

## Consultation and notification summary Wet Jacket operation 2018-19

This document provides a summary of the consultation and notification process undertaken by the Department of Conservation (“DOC”) and its contractor, Contract Wild Animal Control (“CWAC”), in respect of Wet Jacket pest control operation.

On 22 October 2019, the Department revoked the permission it had issued to CWAC to apply pesticides within the Wet Jacket treatment block. This permission was revoked on the basis that rodent numbers in the proposed treatment area had not reached anticipated levels. This summary document therefore does not capture the full consultation and notification process that would otherwise have taken place prior to the commencement of the operation. It only sets out those consultations and notifications that had been undertaken as at the date the permission was revoked.

### Consultation on possible pest control methods

The Department did not consult on the possible methods of pest control as aerial 1080 was considered to be the only effective control method.

The area that was to be treated as a part of this operation is very remote and covers a large area of rugged and steep terrain that is not accessible by foot. Aerial 1080 was considered to be the only method suitable for effectively controlling the rats, possums and stoats within the proposed treatment area.

### Consultation on effects

DOC and CWAC consulted the following groups of stakeholders:

1. Iwi
2. Landowners
3. Adjoining land occupiers
4. Hunting and fishing groups
5. Sponsors and partners
6. Concessionaires
7. Vessel owners and operators
8. Aviation companies
9. Recreation groups
10. Local government and statutory bodies
11. Research departments
12. Schools
13. Police
14. Warehouse owners

The following table shows the number of each type of stakeholder consulted:

Type of stakeholder	Number consulted	Consultant	Reason for consultation	Method of consultation
Iwi	5	DOC	Consultation on the effects of the operation on Rūnanga relative to	In-person visits and email correspondence

			cultural values and support from iwi	
Landowners	4	DOC & CWAC	To seek consent to use the land as a potential loading site	In-person visits, phone conversations and email correspondence
Adjoining land occupiers	2	CWAC	Consultation on effects of the operation adjoining land occupiers	In-person visits and phone conversations
Hunting and fishing groups	26	DOC & CWAC	Consultation on effects of the operation on hunting groups	In-person visits, phone conversations, email correspondence
Sponsors and partners	5	DOC	Consultation on effects of the operation and support from sponsors and partners	In-person visits, phone conversations and email correspondence
Concessionaires	6	CWAC	Consultation on effects of the operation and support from concessionaires	In-person visits, phone conversations and email correspondence
Vessel owners and operators	12	DOC & CWAC	Consultation on effects of operation on owners and operators of vessels that were harboured near, or travelling close to, the proposed treatment area	Phone conversations and email correspondence
Aviation companies	14	DOC & CWAC	Consultation on effects of operation and support from aviation companies operating in the area	In-person visits, phone conversations and email correspondence
Recreation groups	2	DOC	Potential impact on recreation activities	Phone conversations and email correspondence
Local government and statutory bodies	4	DOC & CWAC	Assessment of environmental effects, potential impacts of the operation and conditions of DHB consent	In-person visits, phone conversations and email correspondence

Research departments	1	DOC	Consultation on potential effects of the operation	Consultation on effects of the operation
Schools	1	CWAC	Consultation on potential effects of the operation	Email correspondence
Police	4	DOC	Presentation on the <i>Tiakina Ngā Manu</i> programme and briefing of the operation	In-person visit and email correspondence
Warehouse owners	1	DOC	Consultation regarding storage of baits	In-person visit

### Consultation outcomes

#### Iwi

Three of the iwi groups that were consulted were very supportive of the operation and none of the consulted groups raised any concerns.

#### Landowners

All four landowners were supportive of the operation and confirmed that they were happy for their land to be used as a loading site. None of the landowners objected to the operation or raised any concerns.

#### Adjoining land occupiers

One party expressed their support for the operation, and none of the parties raised any concerns.

#### Hunting and fishing groups

Two of the groups that were consulted noted that they were concerned about actual and/or perceived impacts of the operation on crayfish that were being farmed near the proposed treatment area. However, one of the parties accepted that they were happy for operation to go ahead if a 50m buffer is set, and extra care is taken, around areas where crayfish are farmed.

Another group that was consulted raised concerns regarding the potential impact on high profile fishing sites in Waikaia, Eyre Mountains, Kepler and Clinton. DOC explained that none of those sites were near the proposed treatment area for the Wet Jacket operation, and therefore those sites were not likely to be affected by this operation.

None of the other parties raised any concerns regarding the proposed operation.

#### Sponsors and partners

None of the parties that were consulted raised any concerns or objected to the proposed operation. One group noted that they were very supportive of the operation.

### Concessionaires

Two of the parties that were consulted expressed their support for the operation. One party also noted that, in future, they were keen to hand-lay pesticides across areas that were not being treated aerially. One individual noted that they did not personally support the operation but understood DOC's position.

### Vessel owners and operators

One of the parties that were consulted was very supportive of the operation and believed that periodic aerial 1080 treatment and trapping in the area would provide long-term benefits to Fiordland tokoeka in the area. They did, however, note that they would not be as supportive if the aerial 1080 operation was carried out on a 'one-off basis' as they believed that would have less long-term benefits.

Two other vessel owners/operators also expressed their support for the operation. None of the parties that were consulted objected to the proposed operation or raised any concerns.

### Aviation companies

None of the parties that were consulted objected to the proposed operation or raised any concerns.

### Recreation groups

The groups that were consulted did not object to the operation or raise any concerns. One group noted that they were strongly in support of the operation.

### Local government and statutory bodies

Three of the four groups that were consulted expressed their support for the operation and none raised any concerns.

### Research departments

The research department that was consulted was supportive of the operation and noted that they understood why DOC needed to use aerial 1080 to treat the area. They did not raise any concerns regarding the proposed operation.

### Warehouse owners

The Department consulted with a party that owned a warehouse where 1080 bait pellets were to be stored. The consulted party did not raise any concerns.

The Department (and CWAC) provided 'information packs' to some parties as a part of the consultation process. These 'information packs' contained the following documents relating to the Wet Jacket operation (and are attached to this consultation summary):

1. Tiakina Ngā Manu – Southern South Island 2019 factsheet (attached as Appendix 1);
2. Tiakina Ngā Manu – Predator response 2019 factsheet (attached as Appendix 2);
3. Tiakina Ngā Manu – Wet Jacket peninsulas factsheet (attached as Appendix 3);
4. 1080 – safety information and data sheet (attached as Appendix 4);
5. Letter - 1080 Operation on Wet Jacket Peninsulas (attached as Appendix 5);
6. Public notice published in newspapers (attached as Appendix 6); and
7. Notice – Update on consultation and timing (attached as Appendix 7).

## **Notification**

The Department published a notice in several local newspapers to inform the public that the Wet Jacket operation was likely to commence on, or after, 17 May 2019. A copy of that notice is attached to this summary (as Appendix 6).

The Department will normally also notify affected parties that the start of an operation is imminent. This notification is undertaken as a part of the Department's pre-operational notification process. The Wet Jacket operation was postponed before a specific start date was determined. Therefore, the pre-operational notification process did not take place, and no parties were individually notified that the operation was likely to take place.

The Department did, however, send a letter to those parties it had previously consulted with to notify them that the Wet Jacket operation was likely to be carried out between May 2019 and July 2020. A copy of that notification letter is attached to this summary (as Appendix 7).

