

Mohua monitoring in the Blue Mountains (Southland) November 2025

Updated report for 2025 written by s9(2)(g)(ii) and s9(2)(g)(ii) s9(2)(g)(ii)

This report was originally written in 2007 by s9(2)(g)(ii) but has been updated overtime to reflect the annual survey results collected each year.

Summary

The annual Blue Mountains mohua monitoring was conducted on the 1st - 3rd November 2025 by s9(2)(g)(ii) s9(2)(g)(ii) The three established and fixed transect monitoring lines (Garden Gully, Rankleburn, and Cattle Spur) were each surveyed three times over this period, with the aim of the survey being to gain an accurate picture of the mohua population trend within the monitoring area as a proxy for the wider Blue Mountains.

When comparing the average (mean) results from November's measurement to previous years, the average number of mohua counted per transect are the lowest counts to date. This is consistent with the overall long-term trend, with a few outlier years, of a steady decline in the area. With a potential mast predicted for the 2025/2026 summer season, and the expected mammalian predator upswing as a result, this is a concerning state for the Mohua to be in.

It should be noted that this trip was taken a week after a heavy storm hit the area, creating a large swathe of treefall in the area.

	2021	2022	2023	2024	2025
<i>Garden Gully</i>	48	30	24	53.7	18.7
<i>Rankleburn</i>	28	17	14	17.3	10.3
<i>Cattle Spur</i>	09	07	02	02.3	01.3

Background

The Blue Mountains Forest Conservation Area (12,400 ha) lies between the Clutha River and the township of Tapanui, approximately 115 kilometres northeast of Invercargill. The Blue Mountains range varies in altitude from 100 m near the Pomahaka River to 1020 m at the summit of the main ridge. The vegetation is predominantly silver beech, with podocarps in some gullies and some red beech on the eastern side on the Clutha Valley floor. The tops of the Blue Mountains have alpine snow tussock and alpine cushion bog wetlands associated with numerous tarns.

Forestry company Earnslaw One manages a large area of exotic forest on the eastern side of the Blue Mountains, of mainly *Pinus radiata* and Douglas fir. Access to the eastern side of the Blue Mountains

and the mohua monitoring lines is relatively easy via forestry roads. Access to the western side of the range is via private farmland. The Blue Mountains Forest Conservation Area is managed as a Recreational Hunting Area (RHA) for fallow deer (*Dama dama*), and pigs are also present. Red deer (*Cervus elephus*) are uncommon.

The Blue Mountains are home to one of the four largest remaining populations of Mohua, along with the Dart and Landsborough valleys, and the Catlins (Elliot, 2013). Mohua, or yellowheads (*Mohoua ochrocephala*) are small, insectivorous songbirds that reside exclusively in native forest (Gaze 1985). Mohua are endemic to the South Island and used to be widespread throughout the South Island; one observation in 1888 described a flock of 200 in the Lake Brunner district (Smith 1888). Their numbers were noticed to be declining in the early 1900's and they are now absent from over 75% of their former range (Gaze 1985). The current population is estimated to be c. 5000 individuals and conservation status is "At Risk, Declining" (Robertson et al. 2017). Mohua are cavity nesters and are particularly vulnerable to predation by rats and stoats. Predation of mohua nests often results in the loss of not just the eggs but also the adult female (Elliot 1996).

In 2019, extensive seed sampling across New Zealand indicated the biggest beech mast in over forty years, with heavy seeding of Rimu and tussock as well (DOC media release 2019). Masting events can cause an increase in rodent numbers. Stoat populations respond to the increase in rodent prey with increased survival of young stoats. This increase in rodent and stoat numbers causes increased predation pressure on native birds (King, 1983, Clapperton et al. 2019). The increase in predation during mast years by stoats and rats on mohua and their nests have led to dramatic declines in mohua populations (Elliot 1996). The timing of mohua nesting makes them particularly vulnerable to predation, as the fledging of many first clutches and the laying of second clutches coincides with a peak in the number of stoats (O'Donnell et al. 1996). Ongoing monitoring is especially important with ongoing climate change. Mast events are more likely to occur when a given years summer is warmer than the previous year before it, so increasing temperatures are also likely to increase masting events, further increasing predation pressure on Mohua (Tompkins et al., 2013).

Blue Mountains Monitoring Programme

The Blue Mountains monitoring area covers 2,800 ha of the southern (Rankleburn) area of the Blue Mountains Forest (Fig. 1). This is the area where mohua are concentrated. The monitoring programme is run from the Murihiku/Invercargill Office. Three transect lines covering about 15 km and representative of the Blue Mountains monitoring area have been monitored annually for mohua since the 1980s. Monitoring (Fig. 5) suggest a decline in the population from 1998, followed by some recovery since 2005 and a decline since 2016. Overall, there has been a population decline in the Rankleburn and Cattle Spur areas since the 1990s. However, the higher counts in the 1990s may be due to different methods used for the counts (e.g. squeakers to call birds in). Also, other variables such as weather conditions were not recorded in early years. (Collen, 2007). Annual survey methods have been standardised and documented since 2008 to determine current mohua population trends in the Blue Mountains.

Beech seed fall has been monitored in the Blue Mountains since 2005 using a network of seed collection funnels. To monitor the relative abundance of rodents and mustelids, fifteen tracking tunnel lines were also established and are operated quarterly in February, May, August, and November. In 2025, cameras were installed along these tracking tunnel lines to complement existing monitoring and improve detection of predator activity. The locations of all monitoring lines are shown in Figure 1.

Beech mast events have been recorded in the Blue Mountains in 2006, 2009, 2014, 2016, 2017, 2019, and 2024, and Department of Conservation climate modelling predicts a light mast for the 2025/2026 summer season. In response to previous mast-driven predator increases, aerial applications of sodium fluoroacetate (1080) were undertaken in December 2014 and 2019 during the wider Battle for our Birds campaign. A further 1080 operation planned after the 2016 mast was cancelled due to winter tracking tunnel results indicating that rat numbers had not increased significantly. Another operation was scheduled for spring 2025.

Between mid-May and July 2024, DOC trialled a new toxic bait for stoats in the Blue Mountains, West Otago. The approximately 1000 ha treatment area included the Rankleburn. Monitoring indicated that the relative abundance of stoats declined following the toxin application (DOC 7841242).

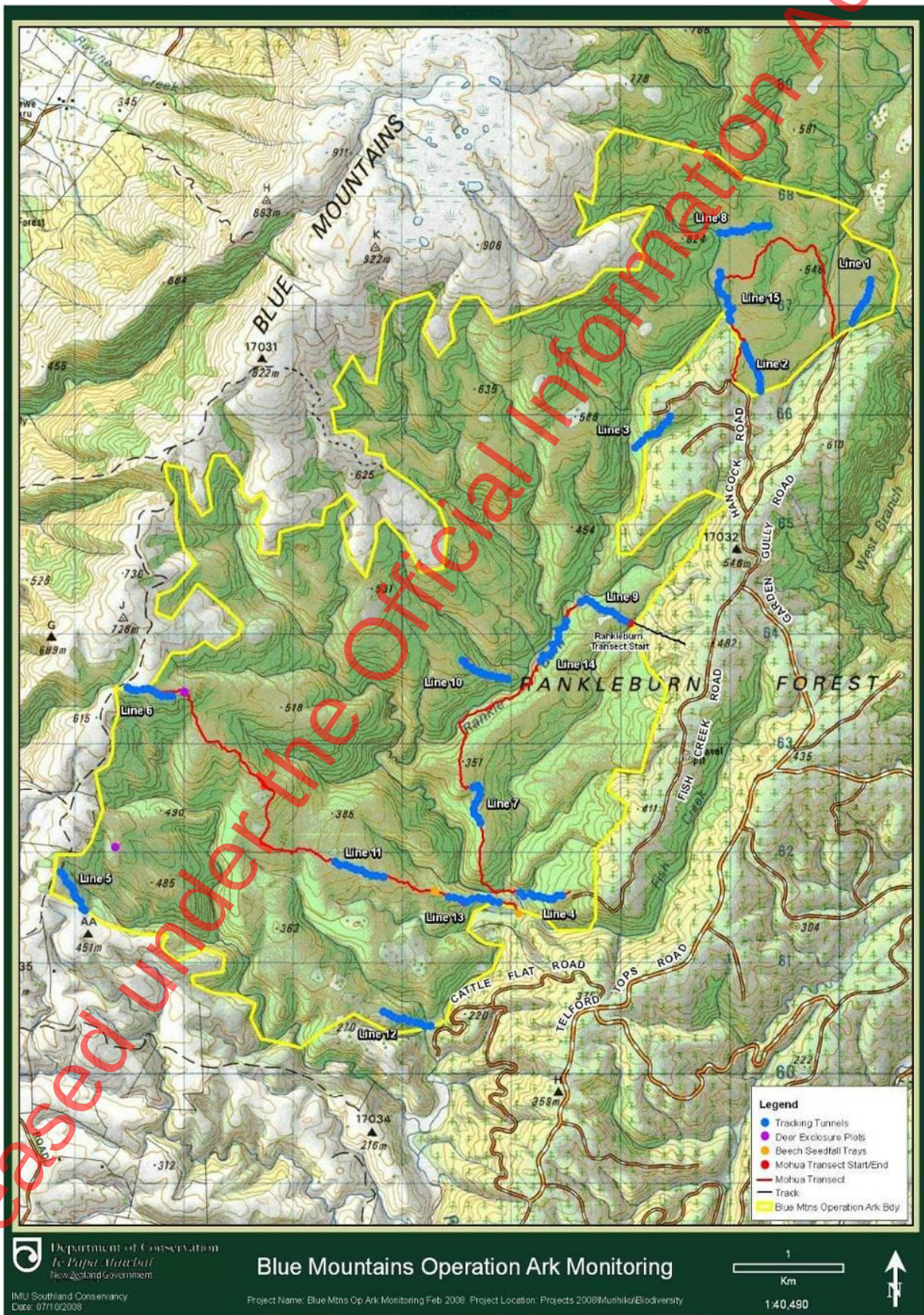


Figure 1. Blue Mountains Mohua monitoring area boundary and monitoring lines.

Methods

Three mohua monitoring transects, shown in Figure 1, were surveyed by [REDACTED] s9(2)(g)(ii), and [REDACTED] s9(2)(g)(ii) from the 1st – 3rd November 2025. This timing was consistent with that of previous surveys and was selected to coincide with the territorial pre-nesting season of mohua. Each of these transects was surveyed three times during predominantly fine weather. The transects were walked in different directions on different days to mitigate for changes in activity due to time of day at different track sections.

Note: The weather on day 2 was considerably poorer than the other two days. While still within acceptable parameters for bird counts, it had a noticeable effect on the scores for that day.

The survey methods were the same as for previous years 2007-2024, using the protocol for fixed transect counts of mohua described in O'Donnell & Elliott ([OLDDM-573015](#)). Each transect was walked at the speed of approximately 1km per hour between 0900 and 1600. Observers listened and watched for mohua. They did not use taped calls or squeakers to elicit responses from the birds. On detection of mohua up to (approximately) 10 minutes was spent attempting to get visual confirmation and determining the precise location and number of birds in the group. The number of birds seen or heard, and their sex (if known) was recorded, and the location recorded with a GPS waypoint. If a bird was heard in the far distance (more than a 10-minute walk from the transect) the observer counted the bird(s) and marked a waypoint at its estimated position.

Each group of mohua was counted separately and every effort was made to ensure that the individuals were not counted twice by being aware of the direction the birds were moving in and continually listening to adjacent mohua calls. All observers had training identifying mohua by their calls, physical appearance, and behaviours.

Results

The surveys were conducted over three good weather days. The weather was warm with light winds picking up occasionally over the survey's duration. Results from the three transects are shown in table 1. The full set of 2025 data can be found in the Excel spreadsheet (DOC-10626539).

Table 1. Results of 2025 mohua transect survey.

Transect name	Length (km)	Date	Groups	Males	Females	Total birds	Mohua/km	Time taken	Weather conditions
Garden Gully	3.6	01/11/25	18	11	4	20	5.5	3 hr 18 min	Good
		02/11/25	10	14	0	14	3.8	4 hr 20 min	Poor
		03/11/25	15	18	4	22	6.1	4 hr 00 min	Good
		mean	14.3	14.3	2.7	18.7	5.1	3 hr 52 min	
Rankleburn	6.2	01/11/25	11	11	1	12	1.9	5 hr 07 min	Good
		02/11/25	4	4	0	5	0.8	6 hr 00 min	Poor
		03/11/25	9	12	2	14	2.3	5 hr 00 min	Good
		Mean	8	9	1	10.3	1.7	5 hr 22 min	
Cattle Spur	5.3	01/11/25	1	1	0	1	0.2	4 hr 30 min	Good
		02/11/25	0	0	0	0	0.0	6 hr 30 min	Good
		03/11/25	2	2	1	3	0.6	5 hr 19 min	Good
		mean	1.3	0.7	0	2	0.3	5 hr 26 min	

Mohua were found along the length of the Garden Gully transect and along the northern half of the Rankleburn transect on all 3 survey days. Mohua were only heard on two of the survey days on the Cattle spur transect, and only seen once (two birds, start of the transect). They were heard at the very beginning, and end, of the cattle spur transect. Groups spotted in the 2025 survey are indicated in figure 2

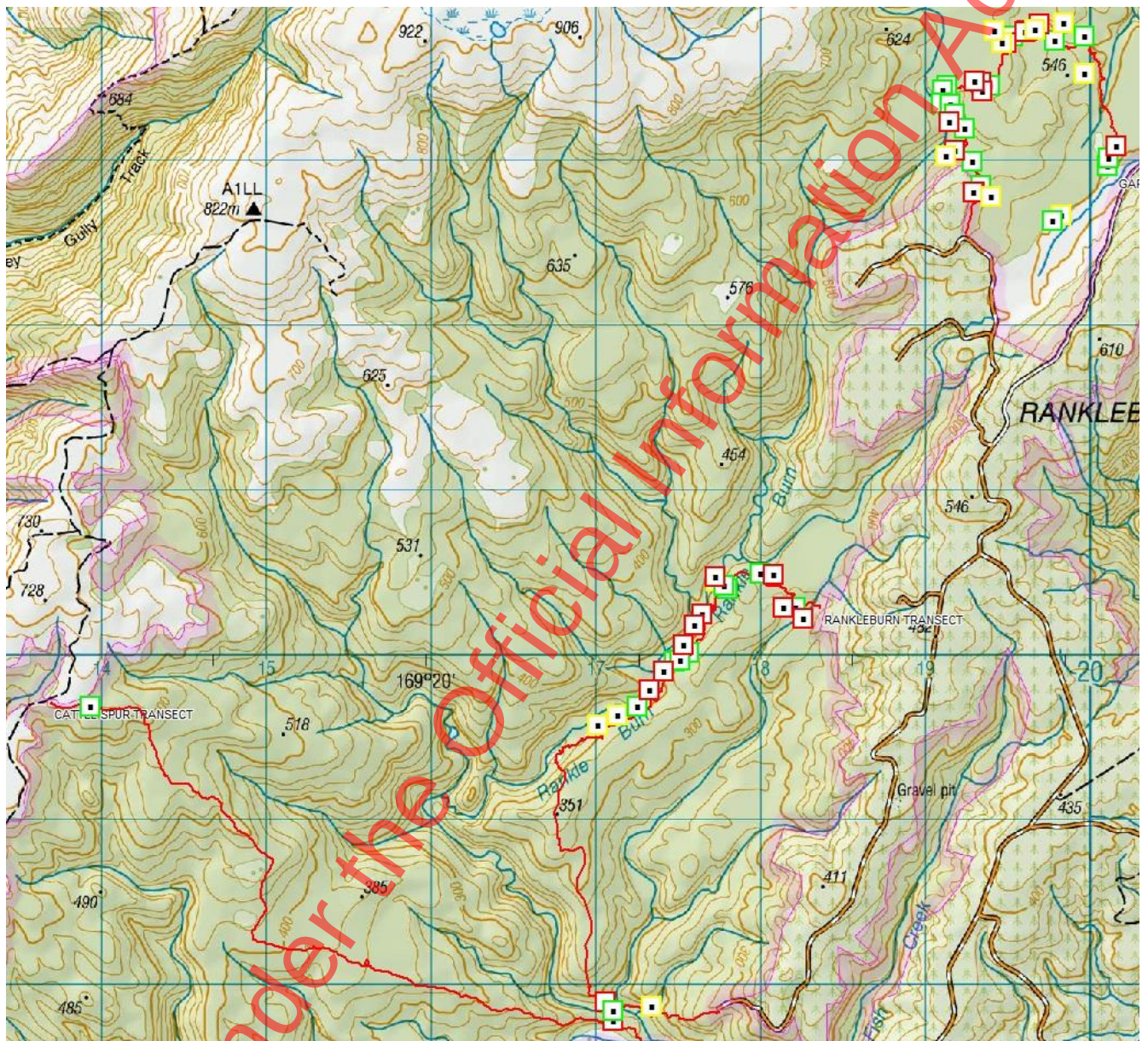


Figure 2. Locations of mohua transect lines (red) and mohua group observation records (squares) from the 2025 transect survey. Each point indicates an observation of a group. The different colours represent three different days of the survey. Red is Day 1, Yellow is Day 2, Green is Day 3.

Since 2007, the average number of Mohua detected on each transect has fluctuated. In Garden Gully there was an upward trend in number of birds and groups detected until 2016, then a decline until 2019. The 2021 count indicated the recovery seen in 2020 may be continuing, but surveys in 2022, 2023, and 2025 indicate further decline again.

