Protecting *Pittosporum*patulum and Beech Mistletoe with possum control in the Öhau Forests

The Department of Conservation's Te Manahuna/Twizel office plans to reduce possum numbers over 17,200 hectares in the Ōhau Forests Area. See attached map.

Why we are controlling Possums

The Ōhau Forests within the Ruataniwha Conservation Park represent some of the best dry east-coast beech forest in New Zealand. Unfortunately, possums have caused severe damage within the forests since they invaded the area in the late 1970s.

Possums cause damage because they target specific plant species they prefer. Without control, possums progressively eat out their favourite plants, leaving a much less diverse ecosystem.

Possums within the forest have targeted a native plant called *Pittosporum patulum*, also known as 'Pit pat'. This plant was ranked as 'nationally endangered' according to the *Conservation Status of New Zealand's indigenous vascular plants* (de Lange et al 2023). The Ōhau Forests contain the last remaining intact population in the country. Without ongoing possum control this intact plant colony could face extinction.



(Photo: Rod Morris)

Possums also like beech mistletoes. The Ōhau Forests contain some of New Zealand's best remaining populations of beech mistletoe. There are three different species of beech mistletoes here – *Peraxilla colensoi, Peraxilla tetrapetala* and *Alepis flavida*, which are often referred to as red, scarlet, and yellow mistletoe. This is considered unusual. *Peraxilla tetrapetala* and *Alepis flavida* are ranked as 'at risk – declining,' while *Peraxilla colensoi* is ranked as 'declining' according to the *Conservation Status of New Zealand's Indigenous Vascular Plants* (de Lange et al 2023).



Populations of both *Pittosporum patulum* and the different beech mistletoes have shown significant recovery from possum browse in many of the areas where possums have been controlled within the Ōhau Forests. This recovery is evident in the results of the monitoring undertaken annually between 2002 and 2008, and again in 2010, 2012, 2014 and 2022-23. Continued possum control is needed to further protect these populations and other possum-susceptible species and values within the area.



Monitoring defoliated sub-adult Pit-pat in South Temple (Nick Head).

How it is happening

Possum control work has been undertaken and is planned to continue in the Temple, Huxley, Hopkins and Dobson River Valleys. Collectively known as the Ōhau Forests, within the Ruataniwha Conservation Park, the operational area has a total size of 17,200 hectares.

The proposed consent includes ground-based control operation methods only. No aerial control work will be undertaken under this consent.

Because of the topography and land use within the area, a variety of toxin and trapping methods will continue to be used:

- (1) Feratox cyanide: This is a small cyanide pellet which contains enough poison to kill one possum. The small pellet is encased either in a 2-cm square pre-feed cube or in paste, both dyed green. Feratox baits will be placed on trees in bait stations and in blue-paper bait bags. All containers will be labelled to identify they are carrying toxins.
- (2) Kill traps: kill traps are currently being used in the North and South Temple Streams, as well as in the Huxley and Hopkins Valleys. Their episodic use is seen as an effective way to avoid possum populations acquiring poison aversion. They also provide a good source of monitoring data as to population levels. These traps kill the possum outright and do not require checking each day unlike the traditional leg-hold trap. The kill traps are attached to trees and set approximately 0.75 m above the ground. The traps are closed during the winter months except those of the lower Hopkins True Left trap line to avoid the threat they pose to any kea and kaka within the area, as these birds appear more likely to venture into the beech forest during colder periods.

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Dobson Valley: Patch poisoning, using Feratox in bait bags where remnant high possum populations cluster. Specific focus will be on protecting the 'critical site' of mature *Pittosporum patulum* at the valley head.

Hopkins Valley: Kill trap operations and patch poisoning will occur using Feratox in bait bags where remnant high possum populations cluster. Feratox baits could also be laid in bait stations along the bush margin.

Huxley Valley: As well as kill trap operations, Feratox will be placed in bait stations along the bush margins and in bait bags to patch poison where remnant, high possum populations cluster. Specific focus has and will continue to be on protecting the 'critical site' of mature *Pittosporum patulum* in the main Huxley Valley.

