

Molesworth

Bovine TB Control

Operation



Removing TB from Molesworth's wildlife

What is planned

OSPRI is planning an aerial possum control operation on Molesworth Station during winter 2021 as part of a wider plan to eradicate TB from Molesworth cattle by 2026. This region has an extensive history of bovine-TB infection in both livestock and wildlife. In recent years control efforts have been delayed due to several factors including further research into control methodology, impact on recreational hunting, and COVID-19 restrictions. Aerial control over a large area and short timeframe is the key to effectively reducing possum numbers to a level where TB cannot be

sustained in the wildlife population. This approach also minimises the risk of re-invasion by infected possums.

Bush Gully, Tarndale, Saxton and Severn trial areas are to be aerially treated with biodegradable sodium fluoroacetate (1080) in May-June 2021. The combined operation covers a total area of approximately 81,400 ha and will begin with aerial application of coloured non-toxic pre-feed. One to two weeks later, toxic green cereal pellets will be applied by helicopter at a rate of two kilograms per hectare. Six gram pellets will be used rather than the standard 12g to facilitate more rapid breakdown of bait. Each pellet contains a small proportion (0.15 percent) of 1080. Deer repellent will be used in both the pre-feed and the toxic bait.

Reducing deer by-kill during Molesworth possum control

Deer on Molesworth

Deer are not the target of this operation, but deer deaths are anticipated even with the use of deer repellent on all bait.

The last Molesworth aerial operation, in Acheron East in 2017, resulted in up to 90% non-target deer by-kill. Several factors contributed to the high number of deaths including the long dry period post drop, operational timing, and the use of non-deer repellent bait.

Continued over page...



Mitigating impact on deer

Following Acheron East (2017), aerial possum control operations were put on hold until research could be undertaken on a new deer repellent.

New deer repellent baits suitable for this operation are now available to OSPRI and will be used across the entire treatment area to support better deer population survival rates and reduce by-kill.

The 2021 operation will take place across May-June, coordinating with both the farming operations and favourable weather; rain and snowfall to facilitate rapid detoxification of baits.

Pre and post monitoring of the deer population will be undertaken as part of the wider research into population recovery on Molesworth.

What hunters can do

There are no restrictions on hunting before the operation; any access and hunting permits should be obtained via DOC and Molesworth Station.

Once the toxic bait has been applied, do not remove deer from the area (including the buffer zone) until the caution period has ended. This is determined by the speed of breakdown of the bait and possum carcasses. Hunters will need to refer to the NZ Food Safety authority (NZFSA) requirements for hunting wild and game estate animals, and be aware of the pesticide status of the area they are hunting in.

Do not bring dogs into the treatment area until after the caution period has ended. Dogs are particularly susceptible

to poisoning by 1080. When dogs come into contact with 1080 through ingesting baits or scavenging poisoned carcasses, the outcome is usually fatal. Most reported dog deaths occur after eating poisoned carcasses, not bait.

What to expect from the operation

The operation will begin with the distribution of non-toxic, tan-coloured cereal pellets by helicopter. This “pre-feed” gives possums a taste for the pellets and overcomes bait shyness.

One to two weeks later (dependant on weather), toxic, green cereal pellets are applied by helicopter. Research has shown that the home ranges of possums in high country terrain are larger than the ranges of forest dwelling possums.

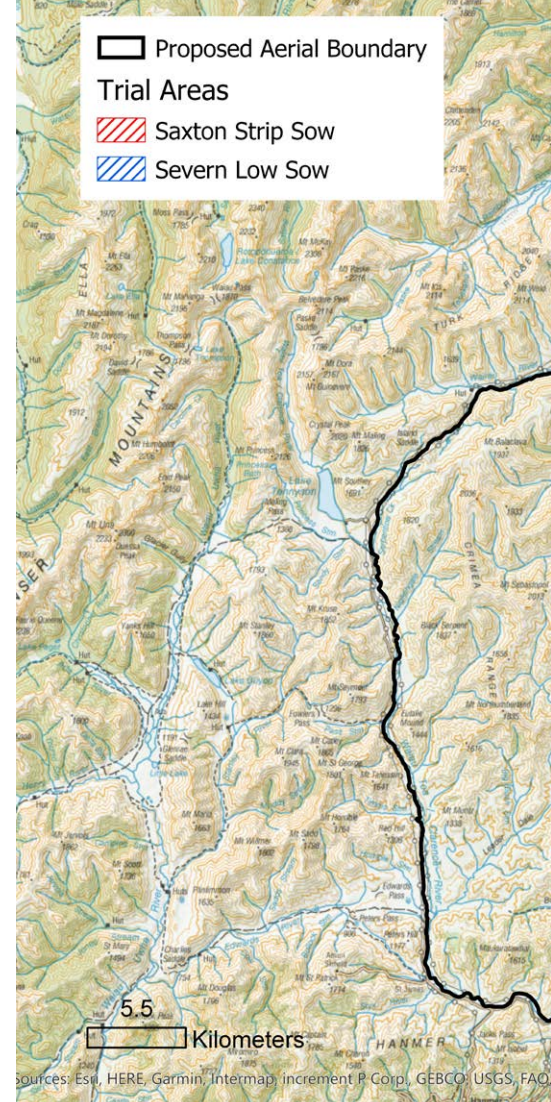
Possums that forage wider areas are more likely to encounter and consume a lethal dose of bait even with reduced application (lower density).

