

Notification about predator control on Rakiura/Stewart Island

To protect pukunui/southern dotterel, the Department of Conservation (DOC) and Zero Invasive Predators (ZIP) are going to reduce feral cats, possums and rats by conducting an aerial control operation this year.

Why we are controlling introduced predators

Pukunui/Southern NZ dotterel is one of the most threatened birds in New Zealand with just 105 remaining, largely because of predation by feral cats and other predators. The population has declined from 176 since 2020. The Pukunui Recovery Project aims to rebuild the pukunui population to at least 300 birds by 2035.

To help achieve this, trapping efforts need to be supplemented with aerial predator control this year. We are aiming to control more than 95% of predators in the operational area. This will give pukunui the best chance at having a more successful breeding season in spring.

How we are going to achieve this

The safest and most effective way to control introduced predators over large areas is to use biodegradable bait pellets containing 1080. The bait targets rodents and possums. Feral cats are also controlled through secondary poisoning as they feed on the carcasses of the dead rodents and possums.

Helicopters will accurately distribute bait across 43,000 hectares of Rakiura National Park along pre-determined and monitored flight paths. 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 treatment area has been extended to cover the large home ranges of feral cats where possible.

The operational area

The map on page four shows the area of approximately 43,000 hectares for predator control, and the eradication trial site within this area. Given the large scale of the operational area, multiple helicopters will be used to distribute bait.

The map on page five shows where bookable hunting blocks intersect with the operational area, as well as the areas where deer repellent will be applied.



Pukunui/Southern New Zealand dotterel
Photo by Daniel Cocker

Predator Free Rakiura 1080 to Zero trial

ZIP will deliver a small-scale eradication trial across approximately 7,000 hectares within the pukunui operational area. The aim is to test tools and techniques for completely removing target predators. Once the trial is completed, predators will not be prevented from reinvading the area.

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

The trial will help us to learn about the effectiveness of using 1080 to eradicate three types of rats – kiore, ship rats and Norway rats - on Rakiura. This will inform the design of future eradication operations.

Permission outcome

DOC is delegated authority by the Environmental Protection Agency to consider applications for permission to use 1080 on land administered or managed by DOC. Permission has been granted for this operation. ZIP has also received the required permission from Te Whatu Ora – Health New Zealand.



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Timeframe and sequence

The operation is scheduled to occur between June and September this year, weather permitting. This timing has been chosen with the aim to give pukunui the best possible protection for their spring/summer breeding season.

The operation will be carried out in two phases. Each phase 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 1080 to Zero trial block no earlier than June 5, followed by toxic bait no earlier than June 12. This will be repeated in phase two.

Phase 2: From August (exact dates TBC) – One application of pre-feed non-toxic bait across the entire operational area of approximately 43,000 hectares, followed by one application of toxic bait.

The exact timing of this is weather dependent: 48-72 hours of fine weather is required to deliver each application of bait.

Monitoring native species

DOC has recently completed its annual pukunui flock count. The pukunui population has increased from 101 to 105. As part of the flock count, juveniles were banded so their survival rates can be monitored. The flock count will be repeated next year.

Trail cameras have been set up to monitor the impacts on predators. The cameras will also capture native species including Rakiura tokoeka kiwi. Harlequin gecko, small-eared skink and southern skink are also being monitored before and after the operation.

Predator monitoring

Camera networks have been set up to monitor predators, particularly feral cats, rats and possums, before and after the operation. The cameras won't be able to differentiate between the three rat species, so traps are also being used to ensure we measure the impact on kiore.

Deer repellent and deer monitoring

1080 bait pellets containing deer repellent will be distributed across bookable hunting blocks within the operational area. White-tailed deer will be monitored by trail camera grids in the deer repellent and non-deer repellent areas, and also in a non-treatment area.

The aim is to better understand whether using deer repellent reduces the impact of 1080 on the white-tailed deer population on Rakiura. We also want to know whether deer repellent reduces the effectiveness of the bait on the three target rat species. This will be valuable research for Predator Free Rakiura.

Consultation outcome

DOC and ZIP have consulted with partners, key stakeholders and potentially affected parties.

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

As a result of this consultation, the following decisions have been made in the operational plan:

Hunting blocks will stay open for bookings throughout operations, with appropriate communication with hunting parties and recommendations in place not to consume meat until caution periods are lifted.

Deer repellent will be used within bookable hunting blocks only. This aims to mitigate the impact on white-tailed deer hunting opportunities in areas where hunters are most likely to be. Non-deer repellent bait will be used in the open hunting zone, including across pukunui breeding grounds.

Deer repellent will also be used in buffer zones around certain higher value hunting blocks, recognising that deer home ranges may extend beyond the hunting blocks.

The deer monitoring areas have moved to the Doughboy Bay area and will be used to understand the impact of a standard predator control operation on white-tailed deer with and without deer repellent. This has changed the location of the 1080 to Zero trial area.

The treatment area boundaries have changed on the eastern side of the original operational area to completely avoid some of the bookable hunting blocks.

