopters will be used to distribute bait. The site where bait will be loaded onto helicopters is yet to be confirmed. It will be away from Oban to minimise any disruption to the community.

Parties that may be directly impacted by the loading site location and helicopter flight lines will be identified and consulted with.

Monitoring predators and pukunui

Rats, feral cats and possums will be monitored in the operational area before and after the operation. We expect to control more than 95% of these predators in the area.

This will provide vital support for pukunui. Other native species will also benefit including Rakiura tokoeka kiwi.

DOC is completing its annual survey of pukunui in March this year. As part of this, juveniles are being banded so their development can be monitored. The survey will be repeated next year.

Operational consent process

The operation requires permission from Te Whatu Ora – Health New Zealand.

Environment Southland is also being engaged to ensure resource consent requirements are met.

DOC has the delegated authority from the Environmental Protection Agency to decide applications for permission to use 1080 on land administered or managed by DOC.

DOC ensures that all legal and policy requirements are met, and that any potential risks of the operation are managed.

Coastal boundaries and marine monitoring

DOC and ZIP are working closely with the commercial fishing and aquaculture industries on Rakiura to ensure the operational plan safeguards these economically vital industries.

Bait will not be applied directly into the ocean or outside the operational boundaries. We use the best technology available to accurately distribute bait along pre-determined and monitored flight paths.

Water supply management

To maximise the benefits of the operation for pukunui and other native species, no exclusion zones are proposed within the operational area.

The water supply at Rakeahua Hut will be disconnected before toxic bait is distributed, and water will be supplied from another source.

We're engaging with the maritime community to ensure that known creek water sources within the operational area have appropriate precautionary measures in place.

Mitigating impacts on hunters

We are aware of the impacts of aerial operations on recreational hunting, and we are working with the hunting community to understand concerns.

To minimise these impacts, we are proposing to use deer repellent in areas where hunting blocks overlap with the operational area. This will allow us to monitor both the efficacy of repellent on reducing impact on whitetail deer populations and measure the efficacy of repellent bait on target species.

Have your say

DOC and ZIP are consulting with a range of individuals and parties that may be affected by the proposed pukunui predator control operation.

This includes Te Rūnanga o Ngāi Tahu and its respective Papatipu Rūnaka, landowners adjacent to the proposed operational area, the Rakiura Māori Lands Trust, the local aquaculture and fishing industry, Rakiura National Park concessionaries, and commercial operators such as hunting groups and tourism businesses.

If you have been contacted by DOC or ZIP as an affected party for this operation, then we would like to understand how you could be affected.

As part of this consultation process, we will consider what we can do to mitigate any effects. Your feedback during consultation will help guide decisions about the operational plan.

Community meeting in Oban

We are hosting community meetings to provide people in Rakiura with an opportunity to discuss the operation.

Oban: Tuesday March 25th at 11am and 7pm at the Stewart Island Community Centre

Consultation next steps

Once the consultation process is complete, DOC and ZIP will update you about the outcomes of the consultation and any operational changes.

This update will include a notification fact sheet with a more precise timeframe for the operation and the confirmed operational plan and map.



Rakiura tokoeke kiwi in the Tin Range

Key facts about 1080

1080 is a manufactured, biodegradable toxin. Its active ingredient, fluoroacetate, is found in some poisonous plants in Australia, Africa and Brazil. It is also found at lower levels in a few of our native plants.

1080 bait is broken down naturally in the environment by micro-organisms, fungi and plants into harmless compounds and does not leave permanent residues in soil, water, plants or animals.

1080 dissolves to harmless levels very quickly when exposed to water and is almost always undetectable in waterways after 24 hours. 1080 operations have never contaminated drinking water in New Zealand. There are regulations and practices to prevent this.

Research studies show that the use of 1080 increases the breeding success of many native species including kiwi and kākā. 1080 does not negatively impact populations of invertebrates including kōura or insects such as caddisflies, mayflies and midges. Fresh water fish including eels/tuna and trout are also unaffected.

Managing risk

1080 is poisonous to humans, domestic and game animals. In areas where the toxin has been applied, dogs are at high risk until poisoned carcasses have disintegrated. This usually takes four to eight months. Dogs are not allowed at any time in Rakiura National Park.

Risks can be eliminated by following these rules:

DO NOT touch bait

WATCH children at all times

DO NOT EAT animals from this area or within the buffer zone outside the treatment boundary. The standard buffer zone is 2 km for deer.

Poison baits or carcasses are DEADLY to DOGS

Observe these rules whenever you see warning signs about pesticides. These signs indicate pesticide residues may be still present in baits and poisoned carcasses. When signs are removed this means you can resume normal activities in the area. Always report vandalism or unauthorised removal of signs.

If you suspect poisoning, please contact:

- Your local doctor or hospital
- The National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 or dial 111
- Seek veterinary advice for suspected poisoning of domestic animals

For more information

Contact DOC and ZIP

Email: pukunui@doc.govt.nz

Find out more online:

Learn more about why 1080 is used to control introduced predators.

www.doc.govt.nz/nature/pests-and-threats/methods-of-control/1080

See operational updates and detailed maps of predator control on public conservation land

www.doc.govt.nz/nature/pests-and-threats/pesticide-summaries

See updates about track access and safety on public conservation land

www.doc.govt.nz/parks-and-recreation/know-before-you-go/alerts

Learn more about Predator Free Rakiura

www.predatorfreerakiura.org.nz/

Get Rakiura hunting updates

www.doc.govt.nz/parks-and-recreation/things-to-do/hunting/where-to-hunt/southland/stewart-island-rakiura-hunting/



Pukunui by the Deceit Peaks in the Tin Range