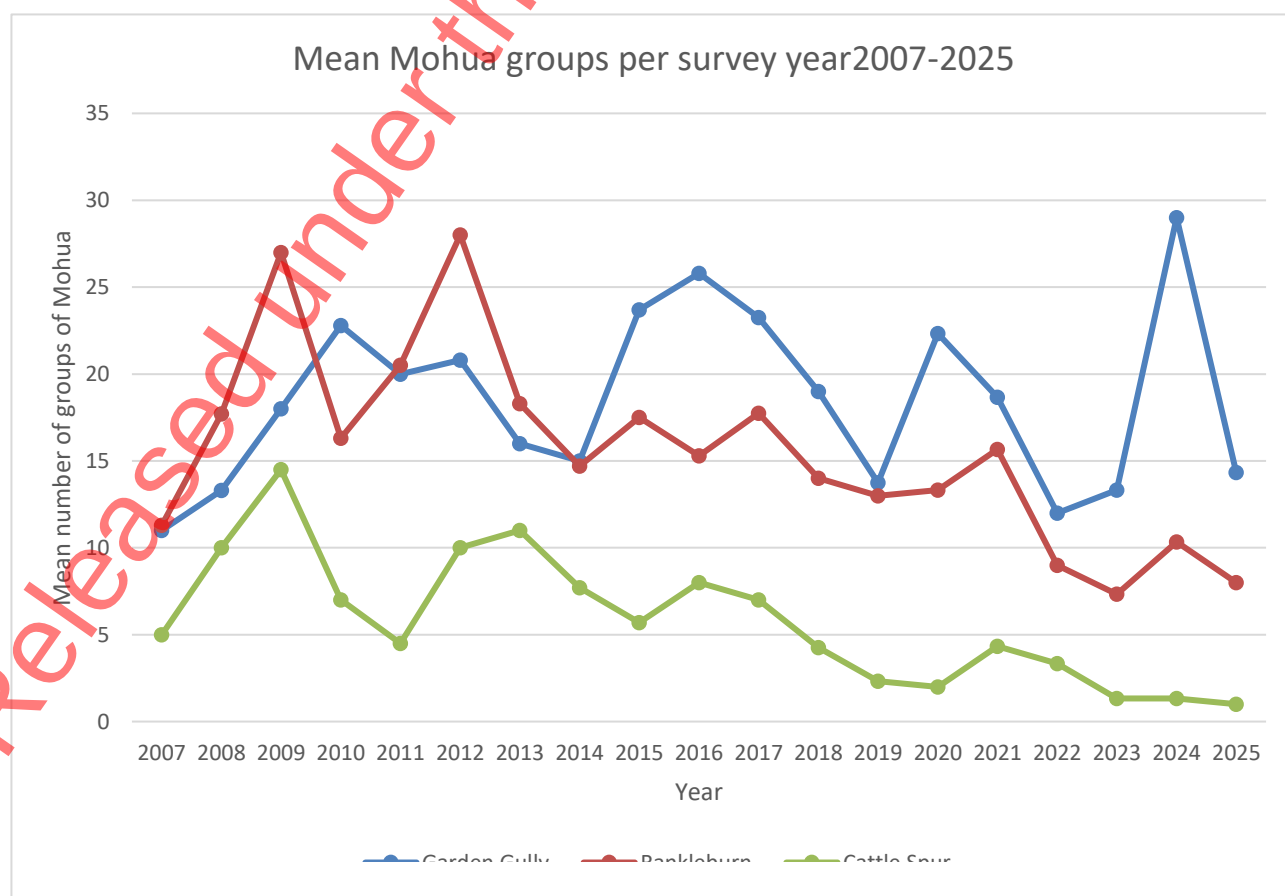
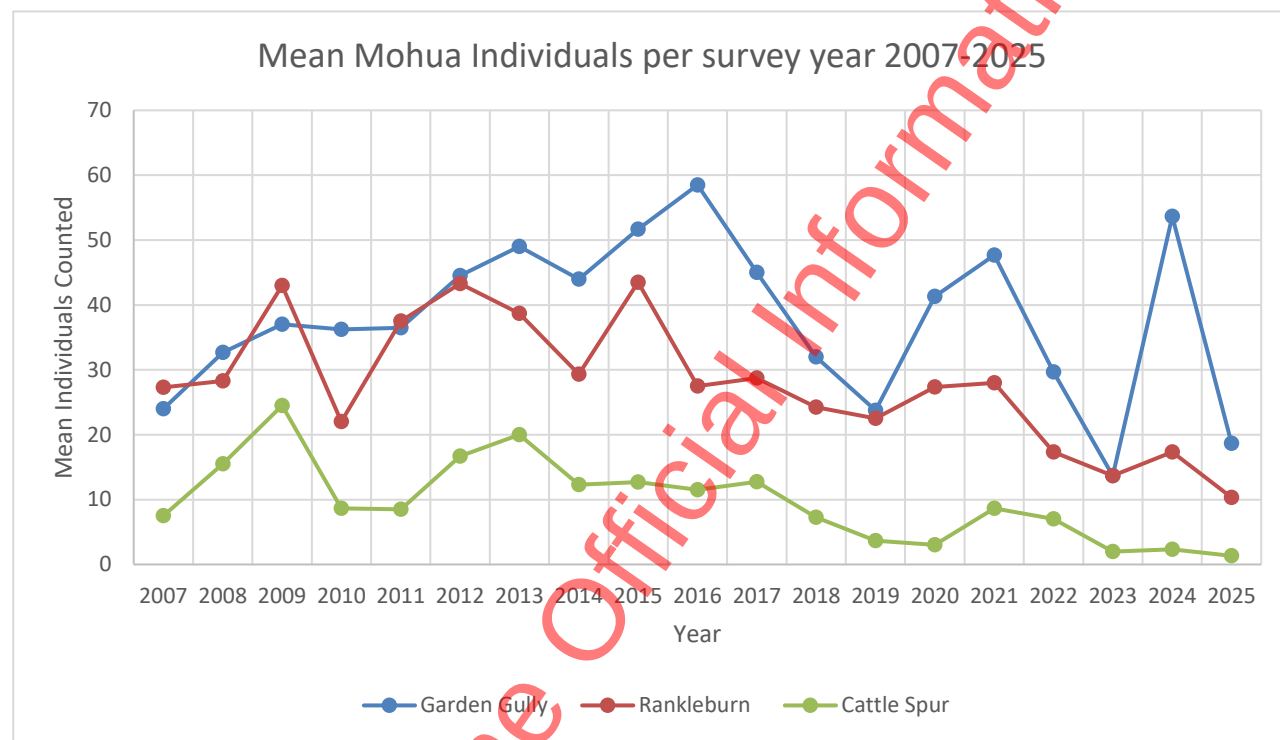


Figure 3. Average number of mohua and groups detected on each transect between 2007 and 2025

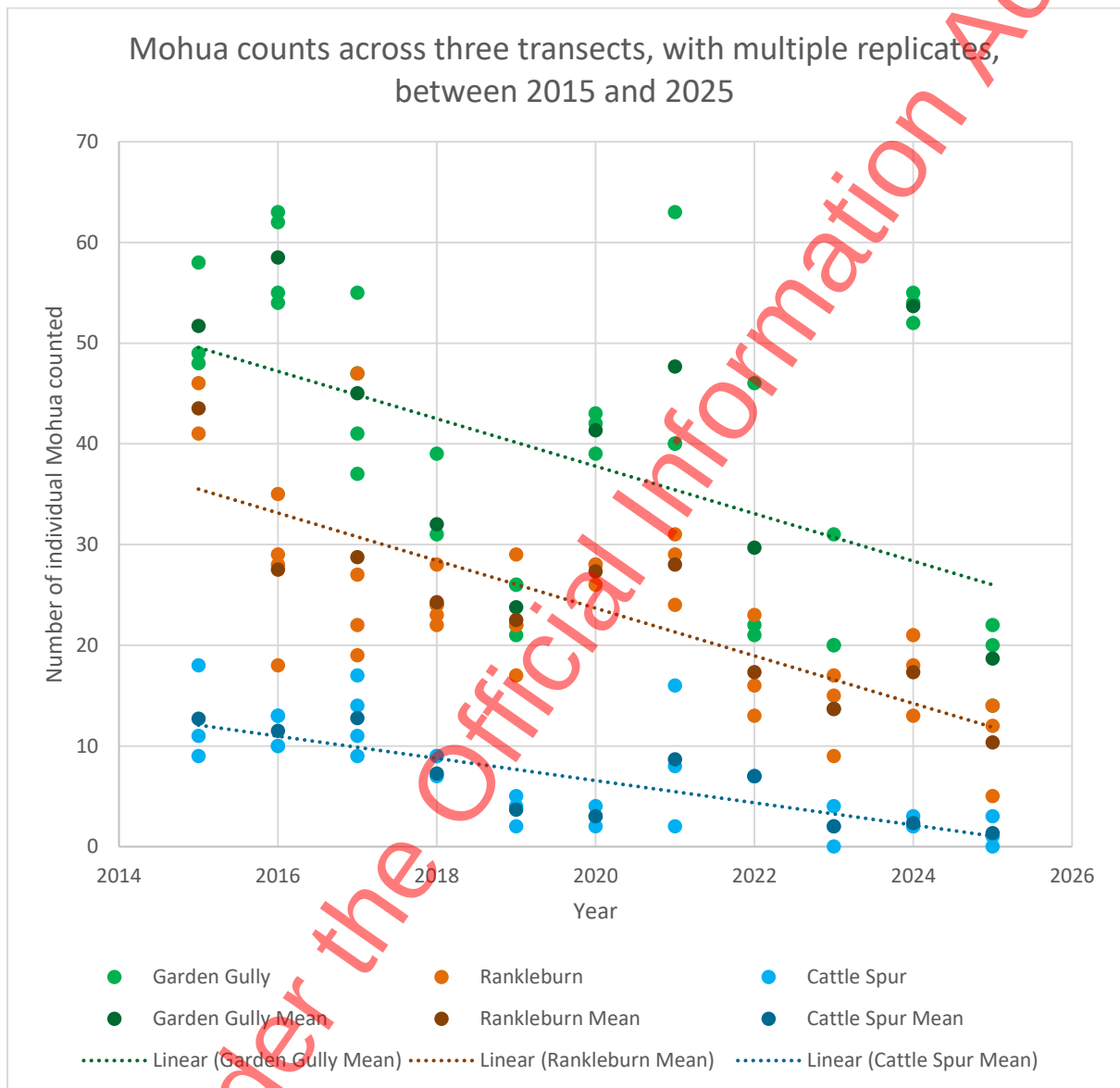


Figure 4. Mohua individual counts across three transects (Garden Gully, Rankleburn, Cattle Spur) split between replicates, over a ten-year span (2015 to 2025). Mean of replicates shown in darker colour

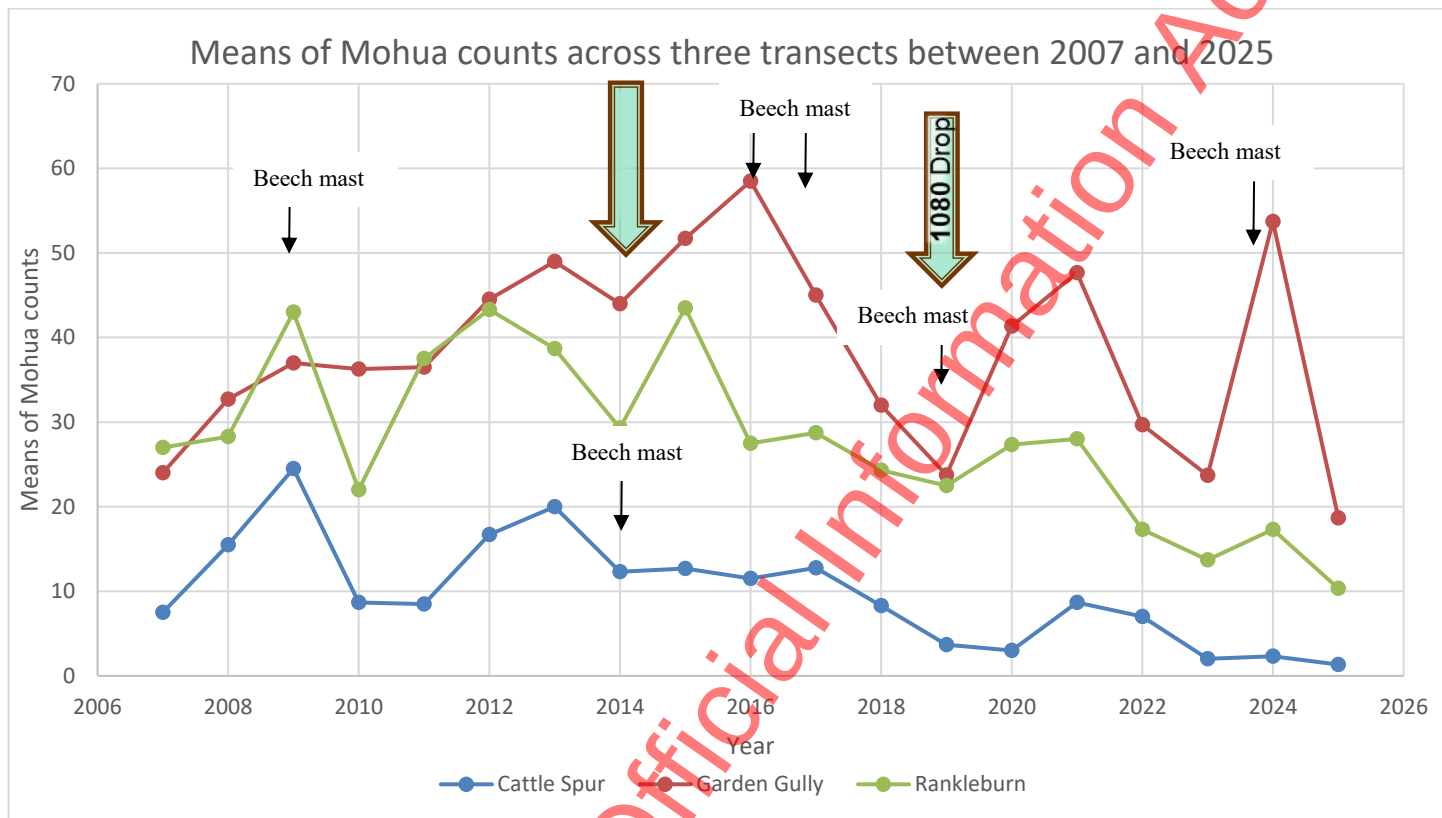


Figure 5. Mean Mohua counts across three transects (Garden Gully, Cattle Spur, Rankleburn) from 2007 to 2025. Known Beech masts and 1080 drops marked.

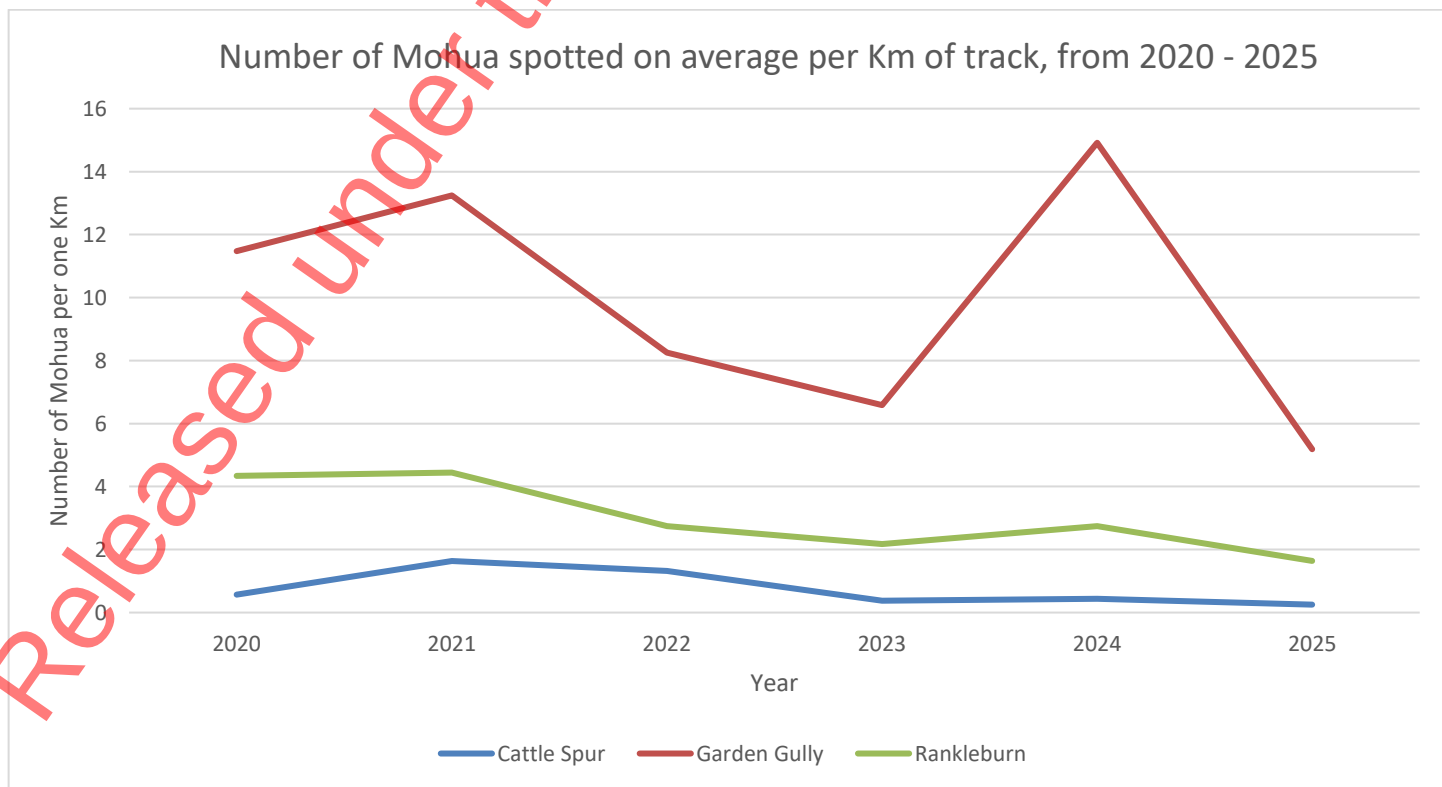


Figure 6: Mean Mohua counts per kilometre across three transects (Gardn Gully, Cattle Spur, Rankleburn) over 5 years.

Discussion

Following the declines observed between 2016 and 2019 (Figure 5), mohua detections increased across all three transects in 2020 and again in 2021, consistent with the expected short-term benefits of the 2019 aerial 1080 operation, which likely reduced predator pressure during the subsequent breeding seasons. However, detections dropped again in 2022, 2023, and 2025, with reductions evident in both individuals and group counts (Figures 3 and 4). The Mohua-per-kilometre index shows a similar pattern, with all transects exhibiting a sustained decline over the last five years (Figure 6), indicating that the downward trend is broad-scale rather than driven by any single line.

The 2024 survey produced a temporary spike in detections that was not maintained in 2025. The cause of this short-term increase is unclear. It may reflect localised predator suppression arising from the 2024 stoat toxic-bait trial in the Rankleburn area or natural variability in detectability, but the lack of persistence suggests that underlying pressures on the population remain.

Mohua numbers in the Blue Mountains have fluctuated over the last 30 years. Note that between 1990 and 2000 different methods were used to illicit a response (squeakers). The 2003-2007 data points for Cattle Spur are inconsistent due to the transect line being shortened temporarily (Figure 5).

Another variable that may have been overlooked in early reports is the translocation of birds. 40 birds from Garden gully, and 5 from Cattle spur were translocated in 1995. 27 birds were translocated in 2001 from Garden gully and Cattle spur. 21 birds were translocated from Garden gully in 2013.

The timing of this year's count was in the first week of November. This is consistent with previous years counts, where the measures have occurred either in the last week of October or the first week of November. Weather conditions were favourable on two of the three days; however, Day 2 experienced showers and increased wind, and counts on that day were noticeably lower. Although still within acceptable survey conditions, this likely contributed to a lower overall mean for 2025.

Since 2007 the mohua transect surveys on Garden Gully and Rankleburn surveys have mostly shown a trend of stable population or increase, followed by a single season decline after beech mast years (e.g. 2009, 2014). Between the 2016 mast and 2019 the population did not follow this trend of recovery after a mast, and instead continued to decline (Bogisch, 2020; Bogisch 2021). The beech mast in 2019 was followed by a 1080 operation, and in 2021 the mohua population was showing signs of recovery on all three transects. However, the past 5 survey years (2021- 2025) indicate a trend of steady decline in Mohua counts along all three transects.