Waterways will be tested within the operational area for sodium fluoroacetate. Samples will be taken at various locations from source to confluence to give an accurate representation of entire water catchments. These locations include South West Arm where the Rakeahua River meets the ocean environment and Doughboy Creek where the creek meets the sea.

Bait will not be sown directly into the ocean. By using a 'safeline' approach, all bait will be applied above the mean high water springs (MWHS) tidal level to prevent bait from entering the marine coastal environment.

Loading site: The operation will be carried out from a land-based loading site in the Mason Bay area. No bait loading or helicopter refuelling will take place on vessels at sea.

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. Bait pellets are made up of sodium fluoroacetate (0.15% of each pellet), cereal, cinnamon lure, sugar, and green dye.

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 takes four to eight months. During this time, people can still hunt game animals however it is advisable not to take meat from within the operational areas. Once carcasses have decomposed, the caution period will be lifted, and normal hunting activities can resume. Unpermitted 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 suspected 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

Next steps

Stakeholders are being notified and there will be a public notice in local newspapers. There will also be warning signs placed at entrances to the treatment area and in huts within or adjacent to the treatment area immediately prior to the operation.

If you want to be notified by email 24-48 hours before each operation begins, please contact the DOC Rakiura and ZIP Operations team. Email: pukunui@doc.govt.nz

After the operation, DOC will contact stakeholders about the results. We will continue to share insights about the outcomes for pukunui and other native species over time.

Community meeting in Oban

DOC and ZIP are hosting another round of Rakiura community meetings to share details and answer questions about the operational plan.

Oban: Tuesday May 27th from 11am-1pm and 7pm-9pm at the Stewart Island Community Centre

The DOC and ZIP team will also be available for one-on-one sessions on the morning of the May 28th, no appointments required. 8am-12pm at the Stewart Island Community Centre

For more information

Contact DOC and ZIP

Email: pukunui@doc.govt.nz

Visit the DOC website:

See this information about the operation online

www.zip.org.nz/updates/2025/protecting-pukunui-on-rakiura

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

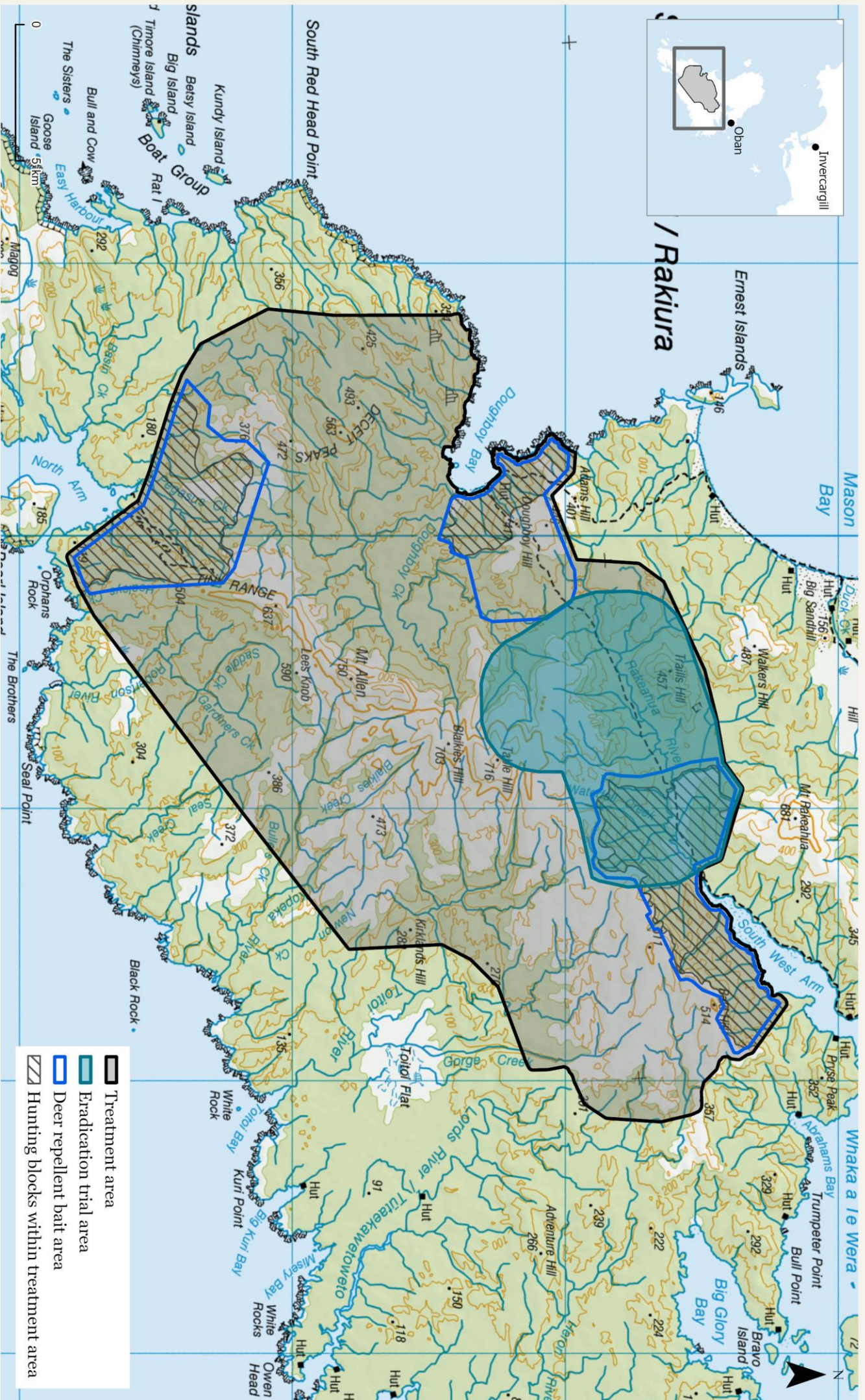
www.doc.govt.nz/parks-and-recreation/know-before-you-go/alerts