Released under the Official Information Act



## *SOUTHERN SOUTH ISLAND 2019*

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### Planned landscape scale predator control for 2019/20

A heavy beech seeding (mast) will again occur in many South Island forests this year. This natural event, that should benefit native species, will be highjacked by introduced predators as rodents and stoat numbers will skyrocket. Without predator control some native species such as mohua, kaka, kea, kakariki karaka / orange-fronted parakeet, piwauwau / rock wren, pekapeka / bats and whio will suffer heavy losses and risk local extinction in some areas.

Similar mast events occurred in 2014 and 2016. Evidence suggest that the 2019 mast will be the heaviest and most widespread since the 1970's and to compound the problem podocarp trees are fruiting heavily and tussock is masting. In 2016 the Department carried out predator control over approximately 800,000 hectares. In the 2019/20 season we plan to cover approximately 1,000,000 hectares nationally. In most places aerial application of cereal pellets containing 1080 will be used to protect native species by controlling predator numbers.

**Result monitoring:** Results from previous years showed an average rat kill of about 95% which reduced rats to undetectable levels at most sites and stoat plagues were avoided.

**Outcome monitoring:** 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 <https://www.doc.govt.nz/our-work/battle-for-our-birds/>

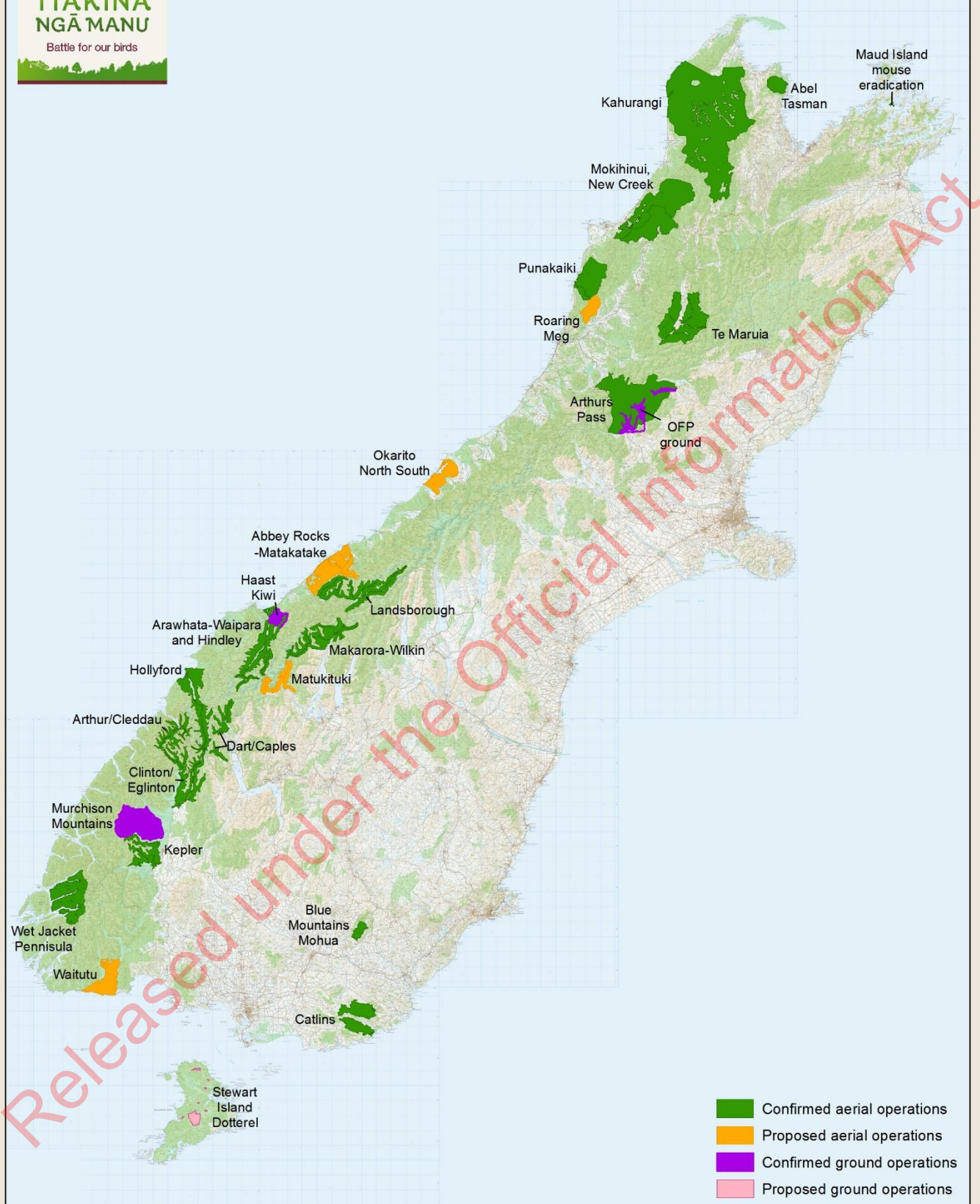
Most planned operations for the 2019/20 season have had aerial control previously, a few sites have been expanded, and we have included one new site, Wet Jacket which lies east of Resolution Island in Fiordland (refer to the map below).

If you have any questions, concerns or require further information please contact:

s 9(2)(a), 9(2)(g)(ii)

Operations Lead, Tiakina Ngā Manu

Email: s 9(2)(a), 9(2)(g)(ii)



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- Confirmed aerial operations
- Proposed aerial operations
- Confirmed ground operations
- Proposed ground operations

50 km

Scale at A3 = 1:2,300,000  
 NZGD 2000 New Zealand Transverse Mercator  
 Basemap : LINZ Topo250 / 50  
 DOC, Geospatial Services



12/02/2019  
 Proposed sites\_2019\_SI\_Feb19\_External.mxd  
 C:\GIS\_Analysis\Projects\Tasks\BFOB\6\_General\_Projects\2019>Status of Operations\

### Planned 2019/20 Predator Control Areas

12/02/2019

Operational areas shown here are indicative only and are expected to change through consultation



Department of Conservation  
 Te Papa Atawhai  
 New Zealand Government



TIAKINA  
NGĀ MANU

Battle for our birds

# Predator RESPONSE

2019

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Department of  
Conservation  
Te Papa Atawhai