The 2022 mast occurred without an accompanying 1080 operation, which may have contributed to increased predator pressure and the subsequent population declines observed in 2022–2025. With another mast predicted for the 2025/2026 summer and a scheduled 1080 operation planned, timely

predator management may be crucial in preventing further declines. Spatial patterns provide further evidence of contraction.

Recommendations

1. Repeat the annual transect surveys in October/November 2026 and subsequent years using the methods described in this report to continue to monitor mohua population trends. Provide a detailed report after each survey that includes explanation of any variables such as weather, observer experience etc. that may have affected the results of the counts.
2. Continued monitoring of seed fall and small mammal index results for informed population management.
3. Carry out the 5 yearly mohua distribution survey. There have been four major beech masts since the last distribution survey was conducted in 2008. The counts on the Cattle Spur transect have declined significantly since 2008. Carrying out distribution surveys would provide greater certainty about the status of the mohua population in the Blue Mountains.

References and related reports

Blue Mountains Home Page: [DOCDM-630153](#) (links to previous mohua monitoring reports and data)

Blue Mountains mohua survey data 1990 onwards [DOCDM-275173](#)

s9(2)(g)(ii) M. 2020: Mohua monitoring in the Blue Mountains (Southland) November 2019. Unpublished report to the Department of Conservation, Invercargill, April 2020. ([DOC-6412843](#))

s9(2)(g)(ii) M. 2021: Mohua monitoring in the Blue Mountains (Southland) October 2020. Unpublished report to the Department of Conservation, Invercargill, April 2021. ([DOC-6644495](#))

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s9(2)(g)(ii) 2007: Mohua monitoring in the Blue Mountains November 2007. Unpublished report to the Department of Conservation, Invercargill, March 2008. [DOCDM-269009](#)

s9(2)(g)(ii) 2009: Mohua surveys in the Blue Mountains Oct - Nov 2008. Unpublished report to the Department of Conservation, Invercargill, February 2009. [DOCDM-398476](#)

s9(2)(g)(ii) 2016: Mohua surveys in the Blue Mountains Oct 2016. Unpublished report to the Department of Conservation, Invercargill, November 2016. [DOC-2910222](#)

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s9(2)(g)(ii) (2019) Mohua monitoring in the Blue Mountains (Southland) November 2018. Unpublished report to the Department of Conservation, Invercargill, May 2019. [DOC-5938233](#)

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O'Donnell, C. F. J., Dilks, P. J., Elliott, G. P. (1996) Control of a stoat (*Mustela erminea*) population irruption to enhance mohua (yellowhead) (*Mohoua ochrocephala*) breeding success in New Zealand, New Zealand Journal of Zoology, 23:3, 279-286, DOI: [10.1080/03014223.1996.9518086](#)

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s9(2)(g)(ii) 2022: Mohua monitoring in the Blue Mountains (Southland) November 2022. Unpublished report to the Department of Conservation, Invercargill, April 2023. (DOC-7203041)

s9(2)(g)(ii) Project update: Readymade stoat bait trial Blue Mountains 2024 Unpublished report to the Department of Conservation, Invercargill, December 2024. (DOC-7841242)

Appendix 1: Results of mohua transect counts in the Blue Mountains 1990 – 2023

(data from [docdm-275173](#)).

YEAR	DATE	MONTH	AREA	LOCATION	LINE	COUNT METHOD	COUNT	NOTES
1990		Dec	MURIH.	BLUE MTNS	Cattle Spur	transect		no count recorded
1991		Dec	MURIH.	BLUE MTNS	Cattle Spur	transect		no count recorded
1993		Dec	MURIH.	BLUE MTNS	Cattle Spur	transect	13	G. Rasch, obs error & time c
1994		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	50	
1995		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	82	5 birds transferred to Bro
1996		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	50	spring after the "big freeze"
1997		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	54	notional total – two days/se
1998		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	42	
1999		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	54	
2000		Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	27	27 birds (mixed age/sex)
2003		Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	5.75	2001. average of 4 days? Transect
2004		Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	2	average of 4 days
2005		Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	4	average of 4 days
2007	25-12	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	7.5	average of 2 days
2008	21-28	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	15.5	average of 2 days. Transect
2009	20-28	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	24.5	average of 2 days
2010	26-10	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	8.67	average of 3 days
2011	27-29	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	8.5	average of 2 days
2012	17-31	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	16.7	average of 3 days
2013	15-17	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	20	average of 2 days
2014	22-6	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	12.3	average of 3 days
2015	20-25	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	12.7	average of 3 days, marginal
2016	20-27	Oct	MURIH.	BLUE MTNS	Cattle Spur	transect	11.5	average of 4 days
2017	29-1	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	12.75	average of 4 days
2018	22-25	Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	8.3	average of 3 days
2019	31-3	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	3.67	average of 3 days (windy)
2020	28-30	Oct.	MURIH.	BLUE MTNS	Cattle Spur	transect	3	average of 3 days
2021	3-5	Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	8.67	average of 3 days
2022	30-1	Oct/Nov	MURIH.	BLUE MTNS	Cattle Spur	transect	7	average of 3 days
2023	10-12	Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	2	average of 3 days

2024	5-7	Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	2.3	average of 3 days
2025	1-3	Nov.	MURIH.	BLUE MTNS	Cattle Spur	transect	1.33	average of 3 days
1990		Dec	MURIH.	BLUE MTNS	Garden Gully	transect	34	a low count, not all birds fo
1991		Dec	MURIH.	BLUE MTNS	Garden Gully	transect	33	
1993		Dec	MURIH.	BLUE MTNS	Garden Gully	transect	40	G. Rasch, obs error & time o
1994		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	54	
1995		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	27	
1996		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	29	
1997		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	53	
1998		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	52	
1999		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	33.2	nesting underway
2000		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	28	
2003		Oct	MURIH.	BLUE MTNS	Garden Gully	transect	10.5	average of 4 days?
2004		Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	16	average of 4 days
2005		Oct	MURIH.	BLUE MTNS	Garden Gully	transect	17.75	average of 4 days
2007	25-12	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	24	average of 3 days
2008	21-28	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	32.7	average of 3 days
2009	20-28	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	37	average of 2 days
2010	26-10	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	36.25	average of 4 days
2011	27-29	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	36.5	average of 2 days
2012	17-31	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	44.5	average of 4 days
2013	15-17	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	49	average of 3 days
2014	22-6	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	44	average of 3 days
2015	20-25	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	51.7	average of 3 days (2 days m
2016	20-27	Oct	MURIH.	BLUE MTNS	Garden Gully	transect	58.5	average of 4 days
2017	29-1	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	45	average of 4 days
2020	31-2	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	41.33	average of 3 days
2021	3-5	Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	47.67	average of 3 days
2022	30-1	Oct/Nov	MURIH.	BLUE MTNS	Garden Gully	transect	29.67	average of 3 days
2023	10-12	Nov.	MURIH.	BLUE MTNS	Garden Gully	transect	23.70	average of 3 days
1990		Nov.	MURIH.	BLUE MTNS	Rankleburn	transect	83.00	7.2 km line – different from c
1991		Dec	MURIH.	BLUE MTNS	Rankleburn	transect	57.00	4.5 km – appears similar to c
1993		Dec	MURIH.	BLUE MTNS	Rankleburn	transect	11.00	G. Rasch, obs error & time of

1994		Nov.	MURIH.	BLUE	Rankleburn	transect	74.00	
				MTNS				
1995		Nov.	MURIH.	BLUE	Rankleburn	transect	82.00	
				MTNS				
1996		Nov.	MURIH.	BLUE	Rankleburn	transect	52.00	spring after the "big freeze"
				MTNS				
1997		Nov.	MURIH.	BLUE	Rankleburn	transect	47.00	less than 66% of lines counted
				MTNS				
1998		Nov.	MURIH.	BLUE	Rankleburn	transect	46.00	
				MTNS				
1999		Nov.	MURIH.	BLUE	Rankleburn	transect	37.00	nesting underway
				MTNS				
2000		Nov.	MURIH.	BLUE	Rankleburn	transect	29.00	
				MTNS				
2003		Oct	MURIH.	BLUE	Rankleburn	transect	13.75	average of 4 days?
				MTNS				
2004		Nov.	MURIH.	BLUE	Rankleburn	transect	17.00	average of 4 days
				MTNS				
2005		Oct	MURIH.	BLUE	Rankleburn	transect	13.00	average of 4 days
				MTNS				
2007	25-12	Oct/Nov	MURIH.	BLUE	Rankleburn	transect	27.00	average of 3 days
				MTNS				
2008	21-28	Oct	MURIH.	BLUE	Rankleburn	transect	28.30	average of 3 days
				MTNS				
2009	20-28	Oct	MURIH.	BLUE	Rankleburn	transect	43.00	average of 3 days
				MTNS				
2010	26-10	Oct/Nov	MURIH.	BLUE	Rankleburn	transect	22.00	average of 4 days
				MTNS				
2011	27-29	Oct	MURIH.	BLUE	Rankleburn	transect	37.50	average of 2 days
				MTNS				
2012	17-31	Oct	MURIH.	BLUE	Rankleburn	transect	43.30	average of 3 days
				MTNS				
2013	15-17	Oct	MURIH.	BLUE	Rankleburn	transect	38.70	average of 3 days
				MTNS				
2014	22-6	Oct/Nov	MURIH.	BLUE	Rankleburn	transect	29.30	average of 3 days
				MTNS				
2015	20-25	Oct	MURIH.	BLUE	Rankleburn	transect	43.50	average of 2 days (1 day margin)
				MTNS				
2016	20-27	Oct	MURIH.	BLUE	Rankleburn	transect	27.50	average of 4 days
				MTNS				
2017	29-1	Oct/Nov	MURIH.	BLUE	Rankleburn	transect	28.75	average of 4 days
				MTNS				
2018	22-25	Nov.	MURIH.	BLUE	Rankleburn	transect	24.30	average of 4 days
				MTNS				
2019	31-3	Oct/Nov	MURIH.	BLUE	Rankleburn	transect	22.50	average of 4 days (windy)
				MTNS				
2020	31-2	Oct/Nov	MURIH.	BLUE	Rankleburn	transect		average of 3 days
				MTNS			27.33	
2021	3-5	Nov.	MURIH.	BLUE	Rankleburn	transect		average of 3 days
				MTNS			28.00	
2022	30-1	Oct/Nov	MURIH.	BLUE	Rankleburn	transect		average of 3 days
				MTNS			17.33	
2023	10-12	Nov.	MURIH.	BLUE	Rankleburn	transect	13.70	average of 3 days
				MTNS				
1993		Dec	MURIH.	BLUE	John	transect	25.00	G. Rasch, obs error & time of day
				MTNS	O'Groats			

Notification about predator control in The Blue Mountains

To protect native species, the Department of Conservation (DOC) is going to reduce possums and rodents in the area.

Why we are controlling introduced predators

The Blue Mountains Forest is made up of silver beech trees with alpine tussock tops and dotted with wetlands that are home to rounded cushion plants. The area has rare and special native plants and animals. It is a regional stronghold for scarlet mistletoe that flower in the tree tops. The forest is also home to native birds such as kākāriki, rifleman/titipounamu, New Zealand falcon/kārearea, and a nationally important population of mohua/yellowhead. Mohua are now only found in a handful of South Island forests. They have dramatically declined because of introduced predators. Mohua are particularly vulnerable to predation.

How are we going to achieve this

The safest and most effective method to control introduced predators over large areas is to use biodegradable bait pellets containing 1080. This bait targets possums and rodents. Stoats are also controlled through secondary poisoning as they feed on the carcasses.

Helicopters will accurately distribute bait across approximately 13,000 ha of the forest along pre-determined and monitored flight paths. This is the safest and most effective way to control predators in the Blue Mountains due to the vast and rugged terrain.

After the operation, we will monitor the numbers of possums and stoats using cameras, and rats using tracking tunnels. We will also monitor mohua numbers to measure how successful we were at reducing predation.



Mohua. Photo: by s9(2)(g)(ii)

Consultation and consent outcome

DOC has consulted with hapū, iwi and key stakeholders including landowners adjacent to the treatment area. This involved discussing the operational plan, listening to any concerns and considering ways to mitigate them.

DOC is delegated authority by the Environmental Protection Agency to decide applications for permission to use 1080 on land administered or managed by DOC. The operation will comply with Public Health Permission requirements from Whatu Ora to manage risk to human health.

Next steps

Adjoining landowners and other stakeholders are being notified and there will be a public notice in the local newspaper/s. There will also be warning signs placed at entrances to the treatment area immediately prior to the operation.

After the operation, DOC will contact iwi, hapū, and stakeholders about the results of the operation. We also aim to share insights about the outcomes for native species over time.

Timeframe

The operation is planned for the first clear weather window between 14th May 2026 and the end of July 2026.

This operation begins with the distribution of non-toxic pre-feed bait pellets to prepare possums and rodents to eat the toxic bait (dyed green) that is applied afterwards. Both baits are about 16 mm in diameter and cylindrical shaped.

Managing risk

1080 is poisonous to humans, domestic and game animals. In areas where the toxin has been applied, dogs are highly at risk until poisoned carcasses have disintegrated. This takes four-to-eight months or longer.

Risks can be eliminated by following these rules:

DO NOT touch bait

WATCH children at all times

DO NOT EAT animals from this area or within the buffer zone outside the treatment boundary.

The standard buffer zone is 2 km for deer and pigs, 200 m for rabbits, and 1 km for hares, tahr, wallabies and possums.

Poison baits or carcasses are DEADLY to DOGS

Observe these rules whenever you see warning signs about pesticides. These signs indicate pesticide residues may be still present in baits and poisoned carcasses. When signs are removed this means you can resume normal activities in the area. Always report suspected vandalism or unauthorised removal of signs.

If you suspect poisoning, please contact:

- Your local doctor or hospital
- The National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 or dial 111
- Seek veterinary advice for suspected poisoning of domestic animals

Map of predator control area

The map on the next page shows the confirmed area for predator control.

For more information

Please contact:

Operational planner DOC Invercargill/Murihiku office,
PO Box 743, Invercargill, 9810

Phone: 0800 275 362

Email: NPCSouthland@doc.govt.nz

Visit the DOC website:

See more information about DOC's National Predator Control Programme

www.doc.govt.nz/our-work/national-predator-control-programme

See operational updates and detailed maps of predator control on public conservation land

www.doc.govt.nz/nature/pests-and-threats/pesticide-summaries

See updates about track access and safety

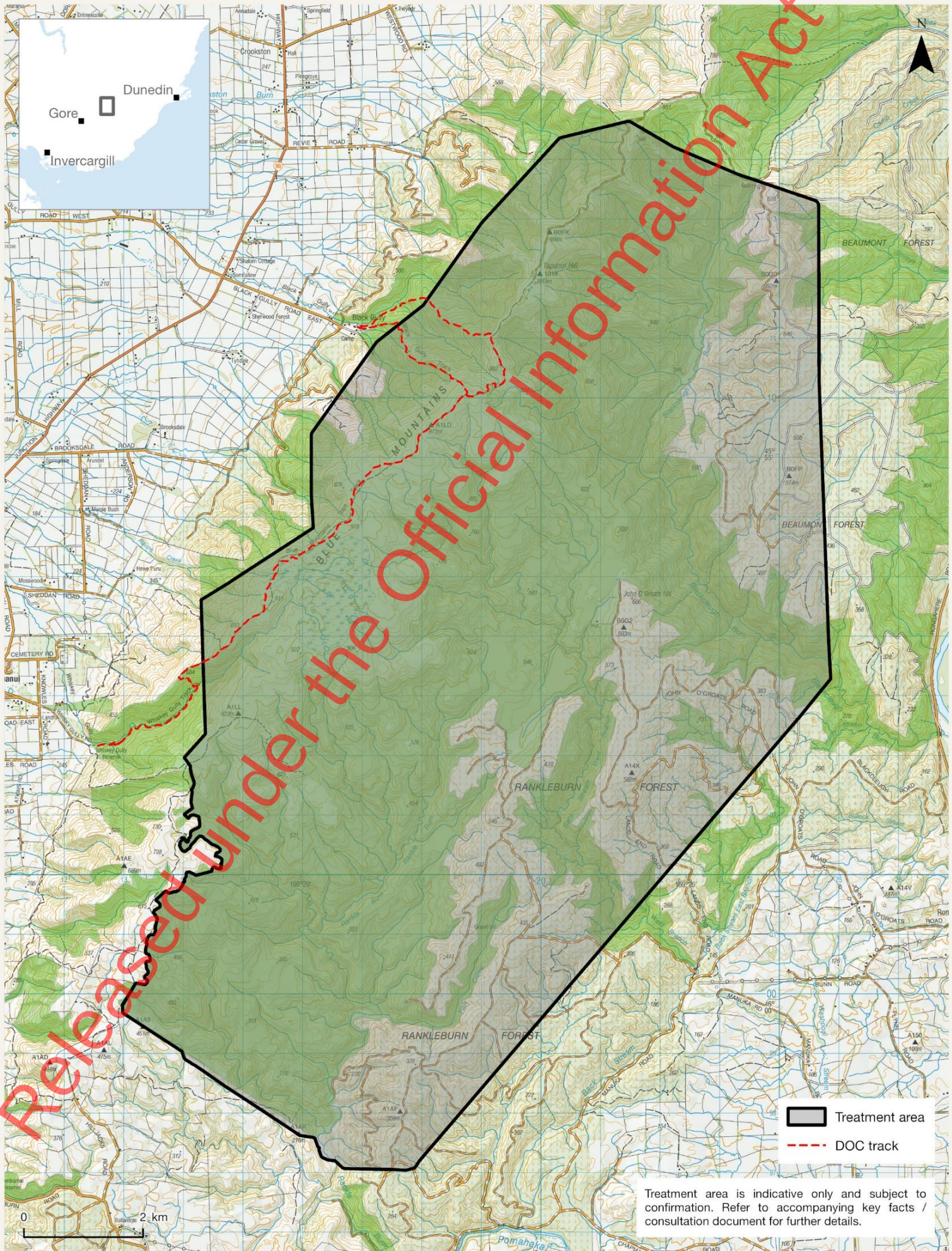
www.doc.govt.nz/parks-and-recreation/know-before-you-go/alerts

Learn more about why we use 1080 to control introduced predators

www.doc.govt.nz/nature/pests-and-threats/methods-of-control/1080

Learn more about Predator Free 2050

www.doc.govt.nz/nature/pests-and-threats/predator-free-2050



**Application Form for Rodent
Control in the
Blue Mountains Area**

**National Predator Control
Programme**

December 2025 – 30 March 2027

Name of applicant:

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Company/organisation:

DOC - Murihiku

Postal address:

PO box 743 Invercargill 9840

Phone number:

s9(2)(a)

Email address

s9(2)(g)(ii)

Prepared by:

s9(2)(g)(ii)

s9(2)(a)

s9(2)(g)(ii)



Department of Conservation
Te Papa Atawhai

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1. Introduction

1.1 Overview

To control rodents in the Blue Mountains area as part of a two-phase operation to mitigate the effects of a predicted beech seed mast event in 2026.

