

Operational Report for Possum, Ship rat, Stoat Control in the Cleddau Catchment (aerial 1080)

03 Sep 2017 - 19 Sep 2017

11/01/2018

Department of Conservation

Te Anau

Contents

1. Operation Summary

Operation Name Possum, Ship rat, Stoat Control in Cleddau catchment (aerial 1080)

Operation Date 03 Sep 2017 - 19 Sep 2017

District Te Anau **Region:** Southern South Island

Pestlink Reference 1718TEA02

Treatment Area Cleddau catchment possum, rat, and stoat control (aerial 1080) **Size (ha)** 5900.00

Conservation Unit Name(s)	GA Id(s)
Fiordland National Park	2801633

Treatment Block Details

Treatment Blocks	Size (ha)
Cleddau catchment	5900.00

Contractor Name Contract Wild Animal Control

Treatment Dates	Start	Completion
Cleddau catchment	03 Sep 2017	19 Sep 2017

Target Pest Details

Treatment Blocks	Target Pests	Control Method	Name
Cleddau catchment	Possum, Ship rat, Stoat	Pesticide Aerial	Pesticide - Aerial in Cleddau catchment-(1)

Conservation Outcome(s)

To protect and conserve the ecological integrity of the Cleddau catchment through the reduction of predators to native flora and fauna.

Result Target(s)	Treatment Area/Block	What we got
•	Cleddau catchment possum, 4 rat, and stoat control (aerial 1080)	
•	Cleddau catchment possum, 0 rat, and stoat control (aerial 1080)	

Outcome Targets	What we got
• N/A	

2. Introduction

2.1 TREATMENT AREA

Non-target species

Common Name	Scientific Name
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Target benefit species

Common Name	Scientific Name
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Threatened species

Common Name	Scientific Name
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Blue duck, Whio, mountain duck, blue mountain duck

Hymenolaimus malacorhynchos

Kea

Nestor notabilis

South Island Kaka, bush parrot, brown parrot, kaw kaw

Nestor meridionalis meridionalis

Mohua, Yellowhead, bush canary, mohoua, houa

Mohoua ochrocephala

Skink species (undetermined)

Skink sp.

undetermined weka species

Gallirallus sp.

Yellow-crowned Parakeet, Kakariki

Cyanoramphus auriceps

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Petroica australis

New Zealand pigeon, Kereru

Hemiphaga novaeseelandiae

Northern Fiordland tokoeka

Apteryx australis "Northern Fiordland"

Geographical location

The Cleddau catchment possum, rat, and stoat control (aerial 1080) is situated 42km km South of Te Anau.

TREATMENT BLOCK DETAILS:

Treatment block	Cleddau catchment
Vegetation type	Silver/Mountain beech dominated forest with mixed podocarp, rata, kamahi at lower altitudes
Bioclimatic zone	coastal semi-coastal lowland sub-montane montane sub-alpine
Climate characteristics:	
Rainfall	6500 mm
Temperature:	Average Summer 15.0 Average Winter 7.0
Snow level	- m
Altitude	900 m
Community and Iwi interests	The area falls under the rohe of Oraka Aparima and Maakawhio. Mount Tutuoko (within the catchment but not in the treatment area) has a formal topuni on it.
Historic sites	Many historic early European and iwi sites within the catchment.

2.2 MANAGEMENT HISTORY

Management history was not chosen to be shown in this operational report. This history is, however, available via Pestlink

3 Outcomes and Targets

3.1 CONSERVATION OUTCOMES

To protect and conserve the ecological integrity of the Cleddau catchment through the reduction of predators to native flora and fauna.

3.2 TARGETS

3.2.1 Result Targets

The result targets for the treatment area were:

-
-

3.2.2 Outcome Targets

The outcome targets for the treatment area were:

- N/A

4 Consultation, Consents & Notifications

4.1 CONSULTATION

Consultation was undertaken by DOC with major stakeholders (concessionaires/leases) and notification was undertaken by the contractor with common users and user groups of the park.

Iwi were consulted - with Oraka Aparima being supportive, but Maakawhio being against the use of 1080. A decision was made the Director to proceed with the operation.

Communications were recorded and can be found in the communications record/plan.

Consultation outcomes

General support and awareness for operation, with the exception of Maakawhio.

Lessons learned

N/A

4.2 CONSENTS

Consent	Consent date	File Reference	Permission ID
Medical Officer of Health Consent	18/08/2017	17-35-MLC-DUNPH	17-35-MLC-DUNPH
DOC permissions	14/07/2017	DOC-3140625	DOC-3140625

Lessons learned

N/A

4.3 NOTIFICATION

Notification was given to key stakeholders (concessionaires and common users and user groups) in the months leading up to the operation, 48 hours before the prefeed, and 48 hours before the toxic application. This included presentations, phone calls and discussions, emails, visitor notices, and newspaper advertisements.