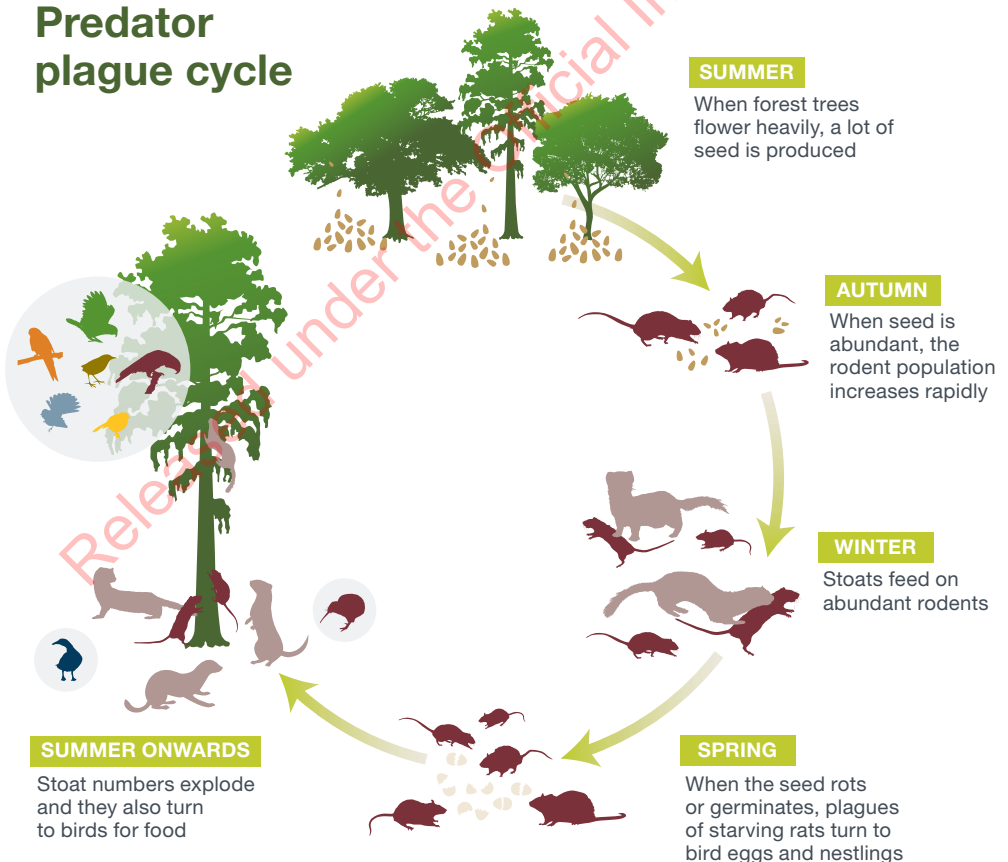


# 25 million native birds are killed by predators like possums, stoats and rats each year<sup>1</sup>

Heavy seeding of trees in our native forests will drive rodent and stoat numbers higher than normal this year and those pests will prey on threatened species including birds, bats and invertebrates.

The Department of Conservation will prioritise its predator control response in key ecosystems to protect New Zealand's native wildlife.

## Predator plague cycle



<sup>1</sup> John Innes. Landcare Research



## Degrees of control

In forests in years when there is no heavy seeding or mast, many native birds can tolerate the low levels of rats and stoats present and little or no pest control is necessary.

During years when mast events occur at just a few sites, localised pest control traps and bait stations will do the trick.

When heavy seedfall is more widespread, as it is this year, rats and stoats have to be controlled over very large areas.

## Who/blue duck

Status: In serious trouble (Nationally Vulnerable)

Population: More than 1000 breeding pairs

Distribution: In good numbers where conservation efforts protect populations.

### Who duckling survival rates at the Tongariro Forest Security Site

#### Before pest control (2004)



For every 3 breeding pairs of who, 2 ducklings made it to fledging



For every 3 breeding pairs of who, 6 ducklings made it to fledging



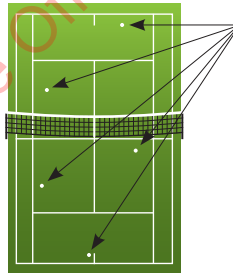
# Controlling predators

The Department of Conservation uses a range of pest control tools to suit the particular need. Trapping and other ground-based predator control methods play an important part in ongoing control but cannot be easily scaled up to respond rapidly to immediate pest threats.

Biodegradable 1080 is applied by air over large areas of rugged terrain to knock down rats, stoats and possums.

## Aerial 1080

1080 is biodegradable, breaks down quickly in the environment and does not leave permanent residues in water, soil, plants or animals. The active component occurs naturally in many plants found in Australia, South America and Africa as a defence against browsing animals.



**4-6 baits** are dropped in an area the size of a tennis court.

Approximately **12% of public conservation land** is to be treated with 1080 during this year's pest control operations.

## Ground control

Conventional and re-setting traps and bait stations are used for **longer term** and **localised suppression** of pest populations.



Conventional traps



Bait stations



## North Island brown kiwi

Status: In some trouble (Declining)

Population: 25,000

Distribution: Patchy throughout the northern North Island.

### Without predator control:



Only **5%** of kiwi chicks hatched in the wild will make it until they are old enough to breed – their 4th birthday.

### With predator control:



Up to **60%** of kiwi chicks hatched in the wild will survive to breeding age.



**More than 583 kiwi have been monitored** throughout 1080 operations since 1990. Over that time, not one has died as a result of 1080 poisoning.



Re-setting traps

*Photo: Neil Hutton*



# Populations under threat


Widespread forest seeding this year will lead to an increase in rats and stoats, putting our native wildlife at risk. The highlighted areas are home to some of our most vulnerable species and have been targeted as the areas most in need of predator control.


## Significant seedfall 2019

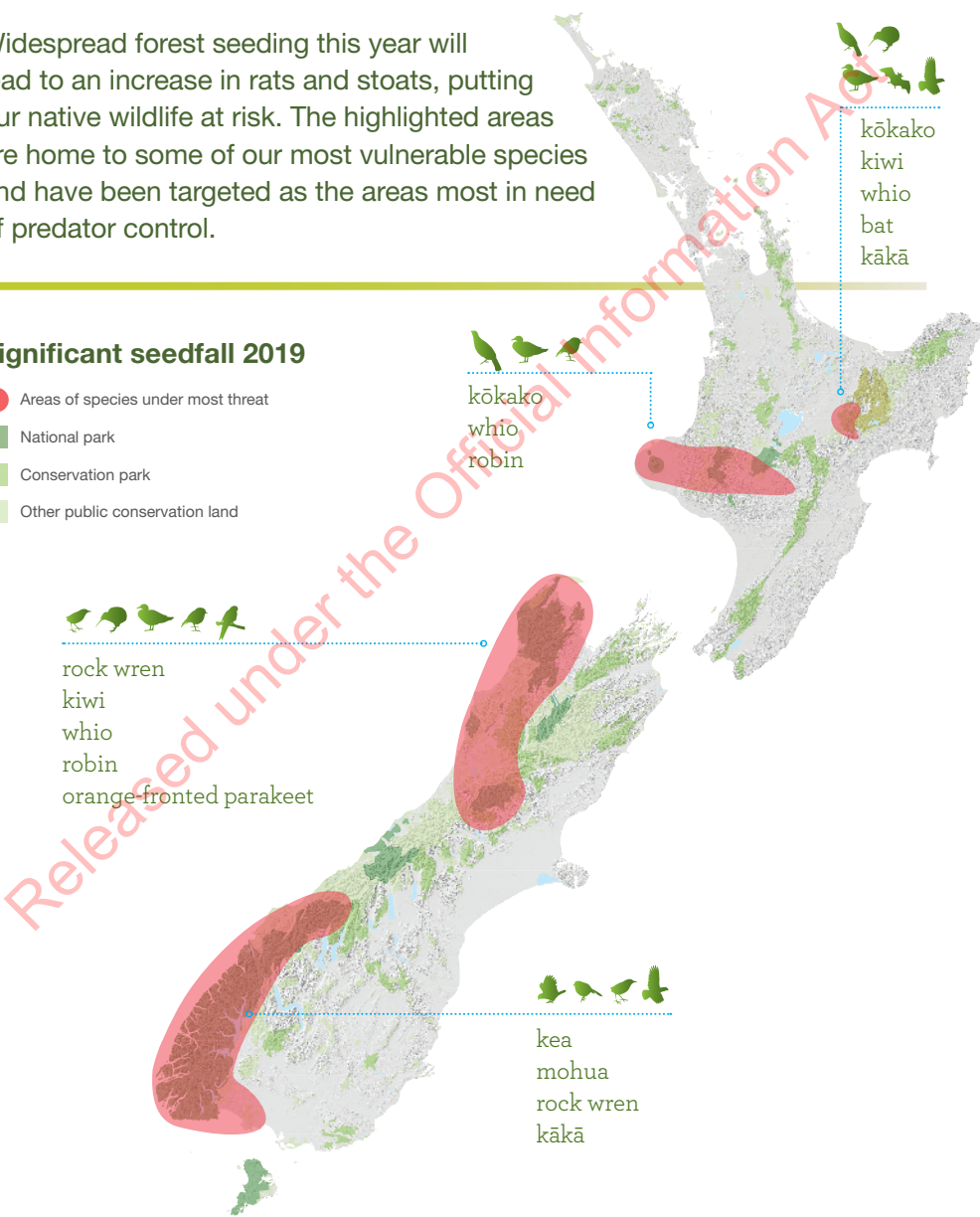
- Areas of species under most threat
- National park
- Conservation park
- Other public conservation land