It is proposed that the following pesticide use will be applied using an aerial broadcast method:

Pesticide Use number #145 - Sodium fluoroacetate, 1.5g/kg cereal pellet Aerial. Prodeer Dry Forest possum and rat bait

Permission is sought for toxic application starting on or after 1 December 2025 and ending on or before 30 March 2027.

To mitigate predator irruptions triggered by beech seed mast events, the NPCP TAG recommends the following rodent control strategy for the Blue Mountains:

- Pre-seed fall control: Implement rodent control operations prior to seed fall to reduce initial population build-up.
- Post-germination control: If monitoring in November 2026 indicates rodent numbers are high enough to trigger control thresholds, or if NPCP TAG advises proceeding, a post-germination control operation should be undertaken

While the permission request spans 16 months and covers two separate operations, the actual 'live' dates for bait application over both aerial applications will be:

- 1 December 2025, to 30 March 2026. Pre beech seed fall
- 1 November 2026 to 30 March 2027. Post beech seed germination

1.2 Treatment area

The treatment area 12,859ha consists of:

- Conservation Area – Blue Mountains Stewardship area (section 25), managed by the Department of Conservation; 9,381.43ha

-
- Ernslaw One Limited. Part of Rankleburn and Beaumont exotic forests; 3,473.08ha
 - LINZ administered land.
 - Crown land undefined 3.26ha
 - Hydro parcel, 1.03ha

The treatment area consists of native beech forest (silver beech dominant), exotic forestry plantation and areas of scrubby tussock-land.

The treatment area is intersected by numerous small streams and creeks, which feed into two larger waterways: the Rankle Burn and the Blackcleugh Burn. Both exit the treatment area and connect with major rivers—the Rankle Burn flows into the Pomahaka River, and the Blackcleugh Burn into the Clutha River—approximately 2.5 km beyond the treatment boundary. The only other named waterway within the treatment area is the Back Stream West Branch, located on the Ernslaw One property

**1.3
Treatment
block(s)**

The treatment block consists of one block. It includes the majority of the Blue Mountains Forest Conservation Area and parts of the Ernslaw One Limited Rankleburn and Beaumont Forestry Blocks on the true right of the lower Clutha River. The treatment block is 12,859ha in total.

**1.4
Geographical
location**

The treatment area includes the Blue Mountains Forest Conservation Area as well as a large portion of the Ernslaw One Rankleburn and Beaumont Forestry Blocks.

It extends from the southern boundary of the Blue Mountains Forest Conservation Area at Cattle Flat near Rankleburn and extends northwards to approximately 3km past the summit of Tapanui Hill.

The operational area is located approximately 3.5km east of Tapanui, West Otago.

**1.5
Adjacent land
tenure and
uses**

- Production Forestry (Ernslaw One Limited)
 - Private Farmland (Sheep & Beef)
 - Public Conservation Land
-

1.6 Nearby residential areas or facilities

There is a High School, Blue Mountains College, one primary school, Tapanui School, and one play-centre located at Tapanui 3.5kms West.

The water intake for the Tapanui water supply is approximately 1.5km from the proposed operational boundary Whiskey Gully

- Henderson Hut (derelict hut, inside the treatment area)
- Black Gully Camping Ground (public use, outside the treatment area)

1.7 Community interests

- Recreational Hunting
- Tramping

The treatment area includes balloted hunting blocks administered by DOC and Ernslaw One. The Blue Mountains fallow deer herd is a highly valued local resource.

The Blue Mountains Tops Track runs from Whiskey Gully along the tops to Black Gully.

1.8 Management history

Year	Site	Target Pest	Method	Agency
2019	Blue Mountains	Rats, Possums	Aerial	DOC
2014	Blue Mountains	Rats, Possums	Aerial	OSPRI/DOC
2011	Blue Mountains	Possums	Feratox, Traps	AHB
2009	Blue Mountains	Possums	Feratox, Traps	AHB

The Blue Mountains was regular component of the Animal Health Board TB Control Programme from 1998 – 2006.

2. Outcomes and targets

2.1 Conservation outcome(s)

An increase in adult mohua survival and nesting success through a reduction in rat predation on mohua.

2.2 Target(s)

Reduction of rodent numbers to low or undetectable levels as recorded through post-operational surveys.

Target level for post-operational monitoring will be 0% rat tracking index.

3. Consultation and consents

3.1 Consultation

The Department of Conservation has identified and initially approached key-stakeholders to consult on the proposed operation.

Consultation has included:

- Kaitiaki Rōpū ki Murihiku, comprising Te Rūnaka o Awarua, Waihōpai Rūnaka, and Hokonui Rūnanga,

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Engagement with Te Ao Marama Inc has been facilitated through the Kaitiaki Rōpū. s9(2)(g)(ii)

- The New Zealand Deerstalkers Association (NZDA) has been consulted, and an agreement has been reached regarding the use of deer repellent across the operational area.
- The Blue Mountains Hunting Liaison Group acknowledged the necessity of the control operation.

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- Otago Deerstalkers were consulted regarding the Henderson Hut water supply. Although the hut is not managed by the association, it receives occasional use due to its remote location and condition. The water supply is believed to be intact and will be managed in accordance with public health permission requirements.

- Adjoining landowners were consulted regarding potential effects. Water supply intake locations and management plans were confirmed with those who have water supplies. Impact on farming operations and risk to dogs have been discussed with non-sowing buffers on unfenced boundaries agreed to mitigate risk.
- The Clutha District Council was consulted about the Tapanui water supply catchment s9(2)(g)(ii). The operation has been carried out previously, and the water supply will be managed in line with public health permission conditions.
- Ernslaw One Ltd Forestry initially requested an expansion of the control area to include additional forestry land for possum control. Following consultation and a cost review, Ernslaw One agreed to retain the original boundary and has provided approval for inclusion of their land in the operation.

All communications undertaken during these consultation processes has been entered into a Communication Log.

3.2 Consents

The following documents are attached as Appendix 4, or are referenced as being available to view in the DOCDM:

- Public Health Unit (PHU) Application Form
(PHU permission will be supplied once received)

4. Methods

4.1 Treatment Block Blue Mountains Forest

Pesticides – Aerial

Pesticide Use

Sodium fluoroacetate
0.15% cereal pellet, aerial

Target Pest

Rodents

Brand Name of pesticide	Prodeer possum and rat bait
Lure/mask (& %)	Cinnamon, dyed green
Type of pre-feed (lure/dye)	Cinnamon, undyed
Number of pre-feeds (if any)	One

Sowing rates for pre-feed and toxic bait	Nominal sowing rates: 1.5kg/ha Pre-Feed 1.5kg/ha Toxic
Other details about this method	Prodeer dry forest 6 gram bait will be used

The operation will be flown at a nominal sowing rate of 1.5 kg/ha - permission is requested for a maximum sowing rate of up to 3 kg/ha to allow for bait overlaps in some areas.

4.2 Justification for proposed method

The Blue Mountain Forest treatment area contains numerous nationally threatened plant and invertebrate taxa that are either endemic to the area or highly range restricted. The vulnerability of these taxa to rodent predation and/or possum predation/herbivory has been well documented and both the sustained control of possum populations at low densities and the alleviation of rodent and stoat predation prior to beech seed fall and post seed germination irruptive phases is required to maintain or improve viable populations of these species.

The Blue Mountains Conservation Area holds one of the largest remaining populations of the nationally vulnerable Mohua (*Mohoua ochrocephala*), as well as populations of NZ bush falcon, kereru, and yellow crowned parakeet. This area has the potential to provide stable habitat for other threatened species that could be re-introduced such as kaka.

Fast-knockdown predator-control methods are seen as key to the protection of these species in the face of a forecast beech seed mast event. Using aerially applied toxin that is fast acting and only requires one application is the preferred method to control predators at a landscape scale to provide protection to taonga species during a beech mast event. Sodium fluoroacetate (1080) is the only toxin registered for aerial use on mainland New Zealand that meets these criteria.

5. Further information

Details of contractor or principle	Principal Agency Department of Conservation
Further information	Nil

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Appendix 1: DOC Performance Standards

Pesticide Use #145	Sodium fluoroacetate 1.5g/kg Cereal pellet Aerial (Prodeer Possum and Rat Bait)	Target Pests: Possums, Rats
HSNO approval code: HSR002424		ACVM registration number: V009653

Location of operation
Blue Mountains



Caution Period
The estimated caution period for this operation is <i>[assessor to complete]</i> months after last date of bait application and is subject to compulsory bait and carcass monitoring. This estimated caution period cannot be reduced to less than 4 months, and must be extended if the endpoints for monitoring have not been met at the end of the period.

Performance Standards
<i>Compulsory for <u>all</u> operations</i> - The Aerial 1080 in kea habitat SOP DOC-2612859 must be followed. - Flight paths to and from the bait loading zones by aircraft equipped with loaded or uncleaned bait sowing equipment must avoid: stocked paddocks, residential dwellings, and any other 'no fly zones' specified by consent providers. - An aircraft must not, when flying to or from the treatment area, fly over a public drinking water supply or waterway that is less than 100 metres upstream of a point of extraction from a water source for a drinking water supply (not being a water supply exclusively for stock). - For operations targeting possums, baits will have a mean size of 6g or more, and 95% of baits should weigh more than 4g. - The baits must be dyed green or blue. - The boundaries of the bait preparation and loading site are marked and loading site signs docdm-181171 erected. At the end of every day of the operation (including the final day), the loading site and any storage area must be fenced so that people do not inadvertently enter the site and stock cannot gain access to the area. The fence and signs remain in place until the area is decontaminated. - If there is any likelihood that farm stock has been exposed to 1080, the owner must be advised as soon as possible, and stock removed from the area. - The product must only be used as specified on the manufacturer's product label. <i>Compulsory for this operation (delete those that you won't be applying to your operation)</i> - Bait sowing rate must be no greater than 5kg/ha for 6gm baits (or equivalent bait density per hectare for other bait sizes). - Minimise the period of time that bait is exposed at the loading site and able to be discovered by honeybees. Only open bags just prior to being loaded. <i>[Add further standards as required. These could include local performance standards as well as any recommendations from Current Agreed Best Practice that you want to apply to your operation. Attach conditions from other consents as separate pages.]</i>

Information Needs
<i>Compulsory for <u>all</u> operations</i> Nil <i>Compulsory for this operation</i> Monitoring: Monitor for native non-target animals in operational area, send samples for residue testing and report search effort and results in operational report. The Vertebrate Pesticides Residue Database SOP docdm-33461 applies.

2. Monitoring: Monitor for domestic and feral non-target animals in operational area, send samples for residue testing and report search effort and results in operational report. The Vertebrate Pesticides Residue Database SOP [docdm-33461](#) applies.
3. Monitoring: Pre and post control monitoring of feral deer in the operational area with a non-treatment area for comparison and report results in operational report.
4. Monitoring: Follow best practice for pre and post control result monitoring to estimate percentage kill for possums and rats and report results in operational report.
5. *[Add as required.]*

Operational Planning & Design Considerations

These are considerations used during planning and assessment of an operation.

Assessor to delete this section from the approved performance standard sheet for the operation.

- Apply bait in coldest months of year.
- For operations targeting possums, do not repeat aerial operations within 4 years using the same bait.
- Use bait sowing buckets with retractable legs.
- Possum control methods current agreed best practice – Method best practice – Aerial Application of 1080 Cereal Pellets [DOC-7487883](#)
- Rat control methods current agreed best practice – Method best practice – Aerial Application of 1080 Cereal Bait [DOC-2749355](#)

My approval dated 23 December 2025, is subject to these performance standards being met.
Compliance monitoring may occur.

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s9(2)(g)(ii)

Director Operations - SSI

Appendix 2: Map

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Appendix 3: Communication Record

There is an ongoing consultation and notification process in place recorded in the communication plan linked below.

[Blue Mountains communication plan DOC-10379912](#)

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Appendix 4: Consents

Proof of Public Health Unit application. [DOC-10512035](#)

Public Health Permission. [DOC-10528575](#)

Ernslaw One Ltd. Access Permission. [DOC-10449598](#)

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Appendix 5: Assessment of Environmental Effects

Effects on non-target native species

Target benefit species

- Mohua/Yellowhead (*Mohoua ochrocephala*)
- Kākāriki/Yellow Crowned Parakeet (*Cyanoramphus auriceps*)
- Karearea/Southern Falcon (*Falco novaeseelandiae* “southern”)

Non-target species

Threat classification after Miskelly et al. (2008)

Common Name	Scientific Name	Threat Category
Yellowhead mohua	<i>Mohoua ochrocephala</i>	Nationally vulnerable
New Zealand falcon karearea	<i>Falco novaeseelandiae</i>	Nationally vulnerable
Long tailed bat pekapeka tou roa	<i>Chalinolobus tuberculatus</i>	Vulnerable

Other native bird species recorded in and around the treatment area which are not threatened include:

Common Name	Scientific Name
Bellbird kōparapara	<i>Anthornis melanura melanura</i>
Brown creeper pipipi	<i>Finschia novaeseelandiae</i>
Grey warbler riroriro	<i>Gergone igata</i>
Morepork ruru kōkōu	<i>Ninox novaeseelandiae</i>
Silvereye tauhou	<i>Zosterops lateralis</i>
South Island fantail piwakawaka	<i>Rhipidura fuliginosa fuliginosa</i>
South Island tomtit, miromiro	<i>Petroica macrocephala macrocephala</i>
Yellow crowned kākāriki	<i>Cyanoramphus auriceps</i>

Effect of operation on native species

A reduction in rodent (and indirectly stoat) numbers will achieve the following:

- enhance breeding success of all bird species including mohua, kākārīki and karearea
- enhance the insect food supplies and fruit/seed supplies available for birds

From the DOC 1080 Pesticide information review:

Studies carried out on native and non-native species suggests 1080 is likely to be toxic to most native animals. There is wide variation in sensitivity between taxonomic groups. Mammals are more sensitive than birds and invertebrates on a weight for weight basis. The small size of many native species relative to the target pests means that toxic baits used for pest control are capable of causing harm to almost any animal that eats the bait. Therefore, the level of exposure to the bait becomes important in determining the effects on non-target native species in the field.

Birds

A total of 47 radio tagged morepork/ruru has been exposed to this method and bait type over 6 operations and none have died from poisoning (**Error! Reference source not found.**). Call count monitoring at Waipoua did not indicate any significant 1080 related mortality (Pierce and Montgomery, 1992).

Transect counts of SI tomtits, grey warbler, SI robins and rifleman were conducted before and after the 2010 Waitutu aerial 1080 operation (1 kg ha⁻¹ prefeed followed by 2 kg ha⁻¹ 0.15% 1080 pellets). The transects were located at five sites, three within the operational area and two in a non-treatment area. While the numbers of tomtits and grey warblers detected on the transects changed following the application of the 1080, the scale and direction of the changes (decreases for tomtits and increases for grey warbler) was similar at all five sites. The pre- and post-control counts of rifleman and SI robins were similar between the operational area and non-treatment sites. The authors therefore concluded there was no evidence for population level impacts from 1080 on any of these species (Greene et al., 2013).

Van Vianen et al. (2018) monitored bellbird, silvereye, SI tomtit, rifleman, brown creeper, grey warbler and fantail using five minute bird counts pre- and post- aerial 1080 operations (1 kg ha⁻¹ prefeed followed by 2 kg ha⁻¹ 0.15% 1080 pellets) in the Rolleston Range and Alexander Range in 2012. The five-minute bird count monitoring occurred in the operational areas and at nearby non-treatment areas. None of the monitored species

declined significantly more within the operational areas compared to the non-treatment sites, indicating 1080 did not have an impact on the populations.

Kereru (NZ pigeon/kukupa) have not been monitored individually when exposed to this method and bait type. However none of six birds ate non-toxic cereal pellets offered in a trial on Kapiti island (Spurr and Powlesland, 1997). Monitoring of kereru during 5 aerial 1080 operations using cereal pellets did not detect population changes using the five minute count method (Spurr and Powlesland, 1997). Additionally, all 15 radio tagged birds exposed to an aerial 1080 operation using carrot bait survived (Powlesland et al., 2003).

21 marked (8 radio-tagged and 13 banded) adult NZ falcon were monitored through three 0.15% 1080 cereal pellet operations undertaken in Kaingaroa Forest during 2013-2014 by Horikoshi et al. (2018). All the marked falcon survived the operations. Using the live-recaptures model in Program MARK 8.1, the researchers estimated of the 95% C.I. survival of adult falcon through the operations at 84-100%.

Seaton et al. (2009) collected productivity data from 87 falcon nests in Kaingaroa pine plantation during three breeding seasons, 2003 - 2006. During this time 1080 pellets and carrots were ground laid or aerially applied in forest compartments where falcon bred. The numbers of chicks successfully fledged was not related to time since 1080 application (1 month to >3 years), application method or bait type. During the study the breeding falcon population increased from 20 to 36 pairs, leading to the authors concluding that 1080 did not have a negative impact on falcon, and probably had a positive impact by reducing predation pressure on the falcon.

Falcon territories remained occupied, presumably by the resident birds, during four aerial 1080 operations using cereal pellets (Pureora 1984, Mapara 1990-92) and one using carrot bait (Waihaha 1994) (Spurr and Powlesland, 1997). The total number of falcon involved in this monitoring was about 13, although the Mapara birds (3 pair) were exposed in three consecutive years (Bradfield, 1993; Calder and Deuss, 1985; Greene, 1998).

Kākāriki (parakeet) nests have been monitored during two aerial cereal 1080 operations. Fifteen nests were monitored during the October 2007 Hurunui Valley operation and a further seven nests were monitored during a 1080 operation in the Dart Valley. Dead chicks in a failed nest in the Hurunui Valley operation contained 1080 residues and the female was

not seen after the nest failed. All the monitored nests in the Dart Valley operation were successful, however two unmonitored Kakariki were found dead with 1080 residues in their tissues. The combined estimate of mortality of nesting parakeets from these operations was 2.27% (0.1-12 % 0.95 CI) (Rhodes et al., 2008). The authors concluded that while some Kakariki were killed during the 1080 operations, given the rate of nest predation observed in areas where no predator control was carried out, the net benefit from the 1080 operations was positive. No detectable impact could be determined through five minute bird count monitoring before and after four aerial 1080 operations using carrot or cereal pellet baits (Spurr and Powlesland, 1997). Additionally following an intensively monitored aerial 1080 operation in Waihaha in 1994 using carrot bait, Greene (1998) observed "...kakariki remained common within the study area..."

Australasian harrier have not been monitored individually when exposed to this method and bait type. However no detectable impact could be determined through five minute bird count monitoring before and after an aerial 1080 operation using cereal pellets on Rangitoto island and "the small resident population was still seen...throughout the year following the poisoning" (Miller and Anderson, 1992). Additionally, Pierce and Maloney (1989) found no evidence of dead harriers after aerial 1080 poisoning of rabbits in the McKenzie basin.

