# Consultation and notification summary Arthur/Sinbad/Cleddau 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 the pest control operation carried out in Arthur, Sinbad and Cleddau in 2019. The consultation process is currently ongoing, and this document only captures the consultations and notifications that will have taken place as at 13 September 2019.

#### Consultation on possible pest control methods

Because of the limited available options for effective control of the target pest species, consultation on possible methods of pest control was not undertaken.

The Arthur, Sinbad and Cleddau catchments are examples of beech forest ecosystems, with some mixed beech and podocarp forest around the lower Arthur area. This area is one of eight key sites for whio in New Zealand. It also houses a number of other species, such as **pāteke**. The reduction of rats and stoats is vital to ensuring the long term survival of these species. Because of the size, remoteness and terrain of the proposed treatment area, aerial 1080 is considered to be the only method of pest control which will effectively manage pest populations on that area. Consultation with stakeholders has therefore been limited to the consultation on effects.

#### Consultation on effects

DOC and CWAC consulted the following groups of stakeholders prior to the commencement of the operation:

- 1. Iwi
- 2. Hunting and fishing groups
- 3. Concessionaires
- 4. Aviation companies
- 5. Meat processing companies
- 6. Local government Agovernment agencies / statutory bodies
- 7. Infrastructure and utility providers
- 8. Recreation groups
- 9. Police
- 10. Sponsors, conservation groups and partners
- 11. Public service providers transport and aviation
- 12. Businesses and community groups

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

Type of	Number	Consultant	Reason for	Method of
stakeholder	consulted	oonsartant	consultation	consultation
lwi	5	DOC	Consultation on effects	In-person visits,
			on <b>Rūnanga</b> relative to	phone calls and
			cultural values and	email
			ecosystems	correspondence
Hunting and	16	DOC &	Consultation on effects	In-person visits,
fishing groups		CWAC	of the operation and	phone calls and
			support from hunting	email
			and fishing groups	correspondence

Concessionaires	22	DOC & CWAC	Consultation on effects of the operation and support from concessionaires	In-person visits, phone calls and email correspondence
Aviation companies	24	DOC & CWAC	Consultation on effects of operation and support from aviation companies	In-person visits, phone calls and email correspondence
Meat processing companies	6	CWAC	Consultation on effects of the operation and support from meat processing companies	In-person visits, phone calls and email correspondence
Local government / government agencies / statutory bodies	4	DOC & CWAC	Assessment of environmental effects, potential impacts of the operation and conditions of DHB consent	In-person visits, phone calls and email correspondence
Infrastructure and utility providers	2	DOC	Consultation on potential effects of the operation	Email correspondence
Recreation groups	4	DOC	Potential impact of operations on recreational activities	Phone calls and email correspondence
Police	2	DOC	Presentation on Tiakina Nga Manu programme and briefing of the operation	In-person visits and email correspondence
Sponsors, conservation groups and partners	10	DOC & CWAC	Presentation on operation, consultation on effects of the operation and support from sponsors, conservation groups and partners	In-person visits, phone calls and email correspondence
Public service providers – transport and aviation	3	DOC & CWAC	Consultation on effects of the operation and support from service providers	Phone calls and email correspondence
Businesses and community groups	3	CWAC	Consultation on effects of operation and support from businesses and community groups	Phone calls and email correspondence

#### Consultation outcomes

## <u>Iwi</u>

Three of the iwi groups that were consulted were very supportive of the operation and another group noted that they did not have any concerns regarding the operation.

The fifth group, however, advised that its **Rūnanga** was opposed to the use of 1080 and the proposed operation. After careful consideration of that feedback, DOC made the decision to proceed with the Arthur/Sinbad/Cleddau operation on the basis that,

- 1) trapping is proven to be ineffective in protecting wildlife from declines and localised extinctions through a mass seeding year;
- 2) multiple long-term datasets clearly show the benefit of 1080 to birdlife;
- 3) by-kill during these 1080 operations is uncommon, and when recorded, it is easily offset by the alarmingly high losses to wildlife from predators that will otherwise thrive without pest control;
- 4) data from a trial of auto-resetting traps and the bait station treatment area in the lower Hollyford / Whakatipu Ka Tuka is showing that these methods are not effective at controlling rats sufficiently in a mast year;
- 5) initial results of a DOC-supported research in the Hollyford/ Whakatipu Ka Tuka operational area study show the highest density of rats yet recorded anywhere in a New Zealand forest and the Tiakina Nga Manu operation is critical to this research;
- 6) recent rat tracking tunnel data shows rats tracking at an alarming >50% average with some sites in the Arthur Valley tracking at 100, and if these operations were to not go ahead the significant gains that have been made with the likes of the Whio programme in the Arthur and Cleddau Valleys could be wiped out through predation by rats and stoats;
- 7) DOC has a high level of confidence in the ability of its staff and contractors to deliver this operation within the high quality standards required; and
- 8) DOC provides transparent weekly updates on the progress of the operation to that iwi group.