- 
- rock wren
  - kiwi
  - whio
  - robin
  - orange-fronted parakeet

- 
- kōkako
  - whio
  - robin

- 
- kōkako
  - kiwi
  - whio
  - bat
  - kākā

- 
- kea
  - mohua
  - rock wren
  - kākā



### Great spotted kiwi



Photo: Rod Morris

Status: In serious trouble (Nationally Vulnerable)

Population: 15,000

Distribution: Confined to three discrete populations, in northwestern Nelson, Paparoa Range and Lewis Pass to Arthur's Pass.

### Powelliphanta snails

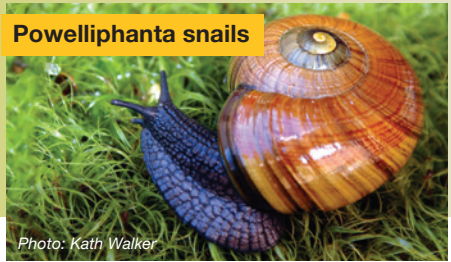


Photo: Kath Walker

Status: In serious trouble

Population: Declining

Distribution: Widely but sparsely spread throughout western South Island and lower North Island.

### Rock wren



Photo: Andrew Walmsley

Status: In serious trouble (Nationally Endangered)

Population: Unknown

Distribution: Widely but patchily distributed through alpine and sub-alpine areas of the South Island, most commonly in Fiordland, South Westland, Mt Aspiring and Aoraki/Mt Cook National Parks. Transferred successfully to Secretary Island in Fiordland.

### Orange-fronted parakeet



Photo: Sabine Bernert

Status: In serious trouble (Nationally Critical)

Population: Fewer than 100 mature parakeets on mainland, and perhaps 200–300 on islands

Distribution: Restricted to South Island beech forest valleys: the Hawdon, Andrews and Poulter valleys in Arthur's Pass National Park and the south branch of the Hurunui valley in Lake Sumner Forest Park.

### Mohua



Photo: James Reardon

Status: In some trouble (Recovering)

Population: Approx 5,000

Distribution: Strongholds where pest control is carried out. In good numbers on some offshore islands.

### Whio



Photo: Herb Christophers

Status: In serious trouble (Nationally Vulnerable)

Population: Breeding population unlikely to be more than 1000 pairs

Distribution: Forested headwater catchments along the ranges of both islands.



# Long-term monitoring

## Doubling native bird numbers in the Landsborough valley

For 20 years our ‘bird counters’ have been going to the remote Landsborough valley in South Westland to monitor the effects of sustained predator control on bird life.

Native bird numbers have doubled since pest control began. Most of the 13 different native bird species increased.

One of the most threatened birds in the monitoring area, mohua (yellowhead), has increased in number 24-fold from 14 to 338 birds.

Monitoring outcomes is important. Standardised ‘5-minute bird counts’ have been carried out by the same

people for the past 20 years which has ensured consistency.

The results of this painstaking monitoring are impressive and highlight that where we control pests consistently over whole valleys and forests, we can turn around the fortunes of native species.

This outcome bodes well for efforts towards Predator Free 2050 as the long term goal.



Grey warbler. Photo: Janice McKenna



Rifleman/titipounamu. Photo: DOC



Tomtit/miromiro. Photo: Leon Berard

The Department of Conservation is planning to manage pests in response to a predicted predator plague this year. For more information visit [www.doc.govt.nz/battlefourbirds](http://www.doc.govt.nz/battlefourbirds)

This publication is produced using paper sourced from well-managed, renewable and legally logged forests.

Front cover: A whio pair. Photo: § 9(2)(a)

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Editing and design: Creative Services, Conservation House, Wellington  
January 2019

# Protect our species on the Wet Jacket peninsulas



## 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

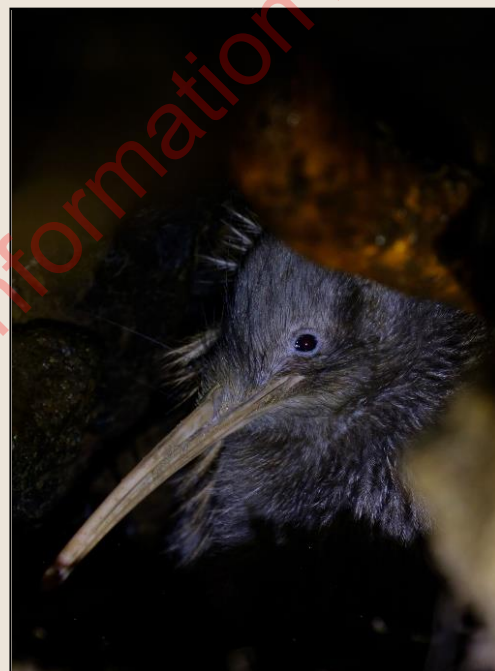
DOC carried out aerial 1080 pest control in the winters following the prolific forest flowering over more than 600,000 hectares each season. Monitoring showed an average rat kill of about 95%, which reduced rodents to undetectable levels at most sites and stoat plagues were avoided.

## 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 [doc.govt.nz/our-work/battle-for-our-birds](http://doc.govt.nz/our-work/battle-for-our-birds).

## 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.



Adult kiwi in burrow. Photo: Crystal Brindle



Kiwi in Shy Lake study site. Photo: Andrew Digby





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

- Proposed treatment area
- DOC hut
- DOC track

2 km  
 Scale at A4 = 1:150,000  
 NZGD 2000 New Zealand Transverse Mercator  
 Not for navigation  
 Crown Copyright Reserved  
 Basemap : LINZ Topo250 / 50  
 DOC, Geospatial Services  
 13/03/2019



**Wet Jacket**  
 Aerial Predator Control 2019  
 Proposed treatment area: 39,707 ha



**Department of Conservation**  
*Te Papa Atawhai*  
 New Zealand Government

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## Wet Jacket peninsulas' values

