

Protect our species *in the Northern Ruahine Ranges*



Pest control to protect native species from widespread predator plagues

A heavy seeding (mast) is occurring in many forests this year. This natural event should benefit native species, but it will be highjacked by introduced predators. Rodent and stoat numbers will skyrocket.

Seedfall and rodent levels are being monitored at the sites where endangered native species are under greatest threat, including the Northern Ruahine. Without predator control, vulnerable species such as whio, mohua, and bats/pekapeka will suffer heavy losses.

Pest control works

In November 2017 DOC carried out an aerial 1080 operation across 32,829 ha in the Northern Ruahine. Rodent levels were monitored using 160 tracking tunnels. In June 2017, rats tracked 11% of the tunnels. Three weeks after the operation, no rat tracks (0%) were found in any of the tunnels.

Rats were still undetectable (0% tracking) in late January 2018 and were only at 1% by May 2018. Low rat abundance through the breeding season gave native birds and animals a much better chance of successful breeding.

Outcomes

In the Northern Ruahine DOC monitored predation on giant land snails both inside and outside of the pest control area. No rat or possum predation was found on snails inside the treatment area, but both were found on snails outside the treatment area. DOC is also monitoring numbers of whio in the area for 5 years

Nationally, intensive species monitoring showed the nesting success of whio, kiwi, toutouwai and rifleman was significantly higher within pest control areas than outside. Go to doc.govt.nz/our-work/battle-for-our-birds.



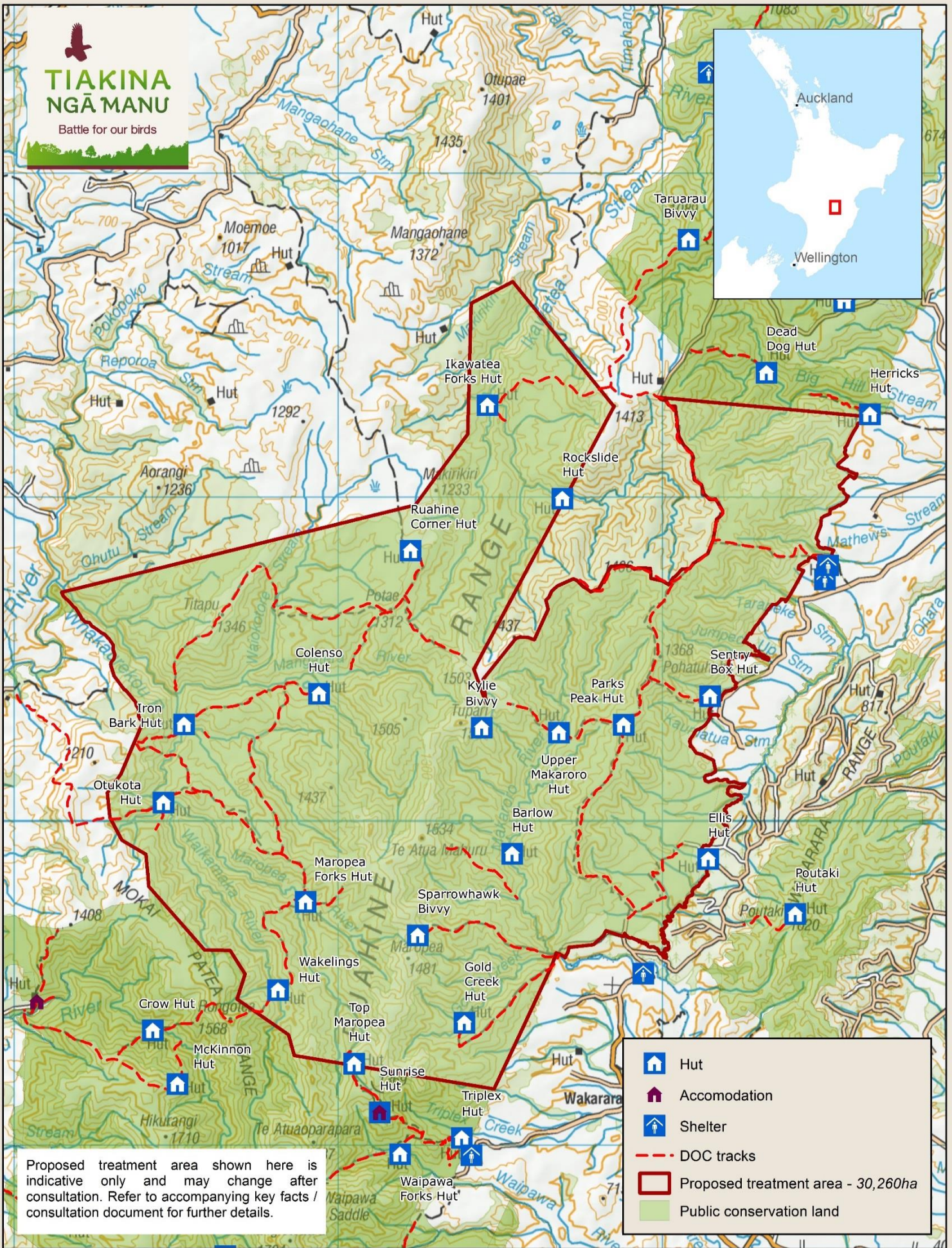
Toutouwai (North Island robin). Photo: Donald Laing.