The decision to proceed with the operation was made on the condition that DOC would send regular updates to that iwi group to ensure that they are informed of the progress of the operation.

#### Hunting and fishing groups

One of the groups raised concerns regarding the potential impacts on fishing sites in Waikaia and the Eyre Mountains. DOC explained that neither of those sites were near the proposed treatment area for this operation, and therefore were not likely to be affected by this operation. One group that was consulted also noted that they would like to have more conclusive evidence on how long 1080 lasts in trout.

#### Concessionaires

Four of the concessionaires expressed their support for the operation. One individual in particular was very supportive of the operation and noted that they would like to handlay bait on areas of public conservation land that were excluded from the proposed treatment block. Another individual noted that they did not personally support the operation but understood DOC's position.

#### Infrastructure and utility providers

The infrastructure and utility providers did not raise any concerns regarding the operation. One provider noted that they may use water stored in tanks following the application of toxic bait, and if so, will put up signs to inform the public that they should not drink water from water intakes until water sample test results confirmed that the water was safe for drinking.

One provider had some questions regarding the exclusion zones around the Bowen water intake and noted that they would be happy with the proposed operation if it mirrored the operation that was previously carried out in the Cleddau region in 2017. The 2019 operation will mirror the 2017 operation, however, the exclusion zones that are in place for the 2019 operation are slightly wider in some areas near the water intake, in comparison to those that were in place during the 2017 operation.

#### Sponsors, conservation groups and partners

The conservation groups and partners that were consulted expressed their support for the operation. One group that was consulted noted that they were keen to ensure that adequate monitoring was in place for pāteke as it could provide answers to questions around the captive release of pāteke.

#### Notification

Pre-operation notification was carried out by CWAC. Copies of the documents that were provided as a part of that notification process are set out below (and are attached to this document):

- 1. Notification letter sent by CWAC (attached as 'Appendix 1');
- 2. **Tiakina Ngā Manu** factsheet Fiordland National Park (attached as 'Appendix 2');
- 3. **Tiakina Ngā Manu** factsheet Arthur, Sinbad and Cleddau Catchments (attached as 'Appendix 3');
- 4. Factsheet protect our species in the Arthur, Sinbad and Cleddau Catchments (attached as 'Appendix 4');
- 5. 1080 safety information and data sheet (attached as 'Appendix 5'); and
- 6. Public notice published in local newspapers (attached as 'Appendix 6').

The following table identifies the various groups that received notifications prior to the commencement of the operation:

Type of stakeholder	Number notified	Notifier	Reason for notification
Hunting and fishing	5	CWAC	Potential impact
groups			
Aviation companies and	18	CWAC	Potential impact
WARO concessionaires			
Meat processing	6	CWAC	Potential impact
companies			
Tourism operators	18	CWAC	Potential impact
Local government	2	CWAC	Potential impact

161			
Infrastructure and utility	2	CWAC	Potential impact
providers			
Recreation groups	4	CWAC	Potential impact
Police	2	CWAC	Potential security or protest issues
Public service providers –	2	CWAC	Potential impact
transport and aviation			
Healthcare providers	1	CWAC	Information to respond to possible
			poisoning
Animal care providers	1	CWAC	Information to respond to possible
			poisoning
Schools	5	CWAC	Potential impact
DOC Visitor Centres	3	CWAC	Information for visitors
ased und	ar till e	Offic	
	Public service providers – transport and aviation Healthcare providers  Animal care providers  Schools  DOC Visitor Centres	Public service providers — 2 transport and aviation  Healthcare providers 1  Animal care providers 5  DOC Visitor Centres 3	Public service providers — 2 CWAC transport and aviation  Healthcare providers 1 CWAC  Animal care providers 5 CWAC  DOC Visitor Centres 3 CWAC



Contract Wild Animal Control New Zealand 27B Ramparts Road TE ANAU 9679

P: s 9(2)(a)

E: office@cwac.co.nz

Our company has been contracted by the Department of Conservation to undertake the project management and delivery of the Arthur Sinbad Cleddau Tiakina Nga Manu Battle for our Birds (Save our Iconic Species) project for the 2019 Winter season.