Based on this research, OSPRI will be trialing two alternative methods of toxic bait application across the Severn and Saxton blocks.

Bush Gully and Tarndale – toxic bait will be applied by helicopter at a rate of two kilograms per hectare. That’s about six baits in an area the size of a tennis court.

Severn Trial Area – Will be treated with 50% less toxic bait (1kg per/ha). Standard broadcast methods will be used meaning complete coverage will be achieved.

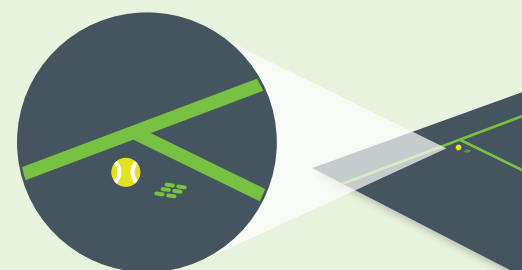
Saxton Trial Area – Will be treated with 75% less toxic bait (0.5kg per/ha) and the application method will be different. Bait will be applied at 2kg/ha in strips



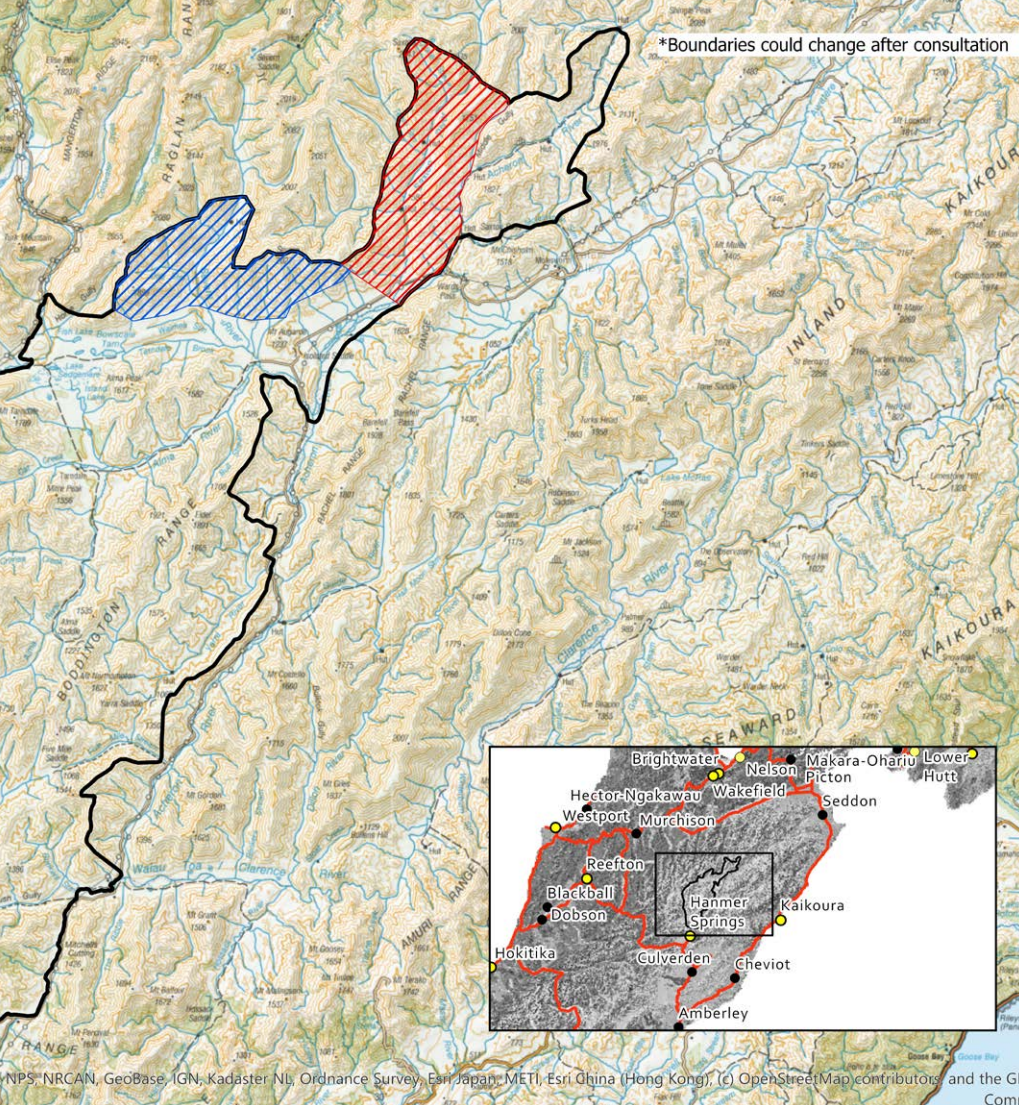
Minimal amounts of 1080 in bait

99.85%
cereal + repellent

6 gram pellet



*Illustration only. Not to scale.