Edmonds et al. (2017) monitored individually marked Short-tailed bats before, during and after an aerial 1080 operation in the Eglinton Valley in December 2014. In this 10 939 ha operation, RS5 pellets were prefed at a 1 kg/ha followed by 1 kg/ha 0.15% 1080 RS5 pellets approximately 6 weeks later. 764 out of 771 marked bats (99.1%) were alive one week after the operation. One bat pup found dead under a roost tree tested positive for 1080 residues. However, any immediate impact of 1080 was assessed as minimal because the calculated annual survival rates of female bats was high (91.5%).

Lloyd (1994) offered non-toxic cereal pellets to captive Short-tailed bats and hand broadcast baits containing a fluorescent marker throughout an area known to be inhabited by bats and concluded "...short-tailed bats are unlikely to eat carrot or grain-based baits...". However short-tailed bats are possibly vulnerable to secondary poisoning because they are known to feed on arthropods that have been recorded feeding on 1080 baits and residues in these prey can in theory be enough to kill a bat (Lloyd and McQueen, 2000).

In a study in Rangataua forest where 0.15% 1080 Pellets were aerially broadcast (3 – 5 kg ha⁻¹) over “...almost the entire winter range...” of the study animals, a total of 269 short-tailed bats were caught at their roost following poisoning and held for 48 hours to determine mortality or signs of poisoning. All animals survived and showed no signs of 1080 poisoning (Lloyd and McQueen, 2000).

Lizards were not monitored in any 1080 poisoning operations prior to 1994; however, none have been reported killed by 1080. Captive McCann’s skinks ate non-toxic cereal pellets (RS5 and Agtech), especially when the baits were wet, but the level of consumption (0.01 - 0.02 g over 2 days) was probably insufficient for the animals to have received a lethal dose had the baits been toxic (Freeman et al., 1997).

The attractiveness of non-toxic RS5 cereal pellets (dyed green and lured with cinnamon) to wild grand and Otago skinks were tested by Marshall and Jewell (2007). The baits were offered in two sizes – small pieces no larger than 6 mm and large baits (whole pellets). The baits were offered dry or wet. All bait types were sampled (licked, nudged or bitten) by both species of skink, with small pieces sampled more often than large baits. No animals tried to consume large pieces of cereal bait. However, 1/10 grand skinks and 3/20 Otago skinks consumed small, wet pellet fragments.

Invertebrate populations have been monitored during eight 1080 aerial poisoning operations using cereal pellets. None of these studies suggest significant population effects on any species studied nor is there evidence to suggest poisoned invertebrates are a significant factor in secondary poisoning of other animals.

An extensive study of forest invertebrates found on 1080 baits by Sherley et al. (1999) found that at any time only a small proportion of baits had invertebrates on them, and the few individuals per bait represented a small section of the fauna present in the litter. The number of invertebrates recorded on baits in treatment grids declined when 0.15% 1080 Pellets were laid at 18 kg ha⁻¹, but started to return to original levels (relative to control grids) within 6 days of removal of the toxic baits. The reduction in invertebrate numbers did not extend further than 20 cm around each bait.

Another study by Spurr and Berben (2004) hand laid 0.15% 1080 Pellets at 5 kg ha⁻¹ to simulate aerial poisoning in Tatarua Forest Park in 1999 and monitored the occupancy of artificial refuges by tree weta and cave weta (*Isoplectron* sp.). No significant impact of bait application was found for these species nor was there any effect observed on numbers of slugs,

spiders and cockroaches which also commonly used the same refuges.

No impact was detected on populations of weta in Waipoua Forest and all cockroaches, centipedes, millipedes, kauri snails and all but one beetle survived in enclosures with 0.08% 1080 Pellets (Pierce and Montgomery, 1992).

More specific information on this monitoring can be found in the Pesticide Information Review for 1080 (DOCDM-25427).

Performance standards and information needs

Ensuring 1080 bait meets all quality specifications is considered the best way to avoid adversely affecting birds and other native species:

1. 1080 baits will be lured with cinnamon.
2. 1080 baits will have a mean size of 6 grams.
3. 1080 bait quality will be checked to ensure bait size complies with standards.
4. 1080 baits will be dyed green to deter birds.
5. 1080 baits will be sown at an effective average sowing rate of 1.5 kg/ha but not greater than 3 kg/ha.
6. Dry forest baits will be used.

Effects on non-target domestic and feral animals

Non-target species

Introduced bird species found in the treatment areas include:

Common Name	Scientific Name
Blackbird	<i>Turdus merula</i>
Chaffinch	<i>Fringilla coelebs</i>
Goldfinch	<i>Carduelis carduelis</i>
Greenfinch	<i>Carduelis chloris</i>
Hedge sparrow, dunnoek	<i>Prunella modularis</i>
House sparrow	<i>Passer domesticus</i>
Redpoll	<i>Carduelis flammea</i>
Skylark	<i>Alauda arvensis</i>
Song thrush	<i>Turdus philomelos</i>
Starling	<i>Sturnus vulgaris</i>
Yellowhammer	<i>Emberiza citrinella</i>

Other introduced animal pests recorded within the treatment areas include:

Common Name	Scientific Name	Extent
Fallow deer	<i>Dama dama</i>	common, localised
Possum	<i>Trichosurus vulpecula</i>	widespread
Stoat	<i>Mustela erminea</i>	common, widespread
Norway rat	<i>Rattus norvegicus</i>	widespread
Ship rat	<i>Rattus rattus</i>	widespread
Mouse	<i>Mus musculus</i>	common, localised
Pig	<i>Sus scrofa</i>	widespread

Effects of operation on domestic and feral animals

From the DOC 1080 Pesticide information review:

There is wide variation between species in their susceptibility to 1080 poisoning. Dogs are especially vulnerable and highly likely to die if they eat 1080 baits or scavenge animals killed by 1080.

Feral deer population mortality from aerial poisoning operations targeting possums is highly variable and does not appear to be consistently influenced by toxic loading, sowing rate, prefeeding or bait type. Most estimates of deer kill fall between 30 and 60%. Nugent et al. (2001) quote productivity figures for red deer populations of around 30% so low to moderate by-kill of deer populations is probably negated within a couple of years.

The impact of Prodeer 1080 bait on red deer and feral pigs was studied during a 5,395 hectare possum control operation at Willowflat Forest, Hawke's Bay, in October 2021. Prefeed (Prodeer non-toxic 6g pellets) was applied at 1.5kg/ha followed 13 days later by toxic bait (Prodeer, 0.15% 1080, 12g pellets) at 2kg/ha. Trail cameras were used to monitor deer and pig activity over 4 months before and 2 months after the poison operation at the poison treatment site and a nearby unpoisoned block at Maungataniwha Forest. Deer visit rates per camera day increased by a similar amount in both the poisoned and unpoisoned blocks throughout the study period, probably in response to seasonal changes such as increased grass growth. There was no effect of poisoning on deer count per camera after accounting for the time+site effects, with an estimated increase in activity of 2% (95% CI = -5.5–10%) in the poisoned area. A few live deer were seen during deployment servicing and removal of cameras but no dead deer. A small number (1%) of deer observations on camera were of fallow deer. For pigs in the poisoned area there was a estimated decrease of 47% (95% CI=39-54%) in pig count per

camera after accounting for time+site effects, however camera visitation rate of feral pigs progressively declined through the monitoring period (including over each 7 day period in the 4 months before the control) and it was not clear if the poison operation caused any bykill of pigs. No pig carcasses were observed incidentally during fieldwork in the poisoned area (Morriss and Gormley 2022).

Birds are generally less susceptible to 1080 than mammals but introduced birds such as blackbirds and chaffinches are found dead after aerial poisoning operations.

Although 1080 is toxic to honeybees, baits used in pest control are generally not attractive to honeybees. However, this may not always be the case if honeybees are particularly hungry, so beekeepers should always be notified of operations.

Performance standards and information needs

1. Signs will be erected at all normal public entry points to the treatment area and maintained until the caution period has expired and/or the area is deemed safe according to bait and carcass monitoring protocols. The number and location of warning signs will depend on the locality and will otherwise adhere to Public Health Unit (PHU) permission conditions.
2. A3 warning signs at every public entry point will clearly state "poison baits or carcasses are deadly to dogs" and will include a map of the operational area.
3. No permits to take dogs into the treatment areas will be issued until the operational all-clear is given i.e. caution period has ended and warning signs have been removed by DOC staff.
4. The Department's Consultation and Notification SOP will be followed to inform visitors of the operation and the risk to dogs.
5. Hunters will be notified of the application of toxins via the on-line Pesticide Summary.
6. Deer repellent will be used as per consultation with the New Zealand Deer Stalkers Association and the Game Animal Council.
7. BMHLG and the local pig hunting club will be notified directly.

Further information

Further information

There is no livestock present within the treatment area. There is stock in a number of neighbouring properties to the South. Consultation with adjoining landowners identified areas where a lack of fencing placed cattle at risk. Non sowing buffers and communication will mitigate this risk.

The aerial stratum includes part of the DOC administered Blue Mountains Recreational Hunting Area (RHA) which is a very popular deer hunting location in the lower South Island. There is also some pig hunting in forests within the area as well. The Blue Mountains Hunter Liaison Group (BMHLG) are representatives from the extended hunting community, DOC, and Ernslaw One. The chairman and the group are the point of contact when communicating with hunters about control operations in the Blue Mountains. Generally, these hunters are opposed to aerial 1080 operations in the Blue Mountains. The major issue requiring significant communication effort for this operation will be consulting with and notifying this group to address concerns they may have about the operation. The use of ProDeer deer repellent bait is proposed for this operation and should help to address some of the concerns held by the local deer hunting community. The presence of hunting dogs in the treatment area following an aerial operation, while carcasses remain toxic, is a major risk associated with this operation. Clear signage and thorough notification to the wider hunting community should help address this issue.

The Blue Mountains range was first treated in winter 2001. At that time there was significant opposition to the aerial from the hunting community. A formal survey of the fallow deer population following the operation showed that approximately 70% of the breeding females were killed. Another aerial operation was repeated in 2008 and 2014 and this time included the use of EDR (Epro Deer Repellent) on cereal baits, which resulted in considerably less opposition from hunters. The formal survey on the deer post 2008 operation showed that less than 10% of the population was killed.

Dogs are highly susceptible to 1080 and must not be exposed to the opportunity to directly eat toxic baits or scavenge from poisoned carcasses. Carcasses can remain toxic after 1080 poisoning until completely decomposed which can take

between 1-12 months, depending on weather conditions and micro-site factors.

The Department places details including maps about pesticide operations occurring on public conservation land on its website (under 'Pesticide Use Summaries'). The caution period and warning signs will remain in place until monitored bait and carcasses are nontoxic.

References

The following published references were used in developing this AEE:

Fairweather, A.A.C.; Broome, K.G. 2018: Sodium Fluoroacetate Pesticide Information Review. Version 2025/1. Unpublished report docdm-25427, Department of Conservation, Hamilton, NZ. 134p.



Department of
Conservation
Te Papa Atawhai

23 December 2025

Director General of Conservation

c/o [REDACTED]

Department of Conservation, 7th Floor, Cue on Don
33 Don Street
Invercargill 9810

CC: permissions@epa.govt.nz

Biodiversity Advisor

ATTENTION: [REDACTED]

PERMISSION ID: 10549991

Rodent control in the Blue Mountains Forest Conservation Area

SUBSTANCE APPROVAL NUMBER: HSR002424

Having considered your application [DOC-10517910](#), the Pesticide Decision Support document [DOC-10577695](#) and having considered the adverse effects of the use of aerial sodium fluoroacetate on DOC managed or administered land, I have decided to grant this permission subject to conditions. I consider that granting this permission is in accordance with the purpose of the Hazardous Substances and New Organisms Act 1996 recognising the life-supporting capacity of ecosystems, the well-being of people and communities and taking into account the principles and other matters in sections 5, 6, 7 and 8 of the Act. I consider that the conditions imposed in this permission are consistent with the approval of the substance.

I also consider that the controlling of pests is in accordance with the General Policy for Conservation Areas (particularly Policy 4.3) and the Conservation General Policy (see Section 4.2). These General Policies have been given effect to through various conservation planning documents and are in line with the purposes of the conservation legislation. I also understand that the controlling of pests and the protection of indigenous biodiversity generally gives effect to the principles of the Treaty of Waitangi. I, therefore, consider that permission to control pests on public conservation land can be granted.

Permission is granted, to take immediate effect, under:

- Section 95A of the Hazardous Substances and New Organisms Act 1996.
- Section 38 of the Conservation Act 1987.
- Section 17 of the Wild Animal Control Act 1977.
- Section 53 of the Wildlife Act 1953.

for [REDACTED] Department of Conservation, or any other person acting under their authority (including contractors) to apply:

- Pesticide Use 145 [Sodium fluoroacetate] [1.5g/kg] [Cereal pellet] [Aerial]

on or after the date stated above until 30 March 2027; and

to undertake the actions approved under the above Acts on the lands managed or administered by the Department of Conservation listed below and shown on the **attached map below:**

- 9,381.43 ha of the Blue Mountains Forest Conservation Area, a Stewardship Area under section 25 of the Conservation Act 1987.

This operation is approved for the purpose of controlling rodents with the aim of birdlife protection and plant regeneration, but particularly for nationally important mohua, kakariki and karearea populations.

It is recognised that this operation may kill other non-target pests.

The permission is given subject to the requirement that the operation:

- Is carried out as generally described in the Application Form submitted 28 November 2025.
- Meets the conditions shown in the attached sheet of DOC Performance Standard for Pesticide Use number 145 and the substance is used in accordance with the EPA's approval of that substance.

Notwithstanding that the permission holder must comply with these requirements, it is acknowledged that indigenous animals may be killed and so this permission authorises such deaths for the greater protection of indigenous species.

Auditing may occur to establish whether these conditions are being met. If not, the permission may be revoked, and further action may ensue. It is an offence to breach these permission's conditions.

The permission may be revoked, or conditions added, deleted or otherwise varied at any time.

s9(2)(g)(ii)

s9(2)(g)(ii)

Director Operations, Southern South Island

Pursuant to a written delegation from:

- The Chief Executive, Environmental Protection Authority for section 95A of the Hazardous Substances and New Organisms Act 1996
- The Director-General of Conservation for section 38 of the Conservation Act 1987
- The Director-General of Conservation for section 17 of the Wild Animal Control Act 1977.
- The Director-General of Conservation for sections 53 of the Wildlife Act 1953.

Enc: **Map (see below)**

DOC Performance Standards (see below)

Pesticides Decision Support document [DOC-10577695](#)

Pesticide Use #145	Sodium fluoroacetate 1.5g/kg Cereal pellet Aerial (Prodeer Possum and Rat Bait)	Target Pests: Possums, Rats
HSNO approval code: HSR002424		ACVM registration number: V

Location of operation
Rodent control in Blue Mountains Forest Conservation Area



Caution Period
The estimated caution period for this operation is nine months after last date of bait application and is subject to compulsory bait and carcass monitoring . This estimated caution period cannot be reduced to less than 4 months, and must be extended if the endpoints for monitoring have not been met at the end of the period.

Performance Standards

Compulsory for **all** operations

1. The Aerial 1080 in kea habitat SOP [DOC-2612859](#) must be followed.
2. Flight paths to and from the bait loading zones by aircraft equipped with loaded or uncleaned bait sowing equipment must avoid: stocked paddocks, residential dwellings, and any other 'no fly zones' specified by consent providers.
3. An aircraft must not, when flying to or from the treatment area, fly over a public drinking water supply or waterway that is less than 100 metres upstream of a point of extraction from a water source for a drinking water supply (not being a water supply exclusively for stock).
4. For operations targeting possums, baits will have a mean size of 6g or more, and 95% of baits should weigh more than 4g.
5. The baits must be dyed green or blue.
6. The boundaries of the bait preparation and loading site are marked and loading site signs [docdm-181171](#) erected. At the end of every day of the operation (including the final day), the loading site and any storage area must be fenced so that people do not inadvertently enter the site and stock cannot gain access to the area. The fence and signs remain in place until the area is decontaminated.
7. If there is any likelihood that farm stock has been exposed to 1080, the owner must be advised as soon as possible, and stock removed from the area.
8. The product must only be used as specified on the manufacturer's product label.

Compulsory for this operation (delete those that you won't be applying to your operation)

9. Bait sowing rate must be no greater than 5kg/ha for 6gm baits (or equivalent bait density per hectare for other bait sizes).
10. Minimise the period of time that bait is exposed at the loading site and able to be discovered by honeybees. Only open bags just prior to being loaded.

Information Needs

Compulsory for **all** operations

Nil

Compulsory for this operation

Nil

My approval dated 23/12/2025 is subject to these performance standards being met. Compliance monitoring may occur.

s9(2)(g)(ii)

s9(2)(g)(ii)

Director Operations, Southern South Island

Released under the Official Information Act

s9(2)(a)

Released under the Official Information Act

s9(2)(g)(ii)

sed under the Official Information Act



Department of
Conservation
Te Papa Atawhai

13/05/2026

Director General of Conservation

c/o s9(2)(g)(ii)

Department of Conservation, 7th Floor, Cue on Don
33 Don Street
Invercargill 9810

CC: permissions@epa.govt.nz

Regional Pesticide Summary
Coordinator

ATTENTION: s9(2)(g)(ii)

PERMISSION ID: 10549991

Rodent and possum control in the Blue Mountains Forest Conservation Area

SUBSTANCE APPROVAL NUMBER: HSR002424

Under Sections 95A of the Hazardous Substances and New Organisms Act 1996, s38 of the Conservation Act 1987, s17 of the Wild Animal Control Act and s53 of the Wildlife Act 1953, the following condition(s) of the Permission ID **10549991** issued to you on 23/12/2025 are:

VARIED:

To amend the treatment area to include the 'other' land being treated as part of the Blue Mountains Forest operation by the Department of Conservation. This includes 3,477.37 hectares of land managed privately, undefined Crown land and Hydro parcels, as well as the 9,381.43 hectares of the Blue Mountains Forest Conservation Area. Therefore, a total of 12,858.80 hectares of land will be treated.

There is also an update to the block to be treated. The original permission included an exclusion for the Hendersons Hut. However, Public Health permission has been granted to fly over the hut with conditions, and therefore the map of the operation has been altered to reflect this (see below). Note: some of the warning sign locations and the loading site have also been changed to reflect the operation.

All other conditions of the Permission remain unchanged.

s9(2)(g)(ii)

.....
s9(2)(g)(ii), Regional Director, Southern South Island

Pursuant to a written delegation from:

- The Director-General of Conservation for section 95A of the Hazardous Substances and New Organisms Act 1996.
- The Director-General of Conservation for section 38 of the Conservation Act 1987.