North and South Temple Valleys: As well as kill trap operations, patch poisoning will occur using Feratox in bait bags where remnant high possum populations cluster. Specific focus has and will continue to be on protecting the 'critical sites' of mature *Pittosporum patulum* at the head of the South Temple Valley.



Mistletoe flowers in Ohau Forest (Mark Beardsley)

Timeframe

The current Ōhau Forests consent expires in August 2025. The Te Manahuna Office is seeking a new consent to continue possum operations until the winter of 2030. DOC will continue to contact all neighbours and place 'warning' signs immediately prior to starting any operation.

Important information

The pesticides used in these operations are poisonous to humans and domestic animals. Dogs in particular can be susceptible. Poisoning can occur through eating baits or poisoned animals.

Rain leaches all the pesticides that are used. All baits break down in the soil to harmless by-products; however, all baits should be treated as poisonous.

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While the risk to dogs from Feratox cyanide pesticide remains present, DOC suggests you do not bring your dog into the Ōhau Forests or keep it under close control.

Risks can be eliminated by following these simple rules:

- > Do not touch any bait.
- > Watch children at all times.
- > Do not bring dogs into this area.
- > Do not touch bait stations.
- > Do not touch kill traps.

Observe these rules whenever you see 'Warning' signs about pesticides or traps. Warning signs indicate that pesticide residues may still be present in baits or animals. When signs are removed, this means that you can resume normal activities in the area. If in doubt, check with DOC.

Operational planning

The use of these pesticides requires the consent of the Medical Officer of Health (MOH).

DOC also has an internal consent approval process to ensure the operation is meeting our standards for pesticide use.

Both consents entail a detailed assessment of the public and environmental risks involved in using these pesticides in the Ōhau Forests. Before any approval can be granted, a satisfactory means to manage the risk must be shown.

Both consenting authorities will impose conditions on the operation to further safeguard the public and the environment.

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If you suspect poisoning

- Seek medical attention from your local doctor or hospital
- Contact the National Poisons Centre: 0800 764 766 (urgent calls) or 03 479 7248 (non-urgent and general enquiries), for advice.
- In an emergency dial 111.

For more information

Please contact:

Department of Conservation

Te Manahuna/ Twizel Office

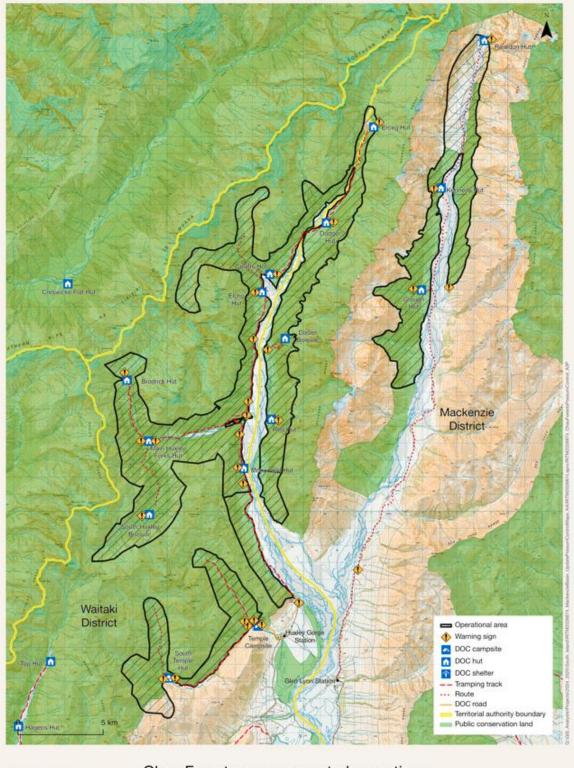
Wairepo Road

Twizel 7901

Ph: 0800 275 362

Email: twizel@doc.govt.nz

Map of area where pest control will take place





Ohau Forests possum control operations (Temple, Hopkins, Huxley and Dobson Valleys) 2025-2030

Te Kāwanatanga o Aotearoa

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