We understand that the Department of Conservation may have been in contact with you, to undertake consultation on effects for this project.

We wanted to both introduce our company and inform you that we are in the final planning stages for delivery of this project. If you wish to discuss any aspect of this operation please feel free to contact us using the details supplied. We look forward to supporting this nationally critical predator control programme, now and into the future.

Warm regards,



s 9(2)(a)

Communications & Consents Coordinator

Contract Wild Animal Control New Zealand Limited 27B Ramparts Road Te Anau Southland 9679

E: s 9(2)(a)

M

# Protect our species in Fiordland National Park



# 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://doc.govt.nz/our-work/battle-for-our-birds">doc.govt.nz/our-work/battle-for-our-birds</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.

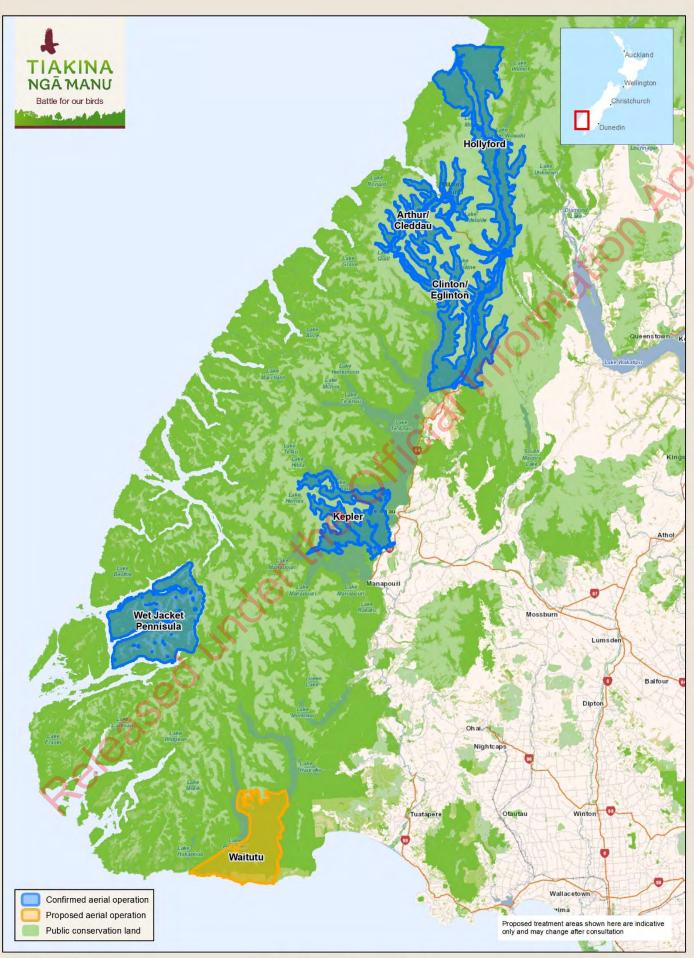


Mohua/yellowhead. Photo: Sabine Barnert



Short-tailed bat/pekapeka. Photo: Colin O'Donnell DOC







New Zealand Government

# Fiordland National Park: 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 at the following sites:

## Arthur/Cleddau/Sinbad

- 17,924 ha in the Arthur, Sinbad and Cleddau valleys to protect whio (blue duck) and pateke (brown teal)
- Part of northern Fiordland whio security site, one of only two sites for re-introduction of pateke in the South Island.
- Proposed timing: From Aug 1<sup>st</sup> 2019

## Eglinton/Clinton

- Protection of mohua, southern tokoeka/kiwi, whio/blue duck as well as short-tailed and long-tailed bats
- 35,625 ha comprising the Eglinton and Clinton valleys along with the adjoining lake side forest
- Proposed timing: From Aug 1<sup>st</sup> 2019

# Hollyford

- Protection of many forest species including kaka, falcon, yellow crowned parakeets, mohua (yellowhead) and kea, as well as fernbirds and whio (blue duck) and
- 40,585 ha covering the upper and lower valley, from Martins Bay up to the Milford Highway
- Proposed timing: From Aug 1<sup>st</sup> 2019

## Kepler

- Protection of pekapeka (long-tailed bats) and whio (blue duck) alongside other native forest flora & fauna
- 24,168 ha plus a 200m buffer strip of bait stations along the Kepler track/edge of Lake Te Anau
- Proposed timing: From Aug 1<sup>st</sup> 2019