- The Director-General of Conservation for section 17 of the Wild Animal Control Act 1977.
- The Director-General of Conservation for sections 53 of the Wildlife Act 1953.

s9(2)(a)

Released under the Official Information Act



Department of
Conservation
Te Papa Atawhai

30/04/2026

Director General of Conservation

c/o [REDACTED]

Department of Conservation, 7th Floor, Cue on Don
33 Don Street
Invercargill 9810

CC: permissions@epa.govt.nz

Regional Pesticide Summary
Coordinator

ATTENTION: [REDACTED]

PERMISSION ID: 10549991

Rodent control in the Blue Mountains Forest Conservation Area

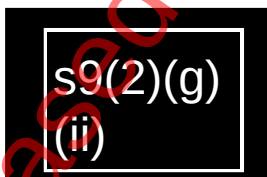
SUBSTANCE APPROVAL NUMBER: HSR002424

Under Sections 95A of the Hazardous Substances and New Organisms Act 1996, s38 of the Conservation Act 1987, s17 of the Wild Animal Control Act and s53 of the Wildlife Act 1953, the following condition(s) of the Permission ID **10549991** issued to you on 23/12/2025 are:

VARIED:

To amend the species to be targeted from rodents, to targeting both possums and rodents to ensure both pest species are reflected as targets for this operation. This is due to additional monitoring finding possum numbers are above the 5% threshold and therefore need to be targeted for control. The methodology to be used remains the same.

All other conditions of the Permission remain unchanged.



[REDACTED]

Acting Regional Director, Southern South Island

Pursuant to a written delegation from:

- The Director-General of Conservation for section 95A of the Hazardous Substances and New Organisms Act 1996.
- The Director-General of Conservation for section 38 of the Conservation Act 1987.
- The Director-General of Conservation for section 17 of the Wild Animal Control Act 1977.
- The Director-General of Conservation for sections 53 of the Wildlife Act 1953.

s9(2)(a)

Released under the Official Information Act

PERMISSION TO USE CERTAIN VERTEBRATE TOXIC AGENT(S) OR OTHER HAZARDOUS SUBSTANCE(S)

(IN A CATCHMENT AREA FROM WHICH WATER IS DRAWN FOR HUMAN CONSUMPTION OR AN AREA WHERE A RISK TO PUBLIC HEALTH MAY BE CREATED)

Under section 95A of the Hazardous Substances and New Organisms Act 1996 (HSNO Act), permission is required from a public health HSNO enforcement officer to use certain vertebrate toxic agents (VTAs) or other hazardous substances¹ when they are intended to be applied or used in a catchment area from which water is drawn for human consumption, or applied in any other area where a risk to public health may be created.

Full name of applicant:	Department of Conservation				
Contact person:	s9(2)(g)(ii)				
Contact details:					
Physical address:	33 Don Street, Invercargill				
Postal address:	As above				
Contact phone number:	s9(2)(a)				
Email:	s9(2)(g)(ii)				
Permission type and identification code					
New	2025/067/SOU	Extension	N/A	Renewal	N/A

Permission period			
Permission start date:	26/11/2025	Permission end date:²	01/11/2026

Operation	
Operation name:	Blue Mountains Rat Control
Operation locality:	Blue Mountains, West Otago
Purpose of operation:	Rat control
Nearest city/town:	Tapanui
Local government:	Clutha District Council and Otago Regional Council
Total operation size (ha):	11,964 ha
Previous operations:	N/A

¹ Hazardous substances requiring permissions refer to substances listed in Schedule 1 of the Environmental Protection Authority's Instrument of Delegation. These are: sodium fluoroacetate (1080), sodium cyanide, potassium cyanide, yellow phosphorous, 3-chloro-p-toluidine-hydrochloride, microencapsulated zinc phosphate paste, Advion® fire ant bait, Amdro® fire ant bait, Campaign® ant bait.

² End date refers to expiry date of this permission and not to the final date the vertebrate toxic agent or hazardous substance may be applied.

I, Simon Ou, having been appointed by the Director-General of Health as an enforcement officer to enforce the provisions of the Hazardous Substances and New Organisms Act 1996 where it is necessary to protect public health, and acting under delegation from the Environmental Protection Authority, grant permission for the use of the vertebrate toxic agents or other hazardous substances listed in Schedule 1, in the area(s) indicated on the operational map(s) in Schedule 2, and subject to the conditions set out in Schedule 1, Schedule 2 and Schedule 3.

Signed:	s9(2)(g)(ii)
Name:	s9(2)(g)(ii)
Title:	HSNO Enforcement Officer National Public Health Service, Southern
Contact details:	
Postal address:	Private Bag 1921, Dunedin 9054
Contact phone number:	s9(2)(a)
Email:	s9(2)(g)(ii)

Appeals: Section 125 (1A) of the Hazardous Substances and New Organisms (HSNO) Act: A person may appeal to the District Court against a decision of the Authority, under section 95A about the terms and conditions of a permission held by the person.

Notice of Appeal: Section 127 of the HSNO Act: Before or immediately after the filing and service of a notice of appeal, the appellant shall serve a copy of the notice on the Authority, and every other party to the proceedings, and any other person who made a submission to the Authority.

Schedule 1: VTA or hazardous substance information

Permission identification code:	2025/067/SOU
Operation locality:	Blue Mountains, West Otago

VTA or hazardous substance (1)

VTA or hazardous substance	Strength	Form	Application rate (for aerial operations)	Purpose
Sodium fluoroacetate (1080)	1.5 g/kg	Pellets	1.5 kg/Ha	Rat control
HSNO approval number: HSR002424				
Start date of operation: 26/11/2025			Last date of operation: 01/11/2026	
Specify all application methods to be used for the hazardous substance: Methods to be used: Aerial				

Schedule 2: Operational map(s)/lists

Permission identification code	2025/067/SOU
Operation locality:	Blue Mountains, West Otago
Description of the operational area. The operational area covers the Blue Mountains forestry blocks. Land is managed by the Department of Conservation and Ernslaw One Ltd.	
Area of ground control	0 ha
Area of aerial control	11,964 ha
Total area	11,964 ha

The substance must be applied on areas outlined on the maps attached to this permission.

s9(2)(a)

Released under the Official Information Act

Schedule 3: Conditions

Permission identification code	2025/067/SOU
Operation locality:	Blue Mountains, West Otago

Operators must be aware of and comply with all relevant legal obligations. The conditions of a permission are legally binding. However, compliance with conditions does not necessarily mean that operators have met all legal requirements for the use of VTAs and other hazardous substances. It is the responsibility of operators to comply with all legal requirements, including but not limited to, the Agricultural Compounds and Veterinary Medicines Act 1997, Animal Products Act 1999, Biosecurity Act 1993, Civil Aviation Act 1990, Conservation Act 1987, Crimes Act 1961, Food Act 2014, Hazardous Substances and New Organisms Act 1996 (HSNO Act), Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017, Land Transport Act 1998, Resource Management Act 1991 and Water Services Act 2021.

The following conditions must be met in order to use the vertebrate toxic agents or other hazardous substances listed in Schedule 1, as they are intended to be applied or used in a catchment area from which water is drawn for human consumption, or in another area where a risk to public health may be created.

General Requirements

Condition 1: Start date and duration

This approval is granted for the period commencing **26/11/2025** to **01/11/2026**. National Public Health Service, Southern (the issuer) shall be notified if there is any alteration to the intended date of the application.

Advise the issuer of the commencement of the application of the substances(s) specified in Schedule 1, at least 12 hours before commencing application.

Advise the issuer of any significant changes, complaints or incidents relating to this operation.

Contact the issuer at least two weeks before the expiry date of the original approval period if you wish to continue the operation after this date. A permission can be extended only if it meets certain criteria.

For non-urgent matters (e.g. notifying commencement, requesting extension), please notify by emailing SO-NPHS-VTA@tewhatuora.govt.nz and copying the Contact Person identified on page 2 of this permission. For urgent matters, or if out of office hours (e.g. reporting complaints or incidents), notification should also be copied to SO-NPHS-OnCallHPO@tewhatuora.govt.nz

Condition 2: Changes to permission

Advise the issuer in writing of any changes to the proposed operation.

Condition 3: Landowner and occupier notification

Before commencing the operation, notify occupiers and, as far as practicable, owners of land, homes or buildings within the operational area and immediately abutting the operational area. The notice must be given sufficiently prior to, but within two months of, the proposed application of the substance(s) specified in Schedule 1. If requested by the person notified, repeat the notification at a mutually agreed time before the proposed application.

The notice shall specify:

1. the name and nature of the VTA(s) and other hazardous substance(s)
2. the approximate date on which the VTA(s) and other hazardous substance(s) will be applied
3. a description of the area over which the VTA(s) and other hazardous substance(s) will be applied
4. the name and address of the person responsible for applying the VTA(s) and other hazardous substance(s)
5. information on safety and precautions with respect to the VTA(s) and other hazardous substance(s) being used.

Condition 4: Complaints and incidents

Any incidents or complaints relating to the operation that are likely to impact on public health shall be reported to the issuer within 24 hours of the incident or complaint.

Condition 5: Aerial applications to huts, access points, camping and public areas, walking and vehicle tracks, roads and lay-bys

The substance(s) specified in Schedule 1 may be applied to the following dwellings, huts, access points, camping and public areas, walking and vehicle tracks, roads and lay-bys:

Track (High Use)

- Black Gully track (within the operational area)

The above track shall be inspected as soon as possible and no more than 24 hours after the application of bait. Reasonable efforts will be made to find and remove all bait and, if encountered, animal carcasses.

Undertake a second inspection of the tracks, huts, campsites and public areas and make reasonable efforts to find and remove all bait and, if encountered, animal carcasses. The second inspection shall be made at least 24 hours after the toxic bait application.

Track and Hut (low Use)

- Blue Mountains Top track (within the operational area)
- Henderson Hut

The above track and hut shall be inspected as soon as possible and no more than 24 hours after the application of bait. Reasonable efforts will be made to find and remove all bait and, if encountered, animal carcasses.

Roads

- John O'Groats Road
- Lands End Road
- Rankleburn Road
- Fish Creek Road

There are locked gates for the above forest roads. They will be locked, and access will be restricted during the application.

The above roads after the locked gates to the operational area, shall be inspected as soon as possible and no more than 7 days after the application of bait. Reasonable efforts will be made to find and remove all bait and, if encountered, animal carcasses.

Condition 6: GPS track logs

The electronic GPS track logs shall be recorded and maintained for each clearance and made available to National Public Health Service – Southern, HSNO Officer within two weeks of the VTAs being applied.

Protection of drinking water supplies

Condition 7: Protection of drinking water supplies

Sufficiently prior to, but within two months of, the operation, the applicant must identify appropriate mitigation measures to protect all water supplies (including domestic self-supplies) that draw water for human consumption from an abstraction point:

- within the operational area, or
- within 400 m for aerial applications, downstream of the operational area where the water source is a surface waterbody that flows through or rises within the operational area.

Within this same timeframe, the applicant must also notify the water supplier of these measures and take and record these measures.

Mitigation Measures for Drinking Water Suppliers

- **Roof Water Source: Henderson Hut**

The roof water source supply does not require an intake exclusion zone.

The intake shall be disconnected until the roof and spouting can be checked for the presence of bait and, if found, removed. If bait is found, spouting must be flushed prior to the reconnection of the drinking water supply.

- **Stream Water Source for Domestic Water Supply**

- **Black Gully Reserve**

The intake is **520 metres** away from the operational boundary, but the water source rises within the operational area. The intake shall be disconnected prior to operation and remain off for at least 36 hours post operation.

- **Lietze Water Supply**

The water source doesn't rise from within the operational area. The intake exclusion distance for the above supply is **250 metres**.

- Other supplies

For supplies abstracted from waterbodies (e.g., lake, spring, stream) that require an intake exclusion zone, no 1080 shall be applied within 50 meters of the water supply intake. For flowing surface waterways (e.g., stream), the 50 meters exclusion shall extend for a length of 200 meters upstream from the point of intake.

From: s9(2)(g)(i)@cluthadc.govt.nz>
Sent: Monday, 20 October 2025 12:18 pm
To: s9(2)(g)(i)
Cc: s9(2)(g)(i)
Subject: RE: Tapanui public water supply; consulting on proposed aerial predator control

Hi s9(2)(g)(i)

I have no issues at my end, thanks for informing us this is happening, just guessing here this wouldn't be the first time this has been done in the area?

Thanks

s9(2)(g)(i)

From: s9(2)(g)(i)@doc.govt.nz>
Sent: Monday, 20 October 2025 12:02 pm
To: s9(2)(g)(i)@cluthadc.govt.nz>
Cc: Helen Desk <helen.desk@cluthadc.govt.nz>; s9(2)(g)(i)
s9(2)(g)(i)
Subject: RE: Tapanui public water supply; consulting on proposed aerial predator control

Caution: This message originated from outside CDC, DO NOT click links, open attachments, or follow instructions without validating your trust in the sender first. If unsure, please contact IT.

Hi s9(2)(g)(i)

Am just in the process of drafting the Public Health Permission application for this work. Do you have any feedback or further information needs regarding the proposal?

Many thanks,

s9(2)(g)(ii)

Supervisor Biodiversity,
DOC Murihiku/Invercargill,
s9(2)(a)

From: s9(2)(g)(i)
Sent: Monday, 29 September 2025 2:28 pm
To: s9(2)(g)(i)@cluthadc.govt.nz'; s9(2)(g)(i)@cluthadc.govt.nz>
Cc: 'helen.desk@cluthadc.govt.nz' <helen.desk@cluthadc.govt.nz>; s9(2)(g)(i)
s9(2)(g)(i)
Subject: Tapanui public water supply; consulting on proposed aerial predator control

Hello s9(2)(g)(i)

I obtained your contact details from the CDC helpdesk, and am making contact as per the MOH guidelines as we are planning aerial predator control in the Blue Mountains in early 2026 (target month for application is January). Bait will be a single application of cereal pellets containing 0.15% 1080 at a rate of 1.5kg per hectare.

Below are two screenshots from the department's pesticide app, showing that the bait will be applied no closer than 1500 metres direct line from the supply intake. We plan at this stage to sow over the headwaters of Whiskey Gully, at least 2,200 metres upstream of the point of abstraction.

Please don't hesitate to contact me directly if you anticipate any issues or would like to discuss this matter further.

Many thanks,

s9(2)(g)(i)

Supervisor Biodiversity,
DOC Murihiku/Invercargill,
s9(2)(a)



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s9(2)(a)

From: s9(2)(g)(ii)@doc.govt.nz>
Sent: Wednesday, 13 May 2026 1:06 pm
To: s9(2)(g)(ii)@cluthadc.govt.nz>
Cc: NPCPsouthland <NPCPsouthland@doc.govt.nz>
Subject: Re: Notification about predator control in the Blue Mountains

Caution: This message originated from outside CDC, DO NOT click links, open attachments, or follow instructions without validating your trust in the sender first. If unsure, please contact IT.

Kia ora s9(2)(g)(ii),

Thank you for your email.

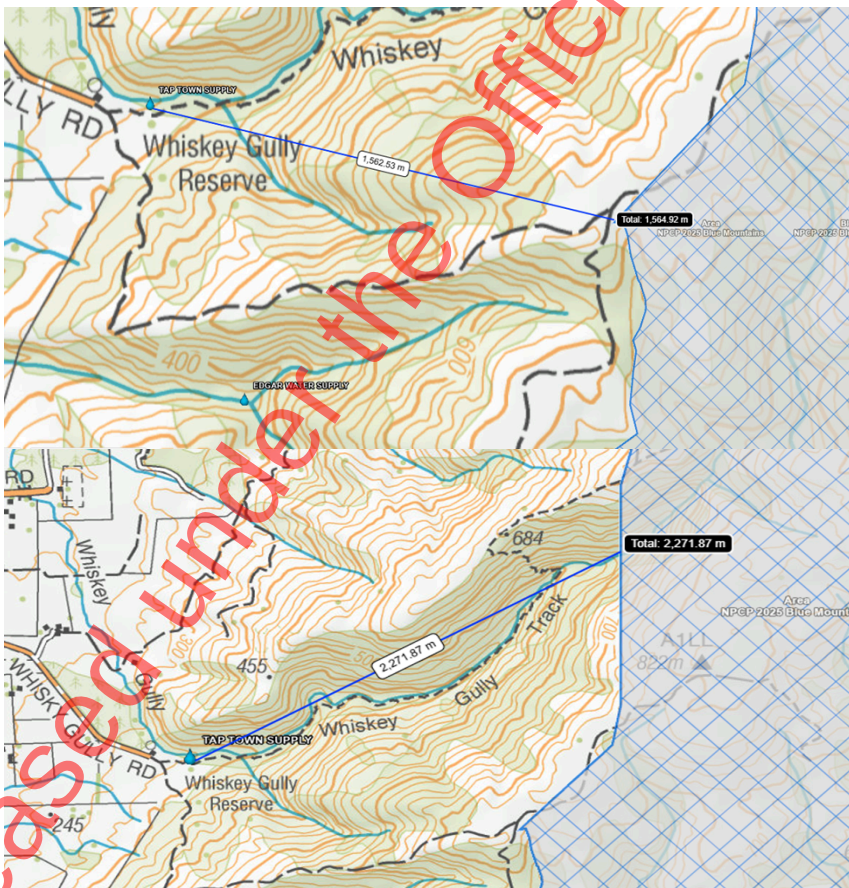
I can confirm that the Blue Mountains National Predator Control Programme operation has been planned and approved in accordance with Ministry of Health consultation requirements

for activities occurring within drinking-water catchments.

Drinking water source – Whiskey Gulley Creek

The proposed aerial predator control has been specifically assessed in relation to the Tapanui public water supply. As part of the public-health permission process, controls and restrictions required under Ministry of Health guidance were applied to ensure protection of the drinking-water source.

No bait will be applied within a minimum setback of 1.5 km from the Whiskey Gulley water intake, and sowing is planned well upstream of the intake (approximately 2.2 km in a straight line) see maps. These separation distances provide substantial buffering between bait application areas and the point of abstraction. On this basis, and consistent with the *Guidelines for Issuing Permissions for the Use of Vertebrate Toxic Agents (Revised 2021)*, there is no identified risk to the Whiskey Gulley water supply when these controls are applied.



Consultation with Clutha District Council

Consultation regarding the Tapanui public water supply and the proposed Blue Mountains operation has already occurred with Clutha District Council through [REDACTED] as required under Ministry of Health guidance. This engagement occurred during preparation of the

public-health permission application, and no concerns were raised by Council at that time. Relevant correspondence is attached for reference.

Operational timing

The operation is currently planned to occur between mid-May and July 2026, subject to weather and operational constraints. Once prefeed has been applied, we aim at a toxic application within an optimum of 7-20 days following.

If you require any further detail on the Ministry of Health process, applied separation distances, or operational controls used to protect drinking water sources, please let me know.

Ngā mihi,



s9(2)(g)(ii) NPCP Regional Lead SSI

Department of Conservation *Te Papa Atawhai*

Invercargill Office | 7th Floor, 33 Don street, Invercargill 9810

s9(2)(a)

Email s9(2)(g)(ii)

Conservation leadership for our nature *Tākina te hī, Tiakina, te hā o te Āo Tūroa*

From: s9(2)(g)(ii) <[redacted]@cluthadc.govt.nz>

Sent: Friday, May 8, 2026 08:43

To: NPCPsouthland <NPCPsouthland@doc.govt.nz>

Subject: Notification about predator control in the Blue Mountains

You don't often get email from [REDACTED]@cluthadc.govt.nz. [Learn why this is important](#)

Hello,

CDC has received notification about predator control in the Blue Mountains, expected between 14 May and July 2026.