A presentation/ Q&A was also given in Milford Village.

Notifications were recorded and can be found in the communications record/plan.

Lessons learned

N/A

5 Methods

5.1 TARGET SPECIES

Treatment Block Cleddau catchment

Control method	Name	Target pest species
Pesticide - Aerial	Pesticide - Aerial in Cleddau catchment-(1)	Possum Ship rat Stoat

Treatment Block	Control Method	Name	Target Pest Species
Cleddau catchment	Pesticide - Aerial	Pesticide - Aerial in Cleddau catchment-(1)	Possum Ship rat Stoat

Trade name of pesticide	0.15% 1080 Pellets RS5
Name of pesticide	Sodium fluoroacetate
Type of bait	Cereal pellet
Toxic loading	1.5 g/kg
Bait quality sampling	Not Conducted

Bait Details

	Pre-feed	Toxic
Bait type	Cereal pellet	Cereal pellet
Lure/ mask/ deterrent	Cinnamon	Cinnamon
Lure/ mask/ deterrent	0.30%	0.30%
Dye	None	Green
Individual Bait Weight	6.0g	12.0g

Sowing Rate Details

Pre-feed				Toxic			
Date	Rate(kg/ha)	Wind Speed	Direction	Date	Rate(kg/ha)	Wind Speed	Direction
03/09/2017	1.00	Calm	Nil	19/09/2017	2.00	Calm	Nil

Time between pre-feed and toxic	16
End of Caution Period Date	19/05/2018
Aircraft type	Jet Ranger Long Ranger Other Squirrel AS 350

Number of Aircraft 5

Sowing gear details

Description	Capacity
Heli Otago - 2 x BK117, 1 x Squirrel, and 2 smaller aircraft. 1T, 700kg, and 300kg buckets used.	1000 kg

Type of navigational guidance system used Tracmap

Loading Method Mechanised loaders, with 300kg bait bags

Complaints and Incidents

N/A

Other Details about this method

-

Deviations from planned operation

-

Lessons Learned

-

5.2 ENVIRONMENTAL EFFECTS

5.2.1 Effects on Non-Target Species

Effects of non-target species are well recorded in the DOC toxicology synthesis on sodium monofluoroacetate. No non-targets were recorded for this operation.

Performance standard(s)	Followed ?	Monitored ?

Effectiveness of performance standards

No non-targets recorded

By kill of non-target species

N/A

5.2.2 Effects on Soil and Water Quality

Water samples taken in the Bowen river were below Minimum Levels of Detection (1 ppb)

Effects on Soil and Water Quality Not Applicable

5.2.3 Effects on Ecosystems

Beneficial due to the reduction of introduced mammalian browsers and predators

Effects on Ecosystems Not Applicable

5.2.4 Effects on Human Health

No recorded effects on human health from this operation

Effects on Human Health Not Applicable

6 Monitoring Results and Outcomes

6.1 RESULT MONITORING - TARGET SPECIES

Result target(s)

6.1.1 Target Species Monitoring Wax Tag

Method:

Species monitored Possum - *Trichosurus vulpecula* in Cleddau catchment possum, rat, and stoat control (aerial 1080)

Monitor method details

10 Lines of 10 wax tags distributed in a sub-sample of the operation area where possums were suspected to be in the highest densities. Placed for one week.

Deviations

N/A

Target pest result details

	Pre	During/Post
Monitoring dates	4/6/17	18/10/17
Results	35	4

Result target met? Yes

Lessons Learned

N/A

6.1.2 Target Species Monitoring Tracking tunnels

Method:

Species monitored Possum - *Trichosurus vulpecula* , Ship rat - *Rattus rattus* in Cleddau catchment possum, rat, and stoat control (aerial 1080)

Monitor method details

5 lines of 10 tracking tunnels in on an altitudinal range on the valley floor

Deviations

N/A

Target pest result details

	Pre	During/Post
Monitoring dates	1/7/17	25/9/17
Results	21	0

Result target met? Yes

Lessons Learned

N/A

6.2 RESULT MONITORING - ENVIRONMENTAL EFFECTS

6.2.1 Non-Target Species

No monitoring of non-target species was undertaken.

6.2.2 Soil and Water Quality

No monitoring of soil and water quality was undertaken.

6.2.3 Ecosystems

No monitoring of ecosystems was undertaken.

6.2.4 Human Health

No monitoring of human health was undertaken.

6.3 OUTCOME MONITORING

Outcome targets

N/A

No monitoring of outcomes was undertaken