

# Possum, Rat and Stoat Removal Research

A programme of work is underway in a 12,000 hectare block within the Perth Valley (South Westland) to test and refine an approach to completely remove possums from large areas, and prevent them from re-establishing. The work will also seek to develop this predator management approach for ship rats and stoats.

If successful, the approach will have significant beneficial outcomes for native plants and animals. It could also negate the need for the repeated use of landscape-scale aerial 1080 to control these predators here and elsewhere in New Zealand, and help pave the way for a predator-free New Zealand.

*This work is a collaboration between Zero Invasive Predators Ltd (ZIP), the Department of Conservation (DOC), and Predator Free 2050 Ltd.*

The indicative boundaries of the research area are shown on the map below. The approach being developed has three main parts:

1. Reinforcing natural barriers to the movement of predators into the block (e.g. rivers, alpine tops) with a network of traps.
2. Completely removing predators within the block. This approach uses a more rigorous method of applying aerial 1080 than standard operations. The operation is scheduled for winter 2018.

*Approval by DOC and the Medical Officer of Health will be obtained before the 1080 treatment is undertaken.*

3. Detecting predators that either survive the 1080 treatment or invade the block from beyond its boundaries, and removing them before they can establish a population.

The work programme will be evident through:

1. The presence of ZIP field staff. Staff will be regularly flown into the site.
2. The installation of traps, as well as detection devices such as chew cards and motion-sensor cameras.
3. The installation of satellite communication facilities at huts and some temporary routes and accommodation, for ZIP and DOC staff.
4. The installation of predator gates on swing-bridges.

Please do not interfere with the equipment or any trapped animals because doing so will compromise the learnings.

Possum eating bird egg (Ngā Manu Images)

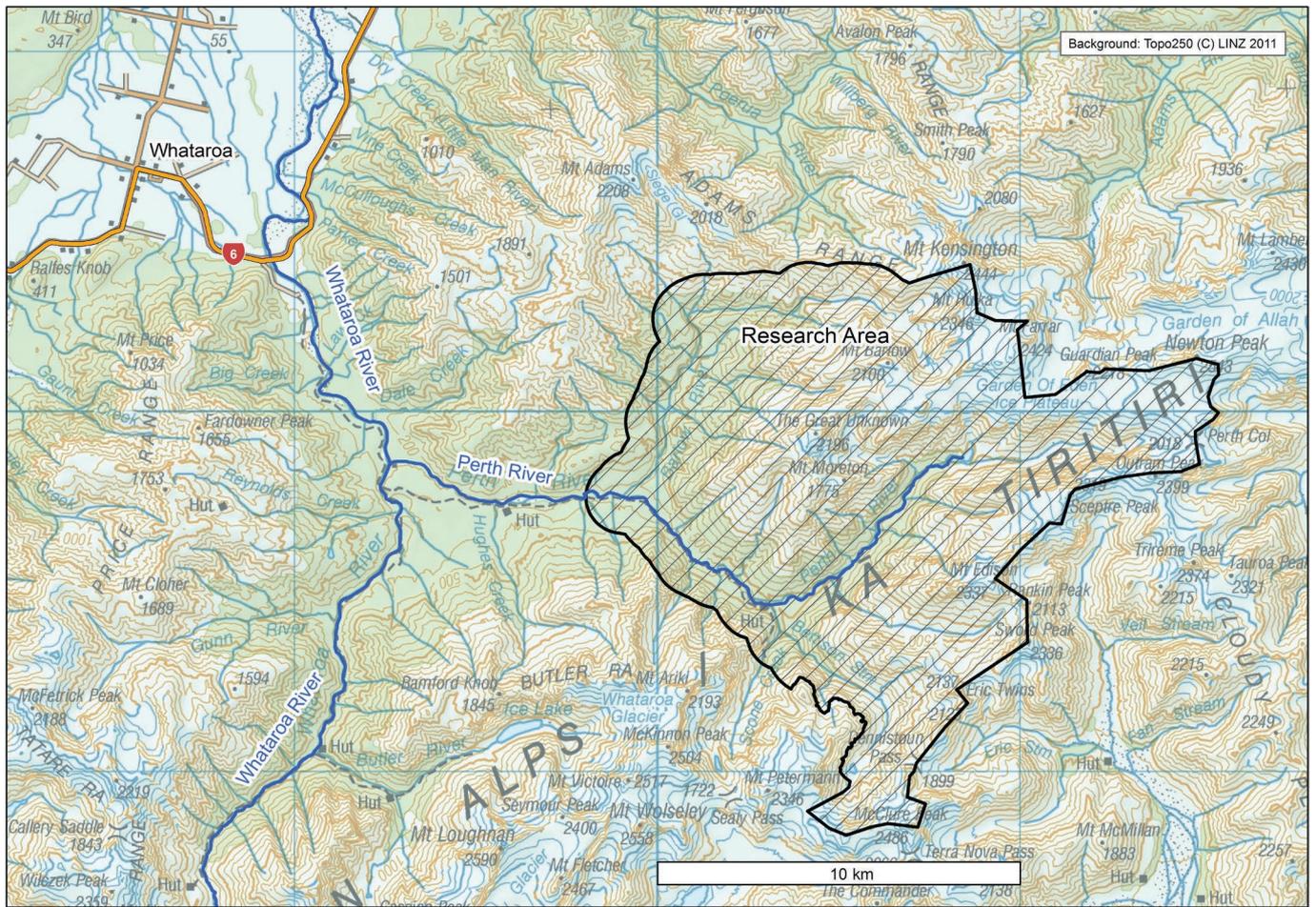


Possum browse on rata



Healthy rata in flower (DOC)





ZIP and DOC staff are liaising with iwi, local people and other users of the valley (particularly hunters) to identify any impacts of the research programme of work on them, and discuss options to reduce any impacts.

Staff are also identifying options to minimise any potential impacts of the work programme on native species including kea, which can be vulnerable to the use of 1080 bait and come to harm as a result of interfering with leg-hold traps.

Possums are the initial focus of this work because: (i) they are known to prey on native bird species, and their eggs, including kereru and kea, as well as invertebrates such as wētā; (ii) they are the major cause of the decline of trees such as kāmahī and rātā; and (iii) the results of similar research at smaller sites suggest it is likely that the approach described will be successful.

The Perth Valley was selected for this research because: (i) ZIP already had existing working relationships with local DOC staff; (ii) the rivers and streams and alpine tops are expected to be strong natural barriers; (iii) the area contains valued biodiversity; and (iv) the control area is relatively accessible (by helicopter) from a road end.

**To learn more about ZIP's work, and to receive updates about this project, please visit [zip.org.nz](http://zip.org.nz)**

**Contact ZIP's Duncan Kay on 021 069 0167**