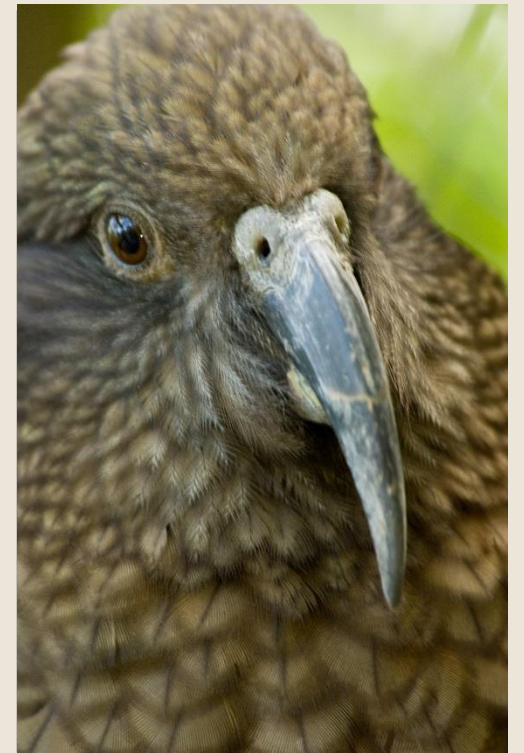
Where heavy seedfall occurs, we can expect predator numbers to soar. To be ready to protect native species at risk, DOC is planning predator control at the following sites:

### Wet Jacket peninsulas

- The Dusky Sound complex includes two large peninsulas either side of Wet Jacket Arm. Since they are surrounded by water on three sides, reinvasion rates of predators following pest control should be greatly reduced, dramatically increasing the potential benefits of pest control at this site. Native species present that will benefit from possum, rat and stoat control include kiwi, kea, kākā, rock wren/pīwauwau, southern rātā and mistletoes.
- In the absence of pest control, populations of many threatened species including Fiordland tokoeka (kiwi) would continue to decline, especially in beech mast years. Some species would likely face localised extinction if predators are not controlled.
- Monitoring of kiwi chick survival on the northern Wet Jacket peninsula in 2017 and 2018 (years when no predator control was undertaken) showed 24 out of 24 chicks did not survive. Only two of the 24 dead kiwi chicks died of natural causes – stoat predation was either confirmed or suspected in all of the other 22 deaths.
- We know from extensive monitoring of past predator control operations at other sites that aerial 1080 is highly effective at reducing the impacts of rats, stoats and possums on vulnerable native species. Kiwi chick survival will continue to be monitored on the northern Wet Jacket peninsula following this operation, with the results used to optimise future predator control work at a range of sites where kiwi are present.
- The planned operation on these two large mainland peninsulas will complement existing nationally significant island restoration projects in the Dusky Sound complex. The operation will reduce the threat of predator reinvasion to these valuable islands and provide safer habitat for native species such as kea and kākā that will be dispersing from these islands to the mainland.



Southern rata. Photo: Greg Lind



Kea. Photo: Rob Scotcher

## 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 some more accessible coastal areas, stoat traps have been laid. 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 and possums, 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. Operations, which are weather dependent, will take place when they are most effective between May 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

s 9(2)(a), 9(2)(g)(ii)

Operations Manager  
DOC Te Anau  
03 249 0200

### What to do if you suspect poisoning

Contact emergency services: 111

National Poisons Centre: 0800 764 766

14 March 2019

Also see [doc.govt.nz/battleforourbirds](http://doc.govt.nz/battleforourbirds)

# DANGER: DEADLY POISON

## KEEP OUT OF REACH OF CHILDREN. ECOTOXIC

HSNO CLASSES: 6.1B, 6.8A, 9.1D, 9.3A



# 0.15% 1080 PELLETS



**Bait in pellet form for poisoning of possums and rodents  
Contains 1.5g/kg sodium fluoroacetate in the form of a bait**

### PRECAUTIONS

**Acutely toxic.** May be fatal if swallowed, inhaled or absorbed through the skin. Repeated oral exposure may cause reproductive or developmental damage. When handling open containers or baits, wear protective equipment as shown in precautions box below.

**Very toxic to terrestrial vertebrates.** Take measures to reduce the risk of non-target animals being exposed to the toxin either through eating baits or by scavenging the carcasses of poisoned animals.

**Harmful to aquatic organisms.** Manage bait application rates carefully and comply with any restrictions imposed on placing baits over or near waterways. Avoid pollution of any water supply with pellets or used container.

**Storage:** Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances. Do not store in direct or diffused sunlight. Avoid cyclic heating and cooling.

**Handling:** When handling open containers or laying baits, wear overalls worn outside rubber boots, and impervious rubber or PVC gloves. When loading aircraft or working in windy conditions, wear goggles and a dust mask as protection against dust entering the eyes or mouth. Do not eat, drink or smoke when using the product or handling open containers. Wash protective clothing and equipment daily after work. Remove protective clothing and wash hands and exposed skin thoroughly before meals and after any contact. Thoroughly wash implements, spreading equipment, aircraft and bait stations before removing them from the operational area.

### EMERGENCY MANAGEMENT

**Symptoms of Poisoning:** Early Symptoms: Nausea, vomiting, tingling and numbness in face and hands, stomach pains, apprehension and anxiety. Later Symptoms: Muscular twitching, blurred vision, mental confusion. Severe Symptoms: Coma, convulsions

**First Aid:** Act immediately if poisoning is suspected. DO NOT induce vomiting. Call a doctor or emergency physician at your nearest hospital immediately. For further advice contact National Poisons Centre 0800 POISONS (Phone 0800 764 766).

**Spillage:** In the event of major spills, inform the Fire Service immediately, and then local health protection officers at your District Health Board or hospital. Isolate the spill area and exclude all bystanders. Take all practicable steps to manage any harmful effects of a spillage including preventing baits from entering streams or waterways. Scoop spilled baits into secure containers. Recover any undamaged bait for later use by placing in appropriately labelled containers and dispose of spoiled bait as directed below. Use a broom to collect fine material and wash down the spill area with copious volumes of water only after all spilled bait has been removed.

**Disposal:** The active ingredient, sodium fluoroacetate, is degraded through microbial activity and will decompose at temperatures above 200 degrees Celsius. It dilutes readily in water. Product which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access by scavenging birds. Avoid deep disposal or burying where groundwater contamination may occur. Alternatively, burn unwanted bait material in a suitably constructed and appropriately located incinerator and bury any residues as above. Treating the baits through a sewage oxidation facility or other chemical treatment facility is also an acceptable means of disposing of unwanted bait material where this is allowed by local by-laws and regulations. Burn empty bags or bury in a suitable location at a landfill at a depth of at least 60 cm. Do not use the empty container for any other purpose.

### DIRECTIONS FOR USE

**Ground based treatment:** Pellets may be applied in weather proof bait stations, by using a mechanical spreader or by hand broadcasting. A period of pre-feeding with non-toxic baits prior to applying toxic baits, is recommended for best results.

**Aircraft:** Apply bait by aircraft using suitable bait spreading equipment. For best results, pre-feed the area to be treated with non-toxic baits at least 2 weeks prior to application of the toxic baits. Bait application rates will vary according to possum or rodent density and habitat type but bait application rates of 3kg – 5kg per hectare will achieve effective control in most cases.

**Weather conditions:** If weather proof bait stations are not being used, this product should not be laid unless fine weather is expected for 72 hours after bait application.

**Deer Repellent:** When possum control is to be undertaken in areas where feral deer may be at risk from eating baits, GEDR™ deer repellent, applied to the surface of pellet baits at a rate of 12 kg per tonne in accordance with the manufacturer's label instructions, may be used to reduce or eliminate the uptake of baits by deer.

### LEGAL OBLIGATIONS

**Sale and use:** This product must be sold only to or used by a person holding a Controlled Substances Licence issued by a test certifier who has been approved. If the product is applied aerially, public notification is required. Additional permissions may be required depending on the method of use and location of use. This product must only be used as specified in the label.