Can you please confirm the start and end dates for the toxic pellet drop?

CDC operates the Tapanui Water Treatment Plant, which sources water from the Whiskey Gulley Creek. Can you confirm the risk of contaminants entering this water source?

Regards,

[REDACTED]
s9(2)(g)(ii)

Principal Compliance Engineer

Clutha District Council

1 Rosebank Terrace, PO Box 25, Balclutha 9240

[REDACTED]
s9(2)(a)

[REDACTED]
s9(2)(g)(ii)

[REDACTED]
s9(2)(g)(ii)



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Blue Mountains Predator Control Update

The Department of Conservation (DOC) in Invercargill/Murihiku has applied nontoxic prefeed to the Blue Mountains operational area on 18/05/2026 as part of the work to protect vulnerable native species. Toxic bait will be applied in the next fine weather window period.

The Blue Mountains is a nationally important stronghold for mohua. Because of this, DOC undertakes regular monitoring of predator levels in the area. An aerial 1080 predator control operation was last undertaken here in 2019. In response to a predicted rise in predator numbers, an operation was initially planned for late January/ early February 2026, however monitoring in November 2025 showed rodent numbers were not high enough to ensure a successful reduction in stoats through secondary poisoning. A subsequent possum monitor was initiated in early autumn which detected possums at levels high enough to ensure the operation would meet its objectives of controlling stoats. Stoats were also detected at levels above the threshold required to trigger control to protect mohua.

Native wildlife and forests need protection

Native species are fighting for survival due to predation from possums, rats and stoats. Without protection, we risk losing the unique natural heritage and biodiversity within the Blue Mountains.

The Blue Mountains Forest is made up of silver beech trees with alpine tussock tops and dotted with wetlands that are home to rounded cushion plants. The area has rare and special native plants and animals. It is a regional stronghold for scarlet mistletoe that flower in the treetops and are a preferred species for possums. The forest is also home to native birds such as kākāriki, rifleman/titipounamu, New Zealand falcon/kārearea, and a nationally important population of mohua/yellowhead. Mohua are now only found in a handful of South Island forests. They have dramatically declined because of introduced predators and need protection. Mohua are particularly vulnerable, as they nest in tree cavities and are highly susceptible to predation.

Our plan to protect native species

Through sustained predator control using 1080, there is a big increase in breeding success for native birds, their food source is more abundant, and the forest canopy is healthier.

The safest and most effective method we have to control possums, rats and stoats over large areas is to use biodegradable cereal bait pellets containing 1080. This bait targets possums and rodents. Stoats are also controlled through secondary poisoning as they feed on the carcasses of the dead possums and rodents.

Helicopters distribute bait pellets across the forest area along pre-determined and monitored flight paths using technology that enables accurate placement. This is the only viable method to control predators in Blue Mountains due to the vast and rugged terrain and the need to expose predators to bait across the operational area.

The operation began with the distribution of non-toxic pre-feed bait pellets on 18/05/26. This prepares possums and rodents to eat the toxic bait (dyed green) that is applied afterwards. Both baits are about 16 mm in diameter and cylindrical shaped.

Consultation and permissions

DOC has consulted with hapū, iwi and key stakeholders including the local Council and landowners adjacent to the treatment area.

DOC is delegated authority by the Environmental Protection Agency to decide applications for permission to use 1080 on land administered or managed by DOC. Permission has been granted for this operation. DOC has also received the required permission from the Ministry of Health. DOC ensures that all legal and policy requirements are met, and that any potential risks of the operation are managed.

1080 and Water

Use of aerial 1080 is strictly regulated and must be approved by a Medical Officer of Health or Health Protection Officer before it can proceed. This approval considers public and private water supplies in the area and sets out compulsory mitigation measures—including bait setbacks and exclusion zones—to ensure the safety of those supplies.

Research and monitoring in water catchments where 1080 has been applied consistently show that, when operational safety procedures are followed, residues in water are extremely unlikely to occur. During predator control operations, small amounts of 1080 from bait pellets may occasionally enter streams or rivers during application or through natural processes such as rainfall. However, the risk to water quality is very low, as 1080 breaks down and dilutes rapidly in water, typically becoming undetectable within about 24 hours.

Drinking directly from open waterways within treatment areas can carry a range of natural and environmental risks, including contamination from animal carcasses and other organic material, regardless of whether 1080 has been used.

Deer Repellent use in the Blue Mountains Recreational Hunting Area

The pre feed and toxic bait contain a deer repellent to reduce the impact on deer in the RHA. This was agreed after consultation with NZDA and local hunters.

Managing risk

1080 is poisonous to humans, domestic and game animals. In areas where the toxin has been applied, dogs are highly at risk until poisoned carcasses have disintegrated. This takes four-to-eight months or longer.

There will be warning signs placed at entrances to the treatment area immediately prior to the operation.

Risks can be eliminated by following these rules:

DO NOT touch bait

WATCH children at all times

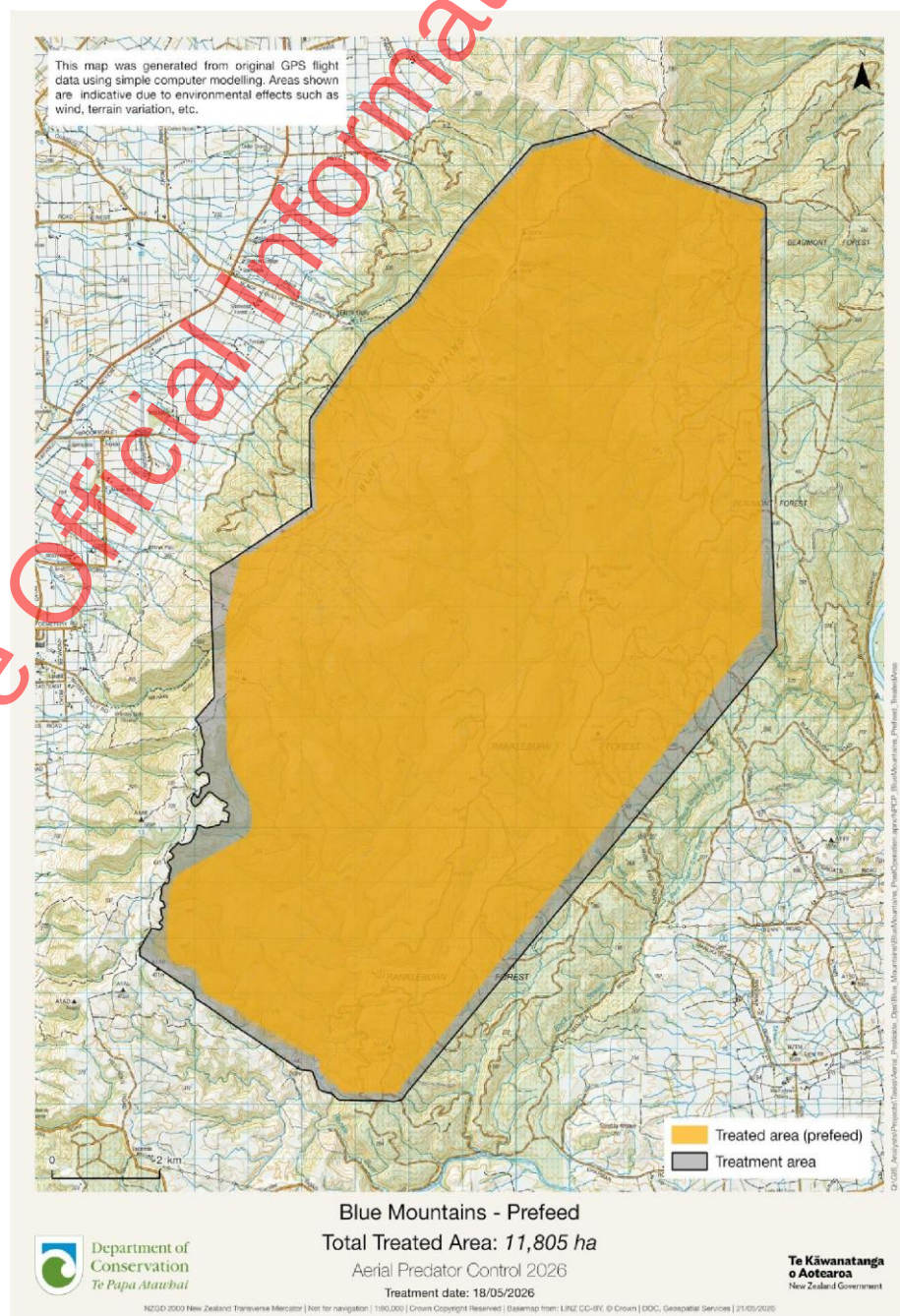
DO NOT EAT animals from this area or within the buffer zone outside the treatment boundary. The buffer zone is 2 km for deer and pigs, 200 m for rabbits, and 1 km for hares and possums.

Poison baits or carcasses are DEADLY to DOGS

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

If you suspect poisoning, please contact:

- Your local doctor or hospital OR The National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 OR dial 111
- Seek veterinary advice for suspected poisoning of domestic animals.

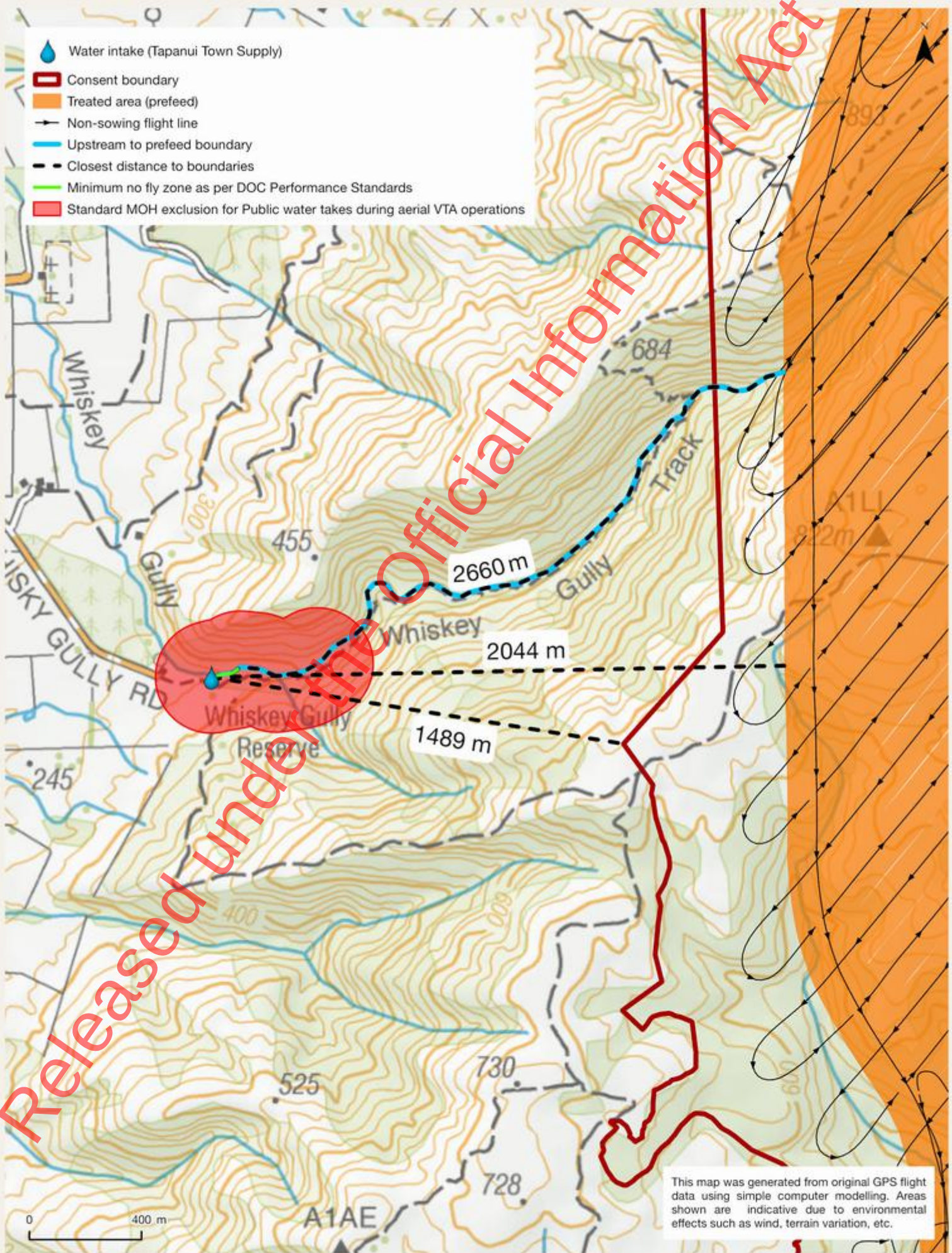


For more information

Please contact: Operational planner DOC Invercargill/Murihiku office, PO Box 743, Invercargill, 9810. Phone: 0800 275 362. Email: NPCPsouthland@doc.govt.nz

Visit the DOC website: More information about DOC's National Predator Control Programme is available on our website www.doc.govt.nz/our-work/national-predator-control-programme

You can also see **operational updates and detailed maps** of predator control on public conservation land on the DOC website. www.doc.govt.nz/nature/pests-and-threats/pesticides/summaries



From: s9(2)(g)(ii)@cluthadc.govt.nz>
Sent: Thursday, 27 November 2025 11:44 am
To: NPCPsouthland@doc.govt.nz
Cc: s9(2)(g)(ii)
Subject: RE: Consulting on proposed predator control Blue Mountains

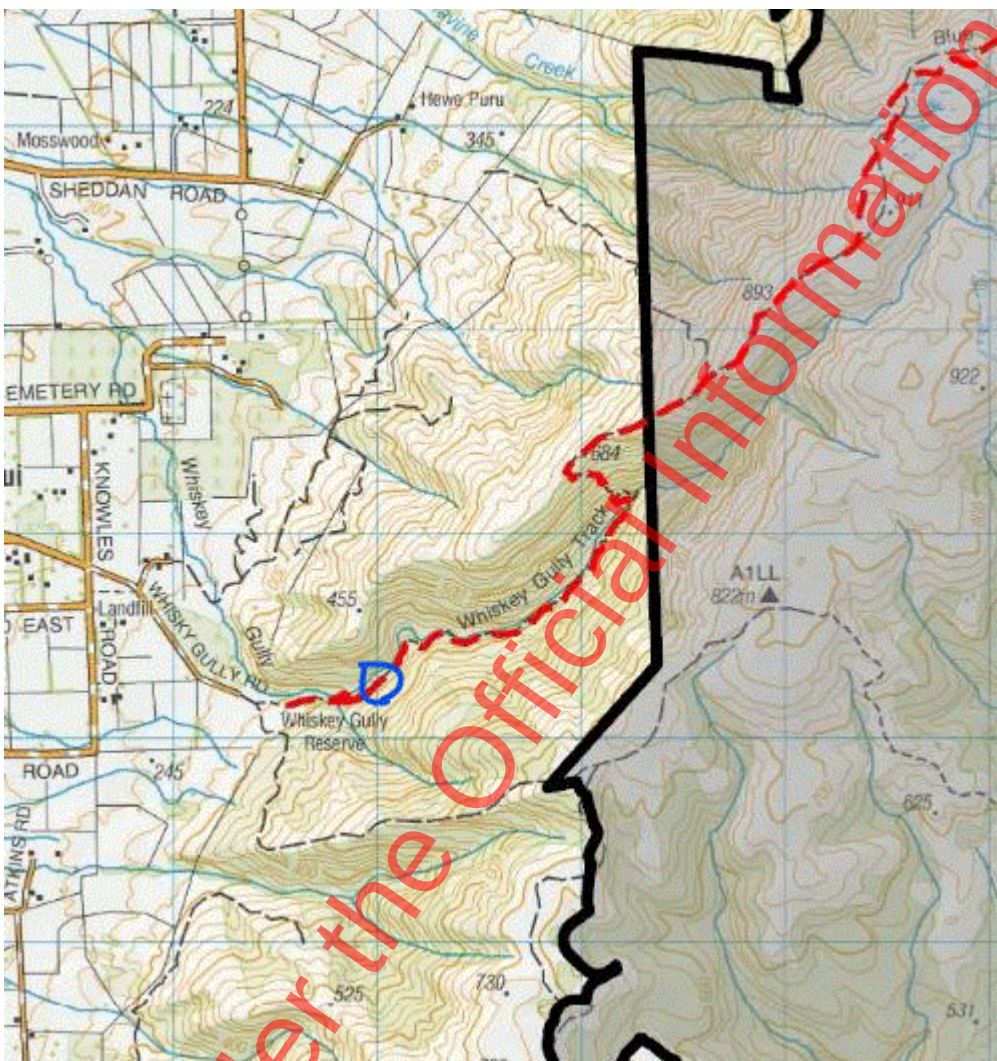
You don't often get email from s9(2)(g)(ii)@cluthadc.govt.nz. [Learn why this is important](#)
Hello,

s9(2)(g)(ii) here from the Clutha District Council, I am the Network Operations Manager.

I have a few queries regarding the up and coming drop you notified in September.

1. Can you please confirm that the Medical Officer of Health or Health Protection Officer has approved this drop, as it is upstream of the water intake for the Tapanui Water Treatment Plant which supplies Tapanui Township.
2. Can you please also confirm the exclusion zone of Whiskey Gully Creek and what monitoring will be in place during this operation.

I have taken a snip from your proposed treatment area and have highlighted in blue the approximate location of our water treatment plant. January/February is a high demand time for us due to summer, so we will not be able to turn off our supply for a duration. We are after some assurance that the appropriate mitigations are in place to protect our supply.



Any queries please come back to me,

Regards

s9(2)(g)(ii)

Network Operations Manager

Clutha District Council

1 Rosebank Terrace, PO Box 25, Balclutha 9240

s9(2)(g)(ii)

@cluthadc.govt.nz

s9(2)(a)

For more information about Council visit www.cluthadc.govt.nz

From: NPCPsouthland <NPCPsouthland@doc.govt.nz>
Sent: Monday, 15 September 2025 9:19 am
To: Undisclosed recipients:
Subject: Consulting on proposed predator control Blue Mountains

Caution: This message originated from outside CDC, DO NOT click links, open attachments, or follow instructions without validating your trust in the sender first. If unsure, please contact IT.

Kia ora koutou,

This email is to notify you that the Department of Conservation (DOC) is planning a rat and stoat control operation in the Blue Mountains for January/February 2026. This operation will involve the aerial spread of cereal baits containing biodegradable sodium fluoroacetate (1080) on public and forestry land to protect mohua/yellowhead and other forest birds. This operation is part of DOC's National Predator Control Programme and is in response to a predicted beech mast this summer. This will lead to a surge in rat populations, which pose a significant threat to native species in the area. Additionally, a large population of rats can lead to increased stoat numbers which will threaten mohua and other species.