#### Wet Jacket

- Planned aerial 1080 operation aims to reverse the decline in the Fiordland tokoeka (kiwi) population by protecting vulnerable kiwi chicks from predation
- The planned operation should also benefit kākā, kea, rock wren/pīwauwau and native vegetation vulnerable to possum browse such as rata and mistletoes
- 39,707 ha to be treated between May 2019 April 2020



Whio. Photo: Herb Christophers



Fiordland tokoeka Photo: James Reardon



# 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. 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
Department of Conservation Te Anau
Lakefront Drive, Te Anau 9600
Phone: 03 249 0200

What to do if you suspect poisoning Contact emergency services: 111 National Poisons Centre: 0800 764 766

> 15/03/19 Also see <u>doc.govt.nz/battleforourbirds</u>



# Protect our species in the Arthur, Sinbad and Cleddau Catchments



# Pest control to protect native species from widespread predator plagues.

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#### Pest control works

DOC carried out aerial 1080 pest control in the winters following the prolific 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. 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. <a href="https://www.doc.govt.nz/our-work/battle-for-our-birds/">https://www.doc.govt.nz/our-work/battle-for-our-birds/</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 have a major pest problem on our hands.

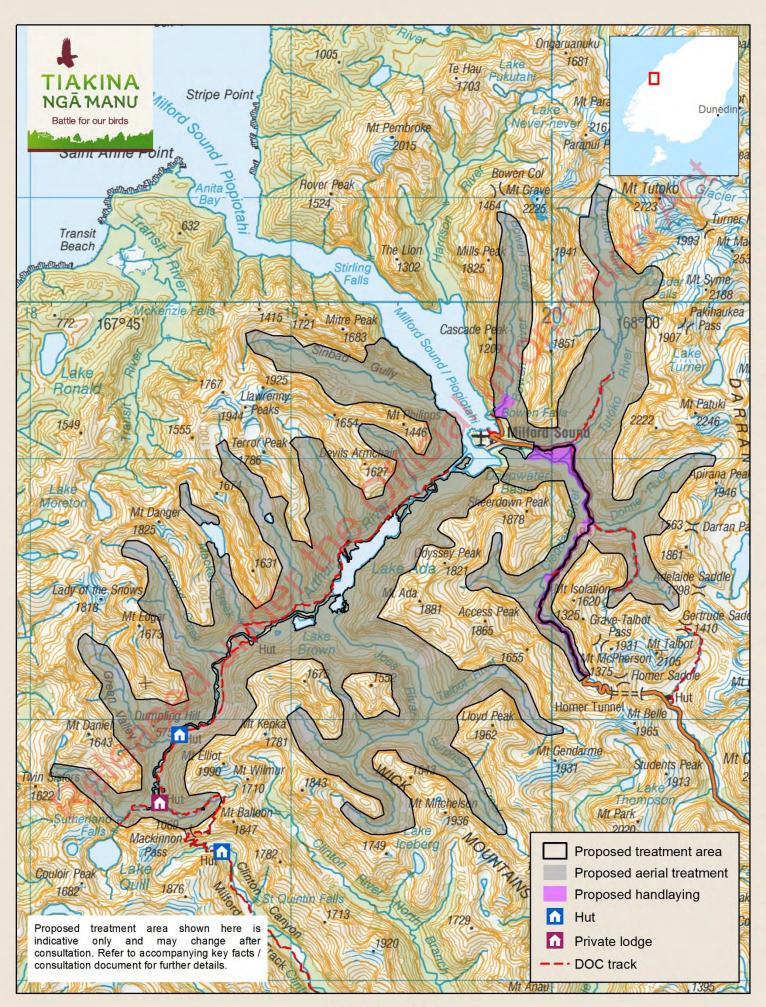


Kea Photo: DOC



Kiwi. Photo: James Reardon





# Arthur, Sinbad and Cleddau sites and values

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

#### Whio/Blue Duck

- Whio live in fast flowing rivers in many of the streams and rivers in the Arthur, Sinbad and Cleddau catchments.
- Stoats are predators of whio especially during the breeding season and have been filmed attacking female whio on the nest and robbing eggs.
- Where DOC has done pest control, whio have thrived.
  In Tongariro Forest, the area under regular pest
  control has led to a need to expand the protected areas
  to accommodate the extra fledglings.
- Where aerial 1080 has been used in New Zealand whio are doing well, from Whirinaki to Milford.