Rat footprints on tracking card. Photo: Anthony Behrens.

TIAKINA NGĀ MANU

Battle for our birds



Proposed treatment area shown here is indicative only and may change after consultation. Refer to accompanying key facts / consultation document for further details.

- Hut
- Accomodation
- Shelter
- DOC tracks
- Proposed treatment area - 30,260ha
- Public conservation land

5 km

Scale at A4 = 1:150,000
 NZGD 2000 New Zealand Transverse Mercator
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 Basemap : LINZ Topo250 / 50
 DOC, Geospatial Services
 19/02/2019



Northern Ruahine
 Aerial Predator Control 2019
 Proposed treatment area: 30,260 ha



Department of
 Conservation
 Te Papa Atawhai

New Zealand Government

The Northern Ruahine

The Northern Ruahine ranges are home to many rare and endangered species. Whio, eastern brown kiwi, and toutouwai are still found here. These species have all become extinct in the wild south of the Ruahine Ranges, due to predation by stoats and rats.

The area is also home to other native birds including kākārīki/parakeets, pōpokatea/whitehead, kaka, matata/fernbird, pīhoihoi/pipit and tītīpounamu /rifleman.

The Northern Ruahine ranges are also a stronghold for the giant land snail *Powelliphanta marchanti*. Threatened plants including Turner's kohuhu (*Pittosporum turneri*), pikirangi (red mistletoe), and *Dactylanthus taylorii* grow in this area.

The risks

Our birds are vulnerable to predation from rats, possums and stoats. Stoat predation is particularly bad for birds that nest in holes (such as kaka, ruru and kakariki) as the female is more likely to be trapped on the nest and killed during predation events, and for flightless birds such as kiwi and moulting whio.

Giant land snails are vulnerable to predation by possums and rats.