Please see the attached fact sheet explaining operational details and a proposed map. Main points include:

Timing

- Access to Black Gully track, Whisky Gully track and Blue Mountains Tops track will be temporarily restricted for one day during the toxic operation.
- The pre-feed operation will start any time from 15 January 2025, with the toxic operation 1-4 weeks after this. The exact timing of both these operations is weather dependent.
- You will receive another email 24-48 hours before each of the non-toxic and toxic operations.

Closures

- Black Gully track, Whisky Gully track and Blue Mountains Tops track will be closed for 1 day during the pre-feed operation and for one day for the toxic operation.
- Exact dates and times for these closures will be in the email you receive 24-48 hours before sowing starts. If delays to sowing occurs, then these closures may be extended
- People planning to visit these areas after 15 January are advised to check the DOC website for possible delays.

If you would like any further information about the planned operations, please contact npcpsouthland@doc.govt.nz or 0800 ASK DOC.

You will receive a minimum of 24hr notice before both the non-toxic and toxic operations. These notifications will be by email and could be over the weekend. If you do not wish to

receive any further correspondence regarding this operation, or if you would like to update the contact details we have for you, please let us know on npcpsouthland@doc.govt.nz.

Ngā mihi,

Department of Conservation *Te Papa Atawhai*

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From: NPCPsouthland

Sent: Tuesday, April 28, 2026 9:30 AM

Subject: Fw: Notice of postponement; Blue Mts aerial predator control

Kia Ora,

Results from our November monitoring have revealed lower than expected rodent numbers in the Blue Mountains.

We will therefore be unable to achieve the desired stoat control to protect mohua and other values by using rodents as a vector.

Given that predator control has not occurred in the range for six years, possum numbers will be high, an assumption supported by anecdotal evidence. Uncontrolled possum populations impact forest health and habitat for birds and bats and directly affect threatened plants such as red mistletoe. Growth in their numbers increases the likelihood of a resurgence in bovine TB, while they also serve as an effective means of secondary poisoning for stoats.

Our revised plan is as follows;

- * Postpone the aerial predator control planned for early 2026.
- * Undertake a formal baseline measure of possum population in early Autumn 2026.
- * If possum index justifies control (or if rodent numbers have increased significantly); apply non-toxic pre-feed from 20th May and toxic bait from 1st June.

- * Timing and primary target notwithstanding, all aspects of planned control remain unchanged.

Ng âmihi,

Department of Conservation *Te Papa Atawhai*

From: NPCPsouthland

Sent: Wednesday, April 29, 2026 8:17 AM

Subject: Fw: Notification factsheet, Blue Mts aerial 2026

Kia ora koutou,

Please see attached notification factsheet regarding the Blue Mountains aerial 1080 operation planned for May 2026.

Ng â mihi,
Department of Conservation *Te Papa Atawhai*



Department of
Conservation
Te Papa Atawhai

From: NPCPSouthland
Sent: Tuesday, April 28, 2026 9:34 AM
Subject: Fw: Update; Blue Mts aerial predator control

Kia ora koutou,

Further to the message sent late December 2025.

Possum monitoring using trail cameras was undertaken in the proposed operational area during March 2026.

Analysis of the camera data has provided a density estimate of 9% RTC (Residual Trap Catch) equivalent.

Technical advice supports proceeding with the planned aerial work, on the basis that possum control will deliver conservation benefits, and, crucially, secondary control of the mustelids that endanger the local mohua population.

Proposed start date has been revised; Non-toxic pre-feed will be applied in a suitable fine weather window from 7th May, with toxic application no earlier than 12th May.

Ng â mihi,

Department of Conservation *Te Papa Atawhai*



Department of
Conservation
Te Papa Atawhai

Released under the Official Information Act

Consultation Summary for Blue Mountains Operation

❖ Iwi

- March-June 2025 Verbal catch ups with a number of key Iwi members regarding upcoming Southern South Island plan
- July 2025 - consultation email regarding 2025/26 SSI 1080 programme sent to Murihiku Kaitiaki Roopu in March 2025 for presenting at their next meeting.
- 02/09/25 email reply received.
- Te Ao Marama was contacted in July with consultation email.
- Otakou Runaka (Otago) was contacted on the 12/08/2025, received a reply on the 29/08/2025 via phone.

❖ Consenting Landowner 1 -

12/8/2025	Asked to meet to discuss
1/9/2025	Meeting in Tapanui. Broadly supportive and agreed in principle.
23/9/2025	Landowner consent form signed
December 2025	Multiple emails, discussion road clearance requirements
May 2026	Lots of contact between DOC and landowner re operational details

❖ Adjoining landowners

Summary for all:

- Initial contact Sept/Oct 2025, mainly email asking to discuss with consultation factsheet
- All followed up with phone calls and meetings as needed
- 24/12/2025 - email to inform of postponement until the autumn
- 21/4/2026 - email to inform of possum results and that operation would occur from May

❖ More detailed logs for each landowner:

Adjoining Landowner 1 -

September 2025	Initial contact, consultation factsheet and request to discuss sent by email.
	No critical issues.
24/12/2025	Email to inform of postponement until the autumn

21/4/2026	Email to inform of possum results and that operation would occur from May
20/5/2026	Called re cows near boundary during prefeed.
26/5/2026	Called, made time to visit
27/5/2026	Visited. Landowner will remove stock from upper paddocks before toxic operation. We have access permission for pre and post op tasks

❖ Adjoining Landowner 2 -

20/10/2025	Initial contact, consultation factsheet and request to discuss sent by email.
21/10/2025	Email reply. followed up with phone call. No concerns with proposal
24/12/2025	Email to inform of postponement until the autumn
21/4/2026	Email to inform of possum results and that operation would occur from May

❖ Adjoining Landowner 3 -

21/10/2025	Initial contact, phone call. Had questions about falcon, water.
22/10/2025	Email sent with more info and maps. Email conversation had around set back.
5/11/2025	Met them in person, 400m setback of bait off PCL boundary agreed upon
24/12/2025	Email to inform of postponement until the autumn
21/4/2026	Email to inform of possum results and that operation would occur from May

❖ Adjoining Landowner 4 -

15/9/2025	Initial contact, emailed consultation factsheet and request to discuss.
20/10/2025	Site lead spoke to landowner on the phone. Agreed to 25m exclusion around water take. Landowner mentioned stock lane and said he would follow up.
7/5/2026	Email from landowner about stock lane through forest. Site lead sent email reply and followed up with phone call. Will move boundary back. Offered emetic pills.
?	Dropped off emetic pills
21/5/2026	Site Lead call to talk about cows in top paddocks during prefeed. Landowner will remove before toxic
24/12/2025	Email to inform of postponement until the autumn
21/4/2026	Email to inform of possum results and that operation would occur from May

❖ Adjoining Landowner 5 - NZP Forestry Partnership

20/10/2025	Site Lead called company. Requested factsheet and map, Site Lead emailed same day.
24/12/2025	Email to inform of postponement until the autumn
21/4/2026	Email to inform of possum results and that operation would occur from May

❖ Adjoining Land Occupier 6 - Black Gully Domain Board

21/10/2025	Site Lead emailed seeking local contact.
22/10/2025	Site Lead spoke to manager on the phone. Requested additional signage and MSDS. They will turn water off before toxic operation.
24/12/2025	Email to inform of postponement until the autumn
21/4/2026	Email to inform of possum results and that operation would occur from May

❖ Hunters

4/11/2025	National NZDA	DOC agreed to use Deer Repellent at this site
15/9/2025	Southern Pig Hunting Club	Email informing of plan and asking for any feedback. No reply.
15/9/2025	Southland Recreational Hunting Club	Email informing of plan and asking for any feedback. No reply.
August 2025	NZDA Otago	Email chain around potential Op in January, addressing rumours of a September operation and confirming this is not on the cards.
August	Blue Mountains Hunters Liaison Group	Email chain establishing contact, sharing information, proposing face to face meeting
24/12/2025	All groups	Email to inform of postponement until the autumn
29/9/2025	NZDA National	NZDA asked, DOC confirmed that Deer Repellent was going to be used
8/10/2025	BMHLG	Face to face meeting in Balclutha. Pleased that deer repellent will be used. Appreciative that access disruptions will be minimised, main point of concern was around timing with respect to roar hunting

21/10/2025	NZDA Otago	Site Lead contacted to ask about facilities, use and mitigation of Henderson Hut
19/2/2026	BMHLG	Email asking about Deer Repellent in light of Rakiura study.
21/4/2026	All groups	Email to inform of possum results and that operation would occur from May
May 2026	NZDA Otago	DOC provided list of which hunting block were effected, and produced map showing 2km buffer zone
24/4/2026	BMHLG	Email Requesting further information re Deer Repellent, and why it was being done despite low rat numbers. Response sent answering questions.
30/4/2026	BMHLG	Request to postpone start date by 7 days until after Rut ballots over. DOC agreed.
7-15/05/2026	NZDA and BMHLG	A lot of comms around the prefeed, treatment extend, information on hunting, caution periods and buffers, visit on site and general updates.
18/5/2026	NZDA and BMHLG	Three representatives of these groups were invited onto load site for the prefeed. Spent approx. 1-2 hours on site.

❖ Community

Fish and Game Southland - Sent consultation emails, no reply

Forest and Bird Southland - Sent consultation emails, no reply

West Otago Community Board - he contacted us

- Representative contacted DOC 7/5/2026 to ask for water information.
- 18/5/2026 spoke on phone, said info regarding water well received. Had some more questions. DOC provided a bunch of information regarding fate of 1080 in carcasses and water including break down

❖ Public Notifications

- ODT classified published 5/5/2026
- Blue Mountains Messenger classified published 6/5/2026
- Operational update in Blue Mountains Messenger published 27/5/2026
- Web alerts, published 29/4/2026

❖ Vets, Schools, Health Centres

- Pre-Op notification. 28 April 2026

❖ Concessionaires

- Pre-Op notification. 15/9/2025
- Notice of Postponement 24/12/2025
- Pre-Op notification. 28 April 2026

❖ Public Information

- Info sheets, booklets dropped off at Tapanui Four Square, Post office and Library
- Maps, more booklets dropped off at Tapanui CDC Library

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Blue Mountains Predator Control Update

The Department of Conservation (DOC) in Invercargill/Murihiku has applied nontoxic prefeed to the Blue Mountains operational area on 18/05/2026 as part of the work to protect vulnerable native species. Toxic bait will be applied in the next fine weather window period.

The Blue Mountains is a nationally important stronghold for mohua. Because of this, DOC undertakes regular monitoring of predator levels in the area. An aerial 1080 predator control operation was last undertaken here in 2019. In response to a predicted rise in predator numbers, an operation was initially planned for late January/ early February 2026, however monitoring in November 2025 showed rodent numbers were not high enough to ensure a successful reduction in stoats through secondary poisoning. A subsequent possum monitor was initiated in early autumn which detected possums at levels high enough to ensure the operation would meet its objectives of controlling stoats. Stoats were also detected at levels above the threshold required to trigger control to protect mohua.

Native wildlife and forests need protection

Native species are fighting for survival due to predation from possums, rats and stoats. Without protection, we risk losing the unique natural heritage and biodiversity within the Blue Mountains.

The Blue Mountains Forest is made up of silver beech trees with alpine tussock tops and dotted with wetlands that are home to rounded cushion plants. The area has rare and special native plants and animals. It is a regional stronghold for scarlet mistletoe that flower in the treetops and are a preferred species for possums. The forest is also home to native birds such as kākāriki, rifleman/titipounamu, New Zealand falcon/kārearea, and a nationally important population of mohua/yellowhead. Mohua are now only found in a handful of South Island forests. They have dramatically declined because of introduced predators and need protection. Mohua are particularly vulnerable, as they nest in tree cavities and are highly susceptible to predation.

Our plan to protect native species

Through sustained predator control using 1080, there is a big increase in breeding success for native birds, their food source is more abundant, and the forest canopy is healthier.

The safest and most effective method we have to control possums, rats and stoats over large areas is to use biodegradable cereal bait pellets containing 1080. This bait targets possums and rodents. Stoats are also controlled through secondary poisoning as they feed on the carcasses of the dead possums and rodents.

Helicopters distribute bait pellets across the forest area along pre-determined and monitored flight paths using technology that enables accurate placement. This is the only viable method to control predators in Blue Mountains due to the vast and rugged terrain and the need to expose predators to bait across the operational area.

The operation began with the distribution of non-toxic pre-feed bait pellets on 18/05/26. This prepares possums and rodents to eat the toxic bait (dyed green) that is applied afterwards. Both baits are about 16 mm in diameter and cylindrical shaped.

Consultation and permissions

DOC has consulted with hapū, iwi and key stakeholders including the local Council and landowners adjacent to the treatment area.

DOC is delegated authority by the Environmental Protection Agency to decide applications for permission to use 1080 on land administered or managed by DOC. Permission has been granted for this operation. DOC has also received the required permission from the Ministry of Health. DOC ensures that all legal and policy requirements are met, and that any potential risks of the operation are managed.

1080 and Water

Use of aerial 1080 is strictly regulated and must be approved by a Medical Officer of Health or Health Protection Officer before it can proceed. This approval considers public and private water supplies in the area and sets out compulsory mitigation measures—including bait setbacks and exclusion zones—to ensure the safety of those supplies.

Research and monitoring in water catchments where 1080 has been applied consistently show that, when operational safety procedures are followed, residues in water are extremely unlikely to occur. During predator control operations, small amounts of 1080 from bait pellets may occasionally enter streams or rivers during application or through natural processes such as rainfall. However, the risk to water quality is very low, as 1080 breaks down and dilutes rapidly in water, typically becoming undetectable within about 24 hours.

Drinking directly from open waterways within treatment areas can carry a range of natural and environmental risks, including contamination from animal carcasses and other organic material, regardless of whether 1080 has been used.

Deer Repellent use in the Blue Mountains Recreational Hunting Area

The pre feed and toxic bait contain a deer repellent to reduce the impact on deer in the RHA. This was agreed after consultation with NZDA and local hunters.

Managing risk

1080 is poisonous to humans, domestic and game animals. In areas where the toxin has been applied, dogs are highly at risk until poisoned carcasses have disintegrated. This takes four-to-eight months or longer.

There will be warning signs placed at entrances to the treatment area immediately prior to the operation.

Risks can be eliminated by following these rules:

DO NOT touch bait

WATCH children at all times

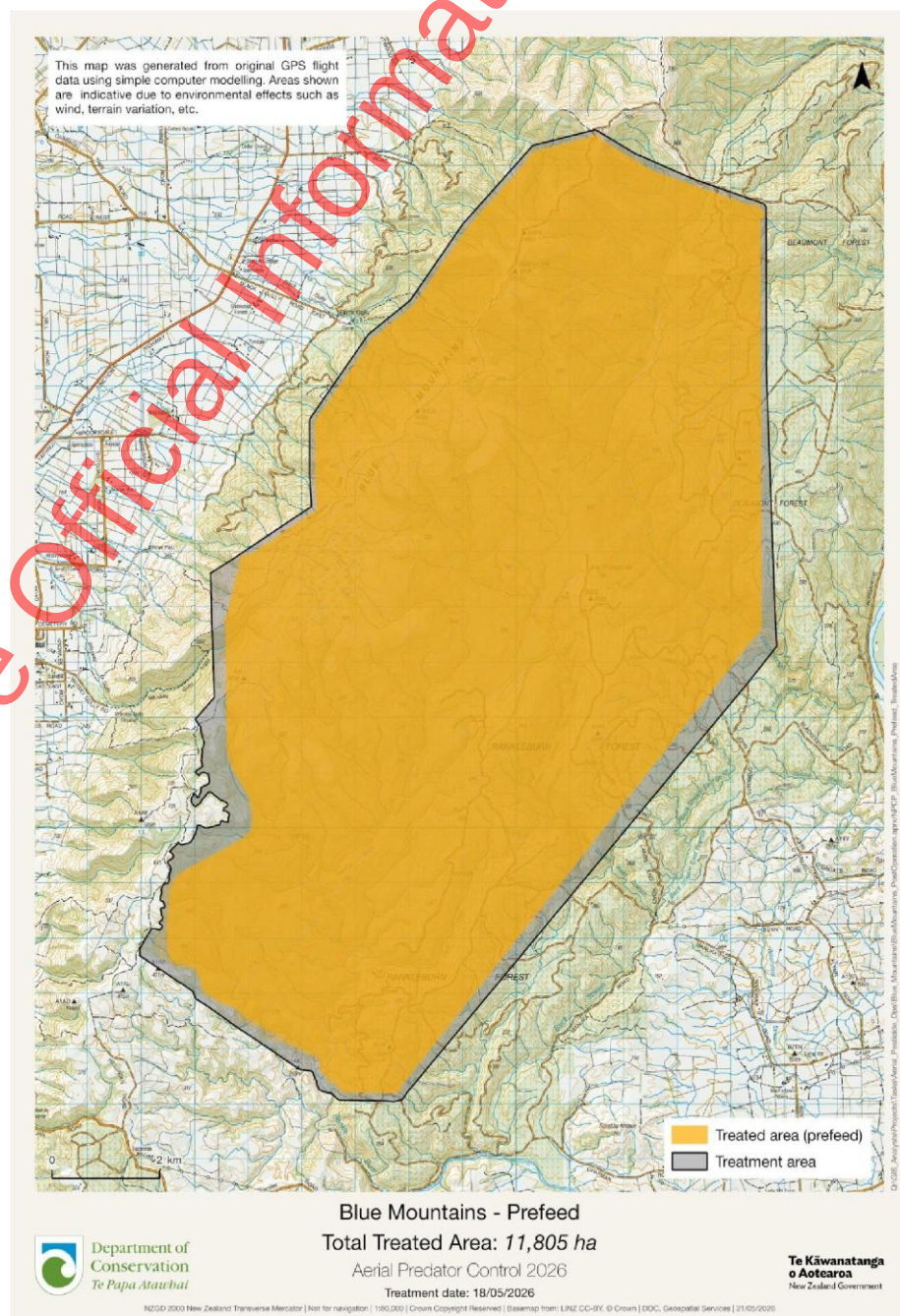
DO NOT EAT animals from this area or within the buffer zone outside the treatment boundary. The buffer zone is 2 km for deer and pigs, 200 m for rabbits, and 1 km for hares and possums.

Poison baits or carcasses are DEADLY to DOGS

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

If you suspect poisoning, please contact:

- Your local doctor or hospital OR The National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 OR dial 111
- Seek veterinary advice for suspected poisoning of domestic animals.



For more information

Please contact: Operational planner DOC Invercargill/Murihiku office, PO Box 743, Invercargill, 9810. Phone: 0800 275 362. Email: NPCPsouthland@doc.govt.nz

Visit the DOC website: More information about DOC's National Predator Control Programme is available on our website www.doc.govt.nz/our-work/national-predator-control-programme

You can also see **operational updates and detailed maps** of predator control on public conservation land on the DOC website. www.doc.govt.nz/nature/pests-and-threats/pesticidesummaries