#### Pateke/Brown Teal

- Pateke have been reintroduced to the Arthur Valley after becoming extinct in the area in the 1990's.
- Pateke are susceptible to stoat predation at all life stages.
- When DOC has undertaken aerial 1080 operations in the Arthur Valley the survivorship of pateke has significantly increased. Trapping alone in a stoat plague season doesn't provide enough protection for pateke.
- The combination of trapping and aerial 1080 have proven to be very effective tools in providing protection for this species.



Whio. Photo: Herb Christophers



Pateke. Photo: Sabine Bernert



# 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 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. Operations, which are weather dependent, will take place when they are most effective between August and November. The plan for this site is have the operation completed before the start of the Great Walks season.

# 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 carcases 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 Contact: \$ 9(2)(a), 9(2)(g)(ii)

Department of Conservation Te Anau District Office 03 249 0220 What to do if you suspect poisoning Contact emergency services: 111 National Poisons Centre: 0800 764 766

DATE

Also see www.doc.govt.nz/battleforourbirds



# Protect our species in the Arthur, Sinbad and Cleddau Catchment



# Department of Conservation 'Tiakina Nga Manu' Predator Control Operation. Winter 2019.

#### How it is happening

Prefeed of the approved treatment area using undyed 6-gram cereal pellet baits followed by aerial and ground application of toxic cereal-pellet baits, dyed green, containing sodium fluoroacetate.

#### **Timeframe**

Prefeeding is planned to commence from the 1st August 2019. Toxic bait application will occur in the next fine weather window. Affected parties will receive a 24-hour to 48-hour notice of the pending operation. Warning signs will be erected immediately prior to the operation starting.

## Important information

The pesticides we use are poisonous to humans and domestic animals. Dogs are highly susceptible to 1080. Poisoning can occur through eating baits or poisoned animals. The risk to dogs with pesticide in carcasses will remain until they have broken down, please ensure that dogs are kept out of the operational area until warning signs have been removed.

Risks to humans and animals can be eliminated by following these simple rules:

- DO NOT touch bait
- WATCH CHILDREN at all times

- DO NOT EAT animals taken from the treatment area
- Remember, poison baits or carcasses are DEADLY to DOGS

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

# Why we are controlling predators in the site

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. Rodent and stoat numbers will skyrocket. Seed fall 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 whio, kiwi, kākā and rock wren/pīwauwau, will suffer heavy losses.

## Why we are using this method

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 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 nontoxic baits to encourage rats to eat the 1080 baits that are applied later.

### Operational planning

The use of this pesticide requires the consent of the Medical Officer of Health, and notification of the operation to the regional council.

DOC assesses and approves all vertebrate pesticide operations on public conservation land on behalf of and following procedures approved by the Environmental Protection (EPA). DOC approving managers apply conditions to ensure that all legal and policy requirements are met, and that any potential risks of the operation are managed.

#### **Notification of Commencement**

You will be contacted in the lead-up to the operation commencing in the 24-hour to 48-hour notification process.

## If you suspect poisoning

#### Always contact:

- Your local doctor; or
- Local hospital; or
- National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 (non-urgent and general enquiries), or dial 111.

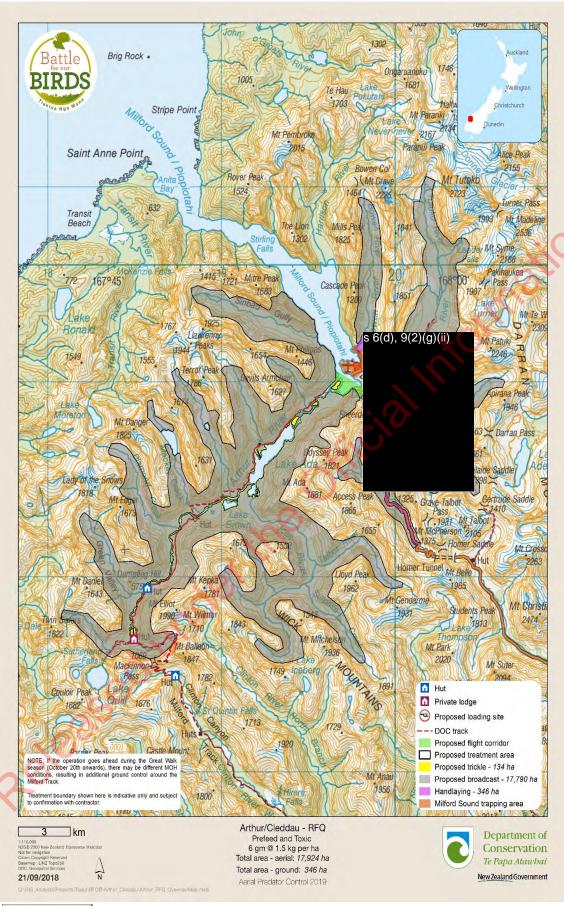
#### For more information

s 9(2)(a)

