# Protect our species Dart-Routeburn-Caples



# Pest control to protect native species from widespread predator plagues

A heavy seeding (mast) will occur in many forests this year. This natural event, that should benefit native species, will be hijacked by introduced predators as rodent and stoat numbers will skyrocket. Seedfall and rodent levels will be monitored at sites where rare and endangered native species are under greatest threat. When rodent numbers meet critical levels, that will trigger predator control. Without predator control, some species such as yellowhead/mohua, kākā, orange-fronted parakeet/kākāriki karaka, rock wren/pīwauwau and bats/pekapeka will suffer heavy losses.

# Predicting increased rodent populations – 2014 and 2016

A widespread heavy seedfall in South Island beech forests in early 2014, and again in 2016, led to escalating rat and mice numbers. Two events of such magnitude in quick succession was thought to be unusual. DOC, with the help of NIWA, is getting better at predicting these mast events.

#### Pest control works

DOC carried out aerial 1080 pest control in the winters following the prolific forest flowering over more than 600,000 hectares each season. Monitoring showed an average rat kill of about 95%, which reduced rodents to undetectable levels at most sites and stoat plagues were avoided.

#### Outcomes

Intensive species monitoring showed the nesting success of rock wren, mohua, robin and rifleman was significantly higher within pest control areas than outside. Go to <a href="https://www.doc.govt.nz/our-work/tiakina-nga-manu/">https://www.doc.govt.nz/our-work/tiakina-nga-manu/</a>

#### 2019 - the battle continues

Extensive seeding is occurring again in 2019 but on an even larger scale. This is likely to be the biggest mast in decades. We will have a major pest problem on our hands.

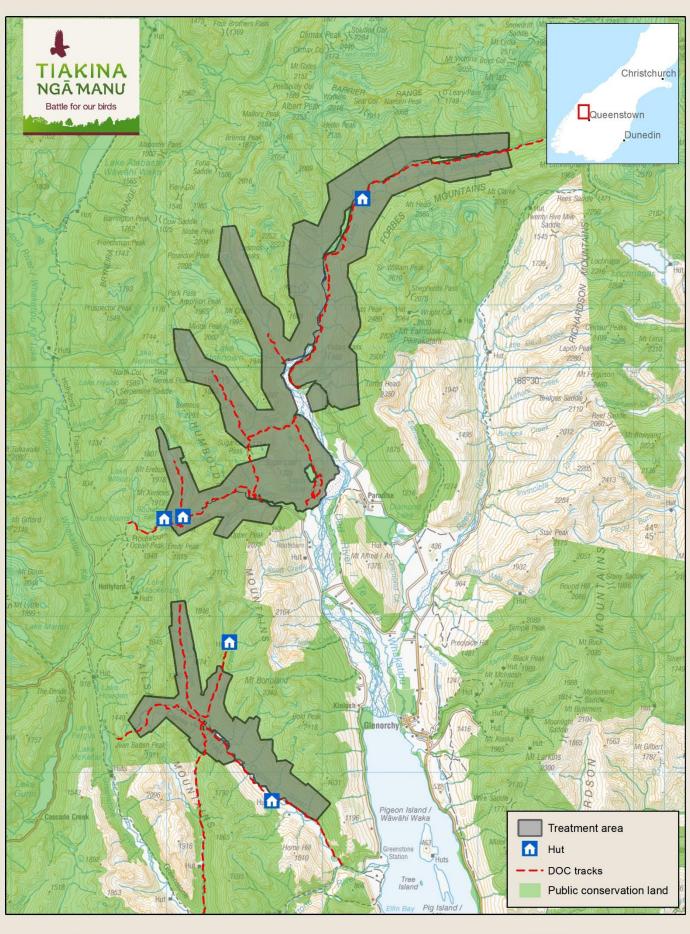




Rifleman. Photo: Ron Enzler



Rock Wren. Photo: Wynston Cooper





Dart, Routeburn and Caples
Aerial Predator Control 2019
Treatment area: 19,437 ha



# Dart-Routeburn-Caples sites and values

Where heavy seedfall occurs, we can expect predator numbers to soar. To be ready to protect native species at risk, DOC is planning predator control in approximately 19,000 hectares of conservation land in the Wakatipu area to protect, among others, the resident yellowhead/mohua population.

#### Yellowhead/mohua

Mohua are small insect eating songbirds that were once common throughout New Zealand.

The Dart-Routeburn area is one of four mainland mohua populations recognised as critical to the long term recovery and survival of the species.

Mohua nest within small holes in trees which makes them easy prey for rats and stoats.

In years when predators are abundant, mohua breeding is curtailed. During big rat and stoat plagues the species takes a huge hit – about 80% to 90% of birds are killed.

Regular pest control has prevented mohua from disappearing from these valleys but they are still struggling. Continued pressure on predators is needed to allow the population to thrive and recover.

## Blue duck/whio

Whio live in fast flowing rivers in parts of Mount Aspiring National Park and the Caples Valley.

Stoats are a threat to whio, especially during the breeding season, and have been filmed attacking female whio on the nest and taking eggs.

Where pest control has been undertaken, whio have thrived. In Mount Aspiring National Park, the area under regular pest control has led to a visible increase in whio numbers, with birds being regularly sighted by visitors to the park.

## Other species

Several other threatened species present in the area, such as the southern long-tailed bat/pekapeka, rock wren/pīwauwau, kaka and kea, will benefit from the predator control operations.



Mohua. Photo: Ron Enzler



Whio. Photo: Ron Enzler



# 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. In more accessible areas, traps or bait stations will be laid, depending of the density of pest populations. High predator numbers can overwhelm trapping networks in some areas. In those cases, aerial 1080 pest control will supplement existing trapping.

Aerial 1080 pest control will target rats, but stoats will also be 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. The Wakatipu operations, which are weather dependent, will take place from early August onwards. There may be a need for a second operation, subject to the success of the first and this will be communicated to all stakeholders once more is known.

#### 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 2cm long, cylinder-shaped and are dyed green.
- Non-toxic pre-feed cereal pellets are about 2cm long, cylinder-shaped but are brown coloured.
- Deer repellent will be used across the Dart, Routeburn and Caples Valleys; this can darken the colour of the pellets but they remain green.

## Managing risk

Dogs, in particular, are highly susceptible to 1080. The risk to dogs from poisoned carcasses will remain until they have completely rotted; this will be for around 8 months depending on conditions.

#### 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

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Email: <a href="mailto:bfobwakatipu@doc.govt.nz">bfobwakatipu@doc.govt.nz</a> Website: www.doc.govt.nz What to do if you suspect poisoning Contact emergency services: 111 National Poisons Centre: 0800 764 766

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Also see www.doc.govt.nz/our-work/tiakina-nga-manu