**Signage:** Signs must be erected at every normal point of entry to the place where the substance is to be applied. Signs must remain in place until baits are retrieved or are no longer toxic, or until any other legal requirement affecting signage has been complied with.

**Tracking:** It is a legal requirement that this product is tracked using the unique pack identifiers for its full lifecycle, including date, location of its use or means of disposal.

### GENERAL INFORMATION

**Shelf life:** The shelf life of this product may vary according to the suitability of storage conditions. As a guide, it is recommended that the product be used within 3 months of date of manufacture as studies have shown that the palatability of bait may progressively decline after that time. Any product held after the expiry date shown on the bag should be disposed of according to label directions.

**Livestock:** It is extremely important to prevent access to baits by domestic livestock and pets. Stock must be kept off the treatment area until baits have been washed out by rain, removed or destroyed. Dogs and cats are particularly at risk from eating poisoned possum and rodent carcasses and pet owners in the immediate vicinity must be notified of this risk. Collect poisoned animal carcasses where practicable for burning or burying at least 600 mm below ground, otherwise limit access to the treatment area until poisoned animal carcasses are unlikely to be eaten or to contain residues.

**Conditions of sale:** As no control can be exercised over the methods or conditions under which this product is used, no responsibility or claim, other than those required by statute, will be accepted for any damage or injury whatsoever arising from the storage, handling, application, use or disposal of this product.

**Transport information:** Proper shipping name: PESTICIDES, SOLID, TOXIC, N.O.S.; UN 2588, Packing Group II, Toxic 6.1B, Hazchem 2X

### Registered to and Manufactured by:

Animal Control Products Ltd, 408 Heads Road, Whanganui, New Zealand Ph 64 (0)6 344 5302

For safety data sheet go to <http://www.pestoff.co.nz/msdpage.htm>

Registered pursuant to the ACVM Act 1997, No. V002848. See <http://www.nzfsa.govt.nz/acvm> for conditions of registration

### NET CONTENTS

<b>RS5</b>	<input type="checkbox"/>	250kg	<input type="text"/>	300kg	<input type="text"/>	350kg	<input type="text"/>
		400kg	<input type="text"/>	450kg	<input type="text"/>	500kg	<input type="text"/>
<b>No.7</b>	<input type="checkbox"/>	550kg	<input type="text"/>	600kg	<input type="text"/>	650kg	<input type="text"/>

Pack No.: \_\_\_\_\_

PRF No./Manuf. \_\_\_\_\_

date: \_\_\_\_\_

Lure/Size: \_\_\_\_\_

Expiry Date: \_\_\_\_\_



51H/Z/0405  
1174/652



**IN A TRANSPORT EMERGENCY DIAL 111 FOR POLICE OR FIRE**

ORILLION



orillion

## SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b>	(a) 0.04% 1080 PELLETS (b) 0.08% 1080 RODENT PELLETS (c) 0.08% 1080 PELLETS (d) 0.10% 1080 FERAL CAT BAIT (e) 0.15% 1080 PELLETS (f) 0.2% 1080 PELLETS
<b>Synonyms:</b>	1080 pellets
<b>Supplier:</b>	Animal Control Products Ltd trading as Orillion
<b>Street address:</b>	Physical address: 408 Heads Road, Whanganui 4501, New Zealand.
<b>Postal address:</b>	Postal address: Private Bag 3018, Whanganui 4541, New Zealand.
<b>Telephone:</b>	+ 64 (0) 6 344 5302
<b>Website</b>	www.pestoff.co.nz
<b>After hours telephone numbers:</b>	§ 9(2)(a) [REDACTED] or § 9(2)(a) [REDACTED]
<b>ACCIDENTAL HUMAN POISONING National Poisons Centre:</b>	Dial 111 and be ready to provide information from the product label to medical personnel. Free phone 0800 764 766
<b>Emergency phone number for spills, transport emergencies and risk mitigation:</b>	} } Dial 111 }

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Product Name:</b>	(a) 0.04% 1080 PELLETS (b) 0.08% 1080 RODENT PELLETS (c) 0.08% 1080 PELLETS (d) 0.10% 1080 FERAL CAT BAIT (e) 0.15% 1080 PELLETS (f) 0.2% 1080 PELLETS
<b>Synonyms:</b>	1080 pellets
<b>Active Ingredient:</b>	Sodium fluoroacetate 0.04% - 0.2%
<b>Other Ingredients:</b>	(a, b, c, e, f) Cereals, sugars and binders (d) Fishmeal, fish oil and binders
<b>Molecular Weight of Active:</b>	100.02
<b>Molecular Formula of Active:</b>	F C H <sub>2</sub> CO <sub>2</sub> Na
<b>Recommended Use:</b>	Pelletised bait for the control of rabbits, possums, rodents, wallabies or feral cats.
<b>Appearance:</b>	Cylindrical green pellets.

## 3. HAZARDS IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** This product contains a DEADLY POISON.

**HSNO Approval Codes:** HSR002422 (0.04%-0.08%), HSR002423 (0.1%), HSR002424 (0.15%-0.2%)

<b>HAZARD CLASSES:</b>	<b>0.04% &amp; 0.08% 1080 pellets:</b> 6.1C, 9.3B <b>0.1% 1080 pellets:</b> 6.1C, 6.8A, 9.1D, 9.3B <b>0.15% - 0.2% 1080 pellets:</b> 6.1B, 6.8A, 9.1D, 9.3A
<b>HAZARD IDENTIFIERS:</b>	<b>Priority Identifiers</b> - Danger. Deadly Poison. Keep out of reach of children. Ecotoxic. <b>Secondary Identifiers</b> - Acutely toxic. May be fatal if swallowed, inhaled or absorbed through the skin. Repeated oral exposure may cause reproductive or developmental damage. When handling open containers or baits, wear protective equipment as indicated below. Toxic to terrestrial vertebrates. Take measures to reduce the risk of non-target animals being exposed to the toxin either through eating baits or by scavenging the carcasses of poisoned animals. Harmful to aquatic organisms. Manage bait application rates carefully and comply with any restrictions imposed on placing baits over or near waterways. Avoid pollution of any water supply with pellets or used container. Do not burn the product as highly toxic hydrogen fluoride gas may be released.
<b>DANGEROUS GOODS CLASS:</b>	<b>0.04% - 0.1%</b> 6.1C (Packaging Group III) <b>0.15% - 0.2%</b> 6.1B (Packaging Group II)
<b>GENERAL REQUIREMENTS:</b>	Deadly Poison. Subject to tracking requirements for individual packs. Available for purchase and use only by holders of Controlled Substances Licenses. This substance must be under the control of an Approved Handler for Class 6 and Class 9 Hazardous substances at all times unless being transported by a transport operator with a Dangerous Goods License endorsement.

**SYMPTOMS OF POISONING:**

**Early Symptoms:** Nausea, vomiting, tingling and numbness in face and hands, stomach pains, apprehension and anxiety.

**Later Symptoms:** Muscular twitching, blurred vision, mental confusion.

**Severe Symptoms:** Coma, convulsions.

**4. FIRST AID MEASURES**

**Ingestion:** **Seek immediate medical assistance in all cases where poisoning is suspected.** National Poisons Centre recommends against inducing vomiting in most cases but in particular, never use any chemical means of inducing vomiting. In areas remote from medical assistance, there may be benefit in inducing vomiting by placing a finger down the throat. Giving the patient ½ glass of whiskey with a tablespoon of sugar added may be of possible benefit if carried out immediately after poisoning has occurred.