**CWAC NZL Communications Coordinator** 

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# **DANGER: DEADLY POISON**

**KEEP OUT OF REACH OF CHILDREN. ECOTOXIC** 





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

WJS : APR 2010 Registe		ntrol Products Ltd, 408 For safety data shee	et go to http://www.pesto	ıi, New Zealand Ph 64 (0)6	
RS5		250kg 400kg 550kg	300kg 450kg 600kg	350kg 500kg 650kg	7Z/0405 /652
PRF No.	date:  date:  ure/Size:  iry Date:		TRAC	AC PROTECTION NEW ZEALS ENVIRONM AND TRADE	51H/ 1174,

IN A TRANSPORT EMERGENCY DIAL 111 FOR POLICE OR FIRE



#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	(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
Synonyms:	1080 pellets
Supplier:	Animal Control Products Ltd trading as Orillion
Street address:	Physical address: 408 Heads Road, Whanganui 4501, New
	Zealand.
Postal address:	Postal address: Private Bag 3018, Whanganui 4541, New
	Zealand.
Telephone:	+ 64 (0) 6 344 5302
Website	www.pestoff.co.nz
After hours telephone	s 9(2)(a)
numbers:	
ACCIDENTAL HUMAN	Dial 111 and be ready to provide information from the product
POISONING	label to medical personnel.
National Poisons Centre:	Free phone 0800 764 766
Emergency phone number for	}
spills, transport emergencies	} Dial 111
and risk mitigation:	

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

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

HAZARD CLASSES:	<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
HAZARD IDENTIFIERS:	Priority Identifiers - Danger. Deadly Poison. Keep out of
	reach of children. Ecotoxic.
	Secondary Identifiers - 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
DANCEDOUS COODS CLASS.	toxic hydrogen fluoride gas may be released.
DANGEROUS GOODS CLASS:	<b>0.04% - 0.1%</b> 6.1C (Packaging Group III) <b>0.15% - 0.2%</b> 6.1B (Packaging Group II)
GENERAL REQUIREMENTS:	Deadly Poison. Subject to tracking requirements for individual
GENERAL REQUIREMENTS.	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 <u>against</u> inducing vomiting in most cases but in particular, <u>never</u> 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 (0.00000035%).

**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.

Solubility in Water (g/L)	Pellets will eventually lose their form and disintegrate if immersed in water for several hours or more.	
Decomposition Point (°C)	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)

Niouse (oral) LD (actimated) 0.7 2.4 mg/kg D/W (20g 100

Human (oral) LD<sub>50</sub> (estimated) 0.7 - 2.1 mg/kg B/W (30g-100g of bait for 70kg human)

#### 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.

<sup>\*</sup> 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"

#### 14. TRANSPORT INFORMATION

Proper Shipping Name:	Pesticide, solid, toxic, n.o.s. [contains Sodium
	fluoroacetate]
U.N. NO.	2588
Class:	6.1
Packaging Group / Hazchem code	III (0.04% - 0.1%) and II (0.15% - 0.2%) / 2XE

Maximum transport quantity as tools	0.04% - 0.1% = 250 kilograms
of trade:	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: s 9(2)(a)

Date of Revision: 21 August 2017





# Arthur Cleddau Aerial Pest Control Operation for Iconic Species Protection

Limited, wishes to advise the public of its intention to aerially apply cereal baits containing sodium fluoroacetate (1080) within the Arthur Cleddau operational area on or after 5th August 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 Battle for our Birds predator control programme, to protect native species from rats, stoats, and possums.

#### Description of the Area

Approximately 18,000 ha of the Cleddau Valley from the Homer Tunnel to the Milford coastline, the Arthur Valley including all side catchments and the Sinbad Valley and included in the proposed operation.

#### 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 dyed green.

The 1080 operation will be preceded by an

Contract Wild Animal Control New Zealand application of non-toxic prefeed baits. The nontoxic prefeed balts are 2 cm long and not dyed. We ask that the public do not venture into 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.

Adetailed 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 guil@cwac.co.nz