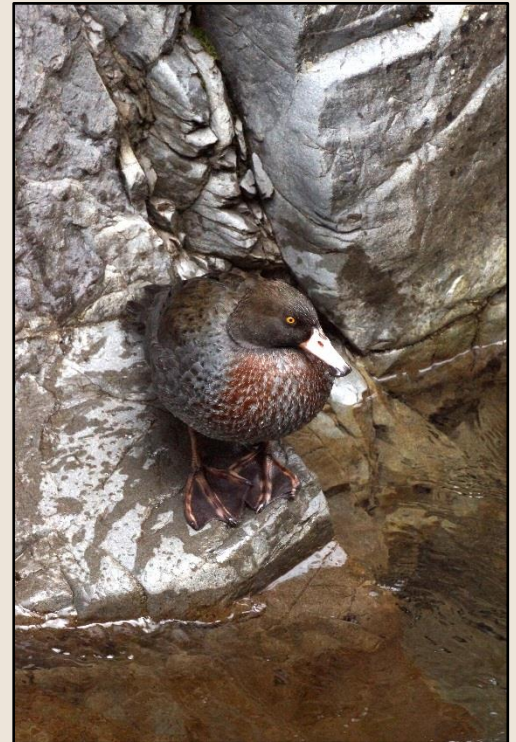
Our threatened plants are highly vulnerable to possum browse. Rats also eat *Dactylanthus* flowers and *Pittosporum turneri* seeds further reducing the chances of survival of these rare plants.

Past successes

Aerial 1080 has been successfully used at this site in 1994, 2004, 2010 and 2017 to protect the plants and animals that make this such a special place.

2019 – the battle continues

Extensive seeding is occurring in 2019 and is likely to be the biggest mast in decades. DOC will have to prioritise resources to protect the areas where species are at the greatest risk. We do not yet know if the resources available will allow the Northern Ruahine to receive pest control this year.



Ruahine whio. Photo: Anthony Behrens.



North Island brown kiwi.
Photo: andrewwalmsleyphotography.com.



Powelliphanta marchanti. Photo: Anthony Behrens.

A range of pest control methods will be used including traps and toxins

Aerial application of 1080 baits is the most cost-effective predator control method over large areas. It is the only viable method in remote or rugged terrain. A stoat trapping network has run in the Northern Ruahine since 2007. The trapping makes a valuable contribution to protecting the taonga species of the Ruahine Ranges but is inadequate on its own to deal with the scale of damage caused by rodents and mustelids after a beech mast.

Aerial 1080 pest control will target rats, but stoats are also killed through eating poisoned rodent carcasses. Operations begin with an aerial pre-feed of non-toxic baits to encourage rats to eat the 1080 baits that are applied later.

Time frame

Operations will be triggered as rodent populations reach monitored thresholds. Operations, which are weather dependent, will take place when they are most effective between July and November. Dates will vary between sites and will be confirmed closer to operations taking place.

Planning

DOC is working closely with iwi and consulting with key stakeholders before finalising details. Before operations begin, DOC will contact affected neighbours, put up warning signs and advertise in local newspapers. Use of 1080 requires the consent of the Environmental Protection Authority, and permission from the Ministry of Health. The process includes an assessment of environmental effects (AEE) to safeguard the public and the environment.

What you need to know

The Department of Conservation complies with all relevant regulations and takes a precautionary approach to the aerial application of pesticides.

- *The 1080 cereal baits are about 2 cm long, cylinder-shaped and are dyed green.*
- *Non-toxic pre-feed cereal pellets are about 2 cm long, cylinder-shaped but are fawn-coloured (not dyed).*

Managing risk

Dogs, in particular, are highly susceptible to 1080. The risk to dogs from poisoned carcasses will remain until they have completely rotted, perhaps for more than 6 months.

Precautionary approach

Risks can be eliminated by following these simple rules:

- *DO NOT touch bait*
- *WATCH CHILDREN at all times*
- *DO NOT EAT animals from this area*
- *Poison baits or carcasses are DEADLY to DOGS*

Observe these rules whenever you see warning signs about pesticides. Warning signs indicate pesticide residues may still be present in baits or animals. When signs are removed, this means you can resume normal activities in the area. Please report suspected vandalism or unauthorised removal of signs. If in doubt, check with your local DOC office.

More information

Senior Ranger Biodiversity
Department of Conservation
Papaoiea/Manawatū Office
Private Bag 11010, Palmerston North 4442
Phone: +64 6 350 9700

What to do if you suspect poisoning

Contact emergency services: 111

National Poisons Centre: 0800 764 766

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Also see doc.govt.nz/battleforourbirds