**Eye Contact:** Wash eyes with copious amounts of water.

**Skin Contact:** Wash exposed area twice with soap and water.

**Contaminated Clothing:** Remove contaminated clothing and wash before re-use. Wear rubber gloves, overalls and secure footwear when handling 1080 pellets. Check boots and the pockets of protective clothing for dust, fragments and pellets. Do not eat, drink or smoke. Clothing and gloves must be decontaminated by washing in hot soapy water. Ensure pellets are not trampled off site.

**Do NOT induce vomiting or give anything by mouth if patient is unconscious or convulsing.**

**PROMPT MEDICAL TREATMENT IS ESSENTIAL. CALL FOR IMMEDIATE ASSISTANCE.**

## 5. FIRE FIGHTING MEASURES

The pellets have a low flammability risk unless pre-heated, however the thermal decomposition (burning) of products containing sodium fluoroacetate (1080) releases hydrogen fluoride gas which is very toxic. Emergency response and firefighting measures for major fires should be taken only by trained professionals using SCBA. Evacuation of adjacent and downwind premises will be necessary in the case of large fires involving 1080 products. Hazchem is 2XE.

## 6. ACCIDENTAL RELEASE MEASURES

In the event of major spills, inform the Fire Service immediately via the 111 emergency phone service, and then local health protection officers at your District Health Board or hospital.

Isolate the spill area and exclude all bystanders. Take all practicable steps to manage any harmful effects of a spillage including preventing baits from entering streams or waterways. Scoop spilled baits into secure containers. Recover any undamaged bait for later use by placing in appropriately labeled containers and dispose of spoiled bait as directed below. Use a broom to collect fine material and wash down the spill area with copious water only after all spilled bait has been removed. Give consideration to possible hazards arising from washing down and ensure people, pets, livestock, wildlife and fish will not be exposed to the dilute toxic run-off.

## 7. HANDLING AND STORAGE

When handling open containers or baits, wear overalls worn outside rubber boots, and impervious rubber or PVC gloves. When loading aircraft or working in windy conditions, wear goggles and a dust mask as protection against dust entering the eyes or mouth. Do not eat, drink or smoke when using the product or handling open containers. Wash protective clothing and equipment daily after work. Remove protective clothing and wash hands and exposed skin thoroughly before meals and after any contact.

Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. As far as practicable, eliminate flammable materials and ignition sources from storage areas. Do not store in direct or diffused sunlight. The storage facility must be secure, dry and will preferably be insulated to buffer the effect of ambient temperature changes likely to cause condensation forming inside packaging.

This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits:** Ministry of Health exposure limit set February 2002 is 0.015 micrograms of 1080 per ml in urine.

**Tolerable Exposure Limits (TEL) :** The NZ Environmental Protection Agency has prescribed the TEL<sub>water</sub> for sodium fluoroacetate, expressed as the amount of sodium fluoroacetate per volume of water as 0.0035 milligrams per litre of water (0.0000035%).

**Engineering Measures:** Decontaminants are water (dilution), heat > 120°C (denaturing) and microbial decomposition (degradation).

**Personal Protection Equipment:** Operators using or handling the product in open containers must wear gloves, overalls and waterproof boots. Do not smoke, drink or eat while handling the product. Wash hands, face and any exposed areas after use. Wash protective equipment immediately after use or otherwise isolate and containerise for return to a washing facility. When working around aircraft, wear a suitable dust mask to prevent inhalation of airborne particles.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** 1080 pellets in have a cylindrical form, are dyed green and may have an odour of cinnamon, fruit flavouring or fish.

<b>Solubility in Water (g/L)</b>	Pellets will eventually lose their form and disintegrate if immersed in water for several hours or more.
<b>Decomposition Point (°C)</b>	The active ingredient 1080 becomes unstable at 110 degrees Celsius and decomposes at 200 degrees Celsius.

## 10. STABILITY AND REACTIVITY

1080 pellets are stable and non-reactive under normal storage and use conditions.

## 11. TOXICOLOGICAL INFORMATION

Exposure must be kept to an absolute minimum. Sodium fluoroacetate may be absorbed through the eyes, broken skin or via the mouth. It is estimated that a lethal dose of bait for an adult human could be as little as 30 grams where the bait contains 0.15% 1080. A small dog may receive a lethal dose of 1080 from as little as 0.5 grams of bait containing 0.15% 1080.

### TOXICITY DATA FOR THE ACTIVE INGREDIENT - VARIOUS SPECIES\*

White laboratory rat (oral) LD <sub>50</sub>	0.2 mg/kg B/W (Body Weight)
Brush-tailed possum (oral) LD <sub>50</sub>	0.3 – 1.0 mg/kg B/W
Dog (oral) LD <sub>50</sub>	0.1 – 0.35 mg/kg B/W
Cat (oral) LD <sub>50</sub>	0.35 mg/kg B/W
Bennett's wallaby (oral) LD <sub>50</sub>	0.2 mg/kg B/W
Mule deer (oral) LD <sub>50</sub>	1.0 mg/kg B/W
Mouse (oral) LD <sub>50</sub>	5.0 – 19.3 mg/kg B/W
Human (oral) LD <sub>50</sub> (estimated)	0.7 – 2.1 mg/kg B/W (30g-100g of bait for 70kg human)

\* Data from US Department of the Interior, Biological Report No. 27 (1995); Ronald Eisler "Sodium monofluoroacetate (1080) Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review"

## 12. ECOLOGICAL INFORMATION

Use the pellets only for the purpose indicated and in the manner prescribed by the label. Sodium fluoroacetate may be present for many months in the carcasses of poisoned animals; thus presenting a secondary poisoning danger to carnivorous birds and mammals. Take steps to mitigate any potential non-target exposure by wildlife or domestic animals. Studies have shown that 1080 concentrations will decline within rotting carcasses through the microbial degradation of 1080.

1080 wastes are ecotoxic. Improper disposal of excess pesticide is unlawful. If wastes cannot be disposed of by use according to label instructions, contact local Regional Council or a hazardous waste advisor for guidance.

## 13. DISPOSAL CONSIDERATIONS

The active ingredient sodium fluoroacetate is degraded through microbial activity and will decompose at temperatures above 200 degrees Celsius. It dilutes readily in water. Bait which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access by scavenging birds. Avoid deep disposal or burying where groundwater contamination may occur. Treating the baits through a sewage oxidation facility or other chemical treatment facility is also an acceptable means of disposing of unwanted bait material where this is allowed by local by-laws and regulations.

Bury empty bags in a suitable location at a landfill at a depth of at least 60 cm. Do not use the empty container for any other purpose.

Surplus bait and empty bags must not be burned.



#### 14. TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Pesticide, solid, toxic, n.o.s. [contains Sodium fluoroacetate]
<b>U.N. NO.</b>	2588
<b>Class:</b>	6.1
<b>Packaging Group / Hazchem code</b>	III (0.04% - 0.1%) and II (0.15% - 0.2%) / 2XE
<b>Maximum transport quantity as tools of trade:</b>	0.04% - 0.1% = 250 kilograms 0.15% - 0.2% = 50 kilograms (Placarding and DG documents not required but this Safety Data Sheet must be carried.)