Sodium fluoroacetate bait pellets

Each pellet contains a small proportion (0.15 percent) of biodegradable sodium fluoroacetate (also known as 1080). Biodegradable 1080 means it is broken down by micro-organisms in water and soil into harmless elements. It does not leave permanent residues in water, soil, plants, or animals. The operation will be subject to strict safety, quality-assurance and monitoring requirements. Advanced GPS navigational equipment will be used to ensure the pellets are accurately placed and exclusion zones avoided.

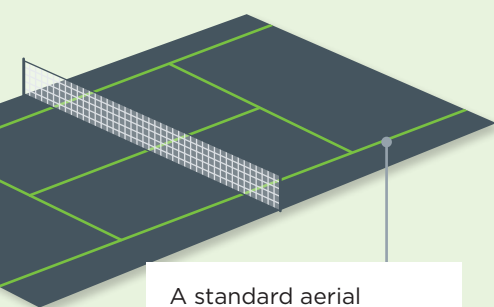
What happens now

This operation is planned for May 2021. A contractor, Vector Free Marlborough Limited, will be delivering the operation on behalf of OSPRI's TBfree Programme. Before the operation, affected landowners and occupiers will be visited by the contractor. They will discuss boundary concerns, water supply safety and the management of any risks to dogs and livestock.

Statutory permissions from the Department of Conservation and the Nelson Marlborough Public Health are required for the operation. Affected landowners and occupiers as well as interested parties will be contacted again before the operation starts. Notices will be published in local newspapers and warning signs will be placed at all likely access points to the operational area.

0.15% of pellet contains biodegradable 1080

of 30m width, with a non-treated gap of 100m between strips. To monitor treatment efficacy, radio collaring of possums and deer is planned within the treatment areas. If you see an animal with a collar, please refrain from hunting, touching or moving the animal as this will distort data collection.



A standard aerial operation uses about 8-12 baits in an area the size of a tennis court.*



Important information

Warning signs will be placed at all main access points to the operational area and everyone must follow the cautions on the signs. There's no health risk when using this area as long you follow these instructions:

Do not handle any bait or allow children to wander unsupervised. Cereal baits containing 1080 are dyed green.

Do not hunt or take game from within a two kilometre radius of the operational area for human or pet consumption. It's an offence to sell meat products that have been

exposed to 1080. Hunting can resume approximately four months following the control work.

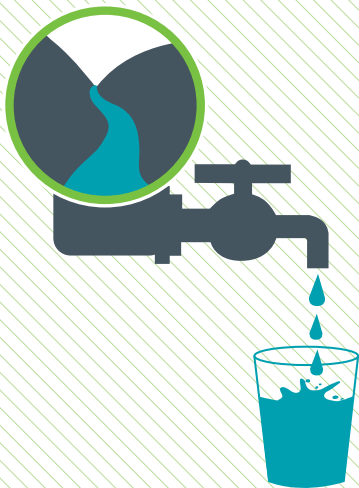
Please observe these rules whenever you see warning signs about the pesticide. Warning signs indicate that pesticide residues may still be present in the baits or carcasses. When the signs are officially removed, you can resume normal activities in the area.



Please note that dogs are prohibited on Molesworth Station.

Dogs are particularly susceptible to 1080. They must not be allowed access to bait or poisoned carcasses which remain toxic to dogs until they have fully decomposed.

Dogs must not be brought into treatment areas until the warning signs have been officially removed.



Drinking water recommendations

While toxin application takes place, and for 72 hours afterward, avoid taking water for drinking and cooking purposes from streams, lakes and tarns.

Where provided at huts and campsites, use alternative water supplies or bring in your own supply.

Local health authorities apply strict conditions to aerial operations so that public drinking water supplies are not contaminated, and testing of public supply is undertaken.



What to do if you suspect poisoning

Contact your local hospital or doctor, or **dial 111**

National Poisons Centre
0800 POISON (764 766)

If a domestic animal is poisoned, contact a local veterinarian.



Further information

Because of public interest in this operation, there is a special interest page on the OSPRI website: ospri.co.nz/molesworth

OSPRI Christchurch Office

PO Box 8674, Riccarton,
Christchurch 8440

P 03 363 3090

E vectornsi@ospri.org.nz

W ospri.co.nz

Contractor

Vector Free Marlborough Ltd

P Free phone 0508 548008

E communications@vectorfree.co.nz

W vectorfree.co.nz

For more information on controlling bovine TB and how and why 1080 is used in New Zealand, visit 1080facts.co.nz

For guidance on recreational hunting see our factsheet 'TB Information for Hunters' at ospri.co.nz

For guidance on commercial hunting see the Ministry for Primary Industries and Department of Conservation websites.