Learn more about Predator Free Rakiura

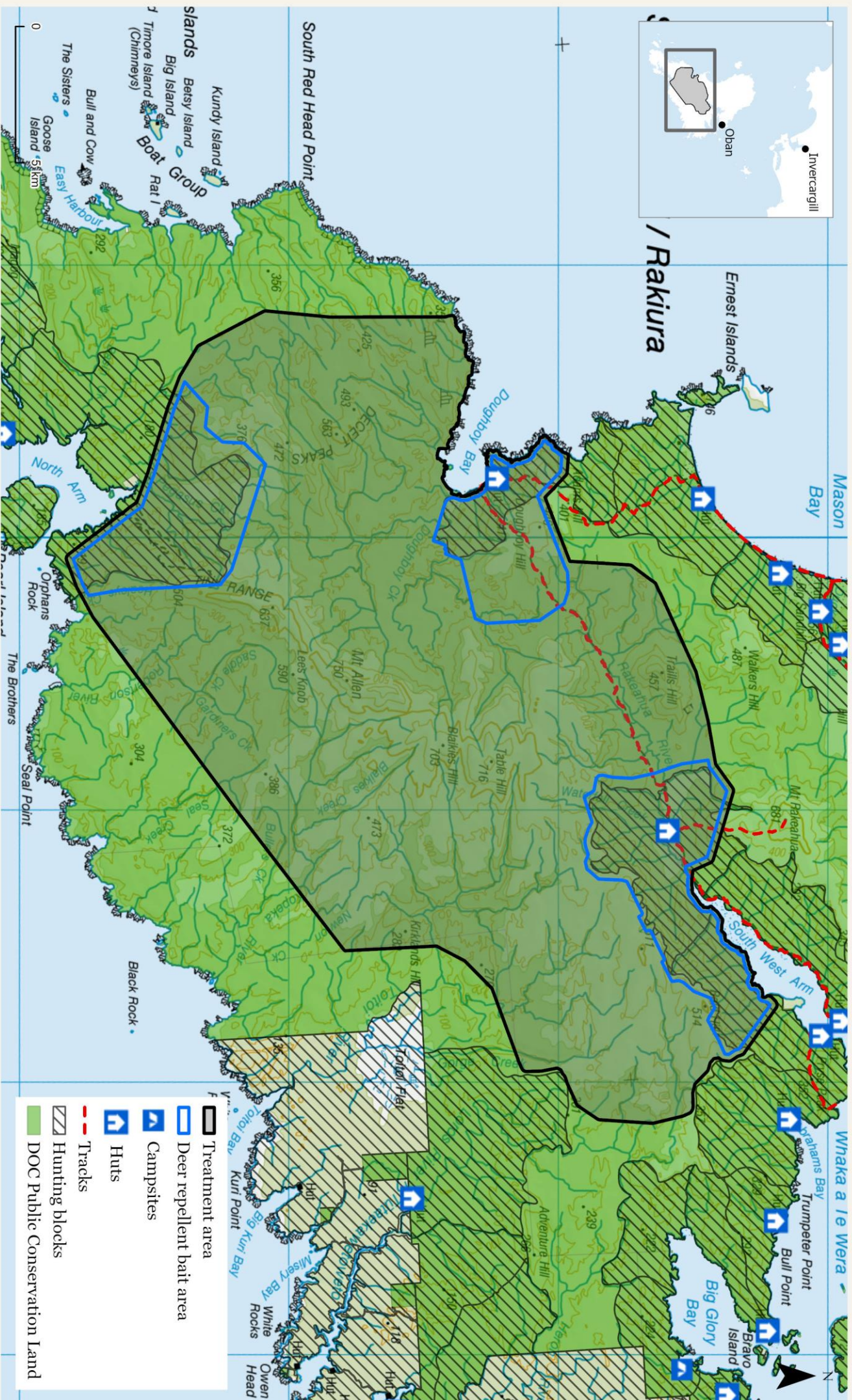
www.predatorfreerakiura.org.nz

Get Rakiura hunting updates

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



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Stewart Island / Rakiura

Aerial Predator Control 2025

Treatment Area: 43,100ha