#### 15. REGULATORY INFORMATION

**Deadly poison:** Available only to holders of Controlled Substances Licenses or persons licensed to transport dangerous goods. Label directions are mandatory. Registered Pesticides:

- (a) 0.04% 1080 PELLETS –V003785. HSNO Approval HSR002422
- (b) 0.08% 1080 RODENT PELLETS - V009015. HSNO Approval HSR002422
- (c) 0.08% 1080 PELLETS – V002829. HSNO Approval HSR002422
- (d) 0.10% 1080 FERAL CAT BAIT – V004107. HSNO Approval HSR002423
- (e) 0.15% 1080 PELLETS – V002848. HSNO Approval HSR002424
- (f) 0.2% 1080 PELLETS – V002538. HSNO Approval HSR002424

**Packaging approvals:** The packaging for these products has been tested and complies with the UN convention for transportation of dangerous goods and with HSNO controls and variations stipulated under the 1080 re-assessment decision arising from application HRE05002 and released on 10 August 2007.

#### 16. OTHER INFORMATION

##### **SPECIAL PRECAUTIONS & OTHER COMMENTS:**

**It is strongly recommended that approved handlers carry an operable telephone, radio telephone or other means of obtaining urgent medical assistance as a precaution when using 1080 poison. Test communication systems and coverage before commencing operations.**

May be fatal if swallowed. Wear waterproof gloves and overalls when using 1080. Wash hands after handling pellets, equipment or animals that have been contaminated with 1080. Do not use poisoned or contaminated animals for food or feed.

This product is toxic to wildlife. Birds and mammals feeding on carcasses of contaminated animals may be fatally poisoned. Take measures to minimise the chance of baits accidentally entering any body of water. Apply the product only as specified by label directions and according to the conditions of any consents required.

Where practicable, the exposed bodies of all poisoned animals should be collected and buried at a landfill approved for hazardous wastes. Dehydrated carcasses may remain dangerous to dogs or cats for an indefinite period. A single mouse poisoned by 1080 may contain enough poison to kill an adult dog.

##### **CONSULT NEAREST POISON CONTROL CENTER FOR CURRENT INFORMATION.**

**All information contained in this Data Sheet is as accurate and up-to-date as possible. Since Orillion cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.**

Revised by: § 9(2)(a)  
Date of Revision: 21 August 2017



26 March 2019

Dear Sir or Madam,

**Subject: 1080 Operation on Wet Jacket Peninsulas**

I write to inform you that the Department of Conservation, Te Anau Office is aiming to undertake the Wet Jacket 1080 operation from 1<sup>st</sup> May 2019. We will be relying on a window of fine weather to begin bait application so this start date may be delayed.

Contract Wild Animal Control (CWAC) has been contracted by the Department of Conservation to deliver this operation and a representative of their staff will be in contact with you with further information prior to the operation.

The operation will use cereal pellets with 1080 that will be aerially distributed over the treatment area at a rate of 1.5kg of bait per hectare. The placement of the baits will be controlled by using aircraft fitted with DGPS (differential global positioning system).

Signage will be placed at certain public access points to inform users of the operation. Department of Conservation and local Medical Officer of Health rules and regulations will be complied with, to ensure the operation is safe and effective.

Included is a map and fact-sheet on the proposed operation for your information.

We will notify you 48hrs before the start of both the pre-feed, and toxic applications.

Please do not hesitate to contact myself, or [redacted] (CWAC) [redacted] if you have any further concerns regarding this operation.

Yours sincerely

[redacted]  
Operations Lead – Predator Control  
Department of Conservation - Te Papa Atawhai  
T: 03 249 0200 | E: [redacted]



## Appendix 6



Department of  
Conservation  
*Te Papa Atawhai*



# Wet Jacket Peninsula Fiordland National Park 'Save Our Iconic Kiwi' Pest Control Operation

Contract Wild Animal Control New Zealand Limited, wishes to advise the public of its intention to aerielly apply cereal baits containing sodium fluoroacetate (1080) on the Wet Jacket Peninsula located in Fiordland National Park **on or after 17<sup>th</sup> May 2019**. The actual date of the operation will depend on the availability of periods of suitable weather.

This pest control operation is being undertaken as part of the Department of Conservation's Save our Iconic Kiwi predator control programme, to protect native species from rats, stoats, and possums.

### Description of the Area

Approximately 40,000 ha of the Wet Jacket Peninsula between Breaksea Sound in the North and Cooper Island in the South, including the areas surrounding Wet Jacket and Broughton Arms.

### Method of Control

Cereal baits containing the pesticide 1080 will be distributed by helicopter over the described area. The 1080 baits are cylindrical pellets approximately 2-3 cm long, cinnamon-lured and *died green*.

The 1080 operation will be preceded by an application of non-toxic prefeed baits. The non-toxic prefeed baits are 2 cm long and *not died*.

We ask that the public do not venture onto the area of the Dusky Track between Loch Maree and Supper Cove, within the operational area during and immediately following the 1080 operation. Warning signs will be placed at all normal points of entry to the area.

Always remember when in the area:

- DO NOT touch bait or bait bags
- WATCH CHILDREN at all times
- DO NOT eat animals from this area
- DO NOT allow DOGS access to animal carcasses

Observe these rules whenever you see warning signs placed at the public access ways in the above area.

Please call the National Poisons Centre for details regarding sodium fluoroacetate (1080) – Ph. 0800 764 766.

A detailed map of the treatment area and additional information on the operation is available. Please either contact the Operations Supervisor on **0800 292 269** or email Contract Wild Animal Control New Zealand Limited at § 9(2)(a)

# Operation to protect tokoeka kiwi on the Wet Jacket Peninsulas, Western Fiordland

## *Update on consultation and timing*

### Consultation

You were recently contacted as part of a consultation process for aerial pest control (1080) work to protect Fiordland tokoeka kiwi on the Wet Jacket Peninsulas. We have now completed consultation about this work and are very pleased with the level of support this work received. There is a strong desire from the public to see greater protection of these western fiord ecosystems, and tokoeka kiwi. Based on feedback from stakeholders, we made several important changes to boundaries, no-fly exclusions and delivery methods around sensitive boundaries, in order to lessen the effect this kiwi conservation has people using the area. These changes will be seen in updated maps (available shortly) and should not affect our ability to protect kiwi in the area.

Thanks for your feedback and input into this process.

### Timing

We're aiming to deliver an operation between May 2019 and July 2020. The exact timing of the operation is dependent on many variables, including weather, snow loading, kiwi hatching dates and rodent dynamics in these western ecosystems.

Stoats are the chief agent of decline of tokoeka – 0% of kiwi chicks survived in the first two seasons of monitoring ([see video of results here](#)). 1080 does not target the stoats directly but instead relies on rodents as a 'vector' to deliver the toxin to the stoats (as stoats are exclusive carnivores and do not eat cereal pellet baits like 1080). Rodent densities in the operational area are not yet at a level where we are confident to achieve the desired impact on stoats, so we are now aiming to deliver the operation in the latter part of the timing window when the densities have increased. This should mean we achieve a higher success rate and protect as many kiwi as possible.

- We will recontact key stakeholders closer to the actual date of the planned operation, as part of a formal notification process.

Thanks again for your involvement and interest in our kiwi conservation work.

Follow this project on our regular blog series: [Fiordland Kiwi Diaries](#).

If you have any questions about this project, please contact:

Department of Conservation

Te Anau district office

(03) 249 249 0200

