

Wasp control in the Nelson Lakes district

The Department of Conservation (DOC) is planning to use targeted wasp baiting methods to reduce wasps on public conservation land in the Nelson Lakes district in January /February 2022.

Why should we control wasps?

Vespid wasps/wāpi (Figure 1) are now one of the most damaging insect pests in New Zealand's natural areas and their numbers seem to be increasing. Introduced wasps threaten our native birds – particularly in honeydew beech forests where they kill chicks as they emerge from their eggs and take honeydew, which is a valuable energy source for birds such as kākā, tūī, and korimako (bellbird).

High densities of wasps exert intense predation pressure on native invertebrates, in particular native caterpillars and orb web spiders. Wasps could contribute to the decline of threatened insect species and affect the ecosystem function through removal of insect pollinators and prey sources for other species.

Wasps attack honeybees, raid their hives and rob their honey. Other effects include lost honey production, the cost of replacement bees and higher pollination costs for horticulture.

Wasps pose a significant threat to human health – over 1300 people each year seek medical treatment for wasp stings and many wasp stings are unreported.



Figure 1: Common wasp, *Vespula vulgaris*

Why is DOC doing this work?

A key role for DOC is to conserve New Zealand's natural ecosystems to ensure they are healthy, functioning and provide a safe place for public recreation.



How will DOC control wasps?

The Department will use a toxic wasp baiting method which exploits the social structure of a wasp colony. Vespex is a protein (chicken meat) bait, containing the insecticide fipronil which is placed in bait stations. The protein bait ensures that it is targeting wasps and will not attract bees but is only effective at times of the year when wasps are feeding on protein.

Bait stations are yellow or orange (Figure 2) and are placed 1.5 metres above the ground to avoid interactions with non-target species, such as weka. Worker wasps collect the bait from stations and return with it to their nest. They feed it to the queen and the developing larvae, therefore poisoning the entire colony within a short time. The bait stations are filled once during the summer and all remaining bait is removed after three to seven days.

This method has been trialled under strict conditions in Nelson Lakes National Park and proven to reduce wasp populations and cause little adverse effects to other species.



Figure 2: Bait stations containing Vespex wasp bait

Timeframe

To maximise the benefit to conservation, the bait will be applied when the wasps are known to be feeding on protein and the weather is suitable – fine and preferably sunny to ensure wasps are active. Bait

will be applied by DOC between mid-January to the end of February 2022.

What areas will be targeted?

The Rotoiti Nature Recovery Project (RNRP) Mainland Island covers approximately 5000 ha of public conservation land on the western slopes of the St Arnaud Range in Nelson Lakes National Park and in Big Bush Conservation Area. Wasp control will be carried out over approximately 1600 ha of the RNRP for biodiversity protection purposes.

In addition, wasp control will be undertaken in the St Arnaud village and at key recreation sites and popular tramping tracks in Nelson Lakes National Park and around Murchison for public safety purposes.

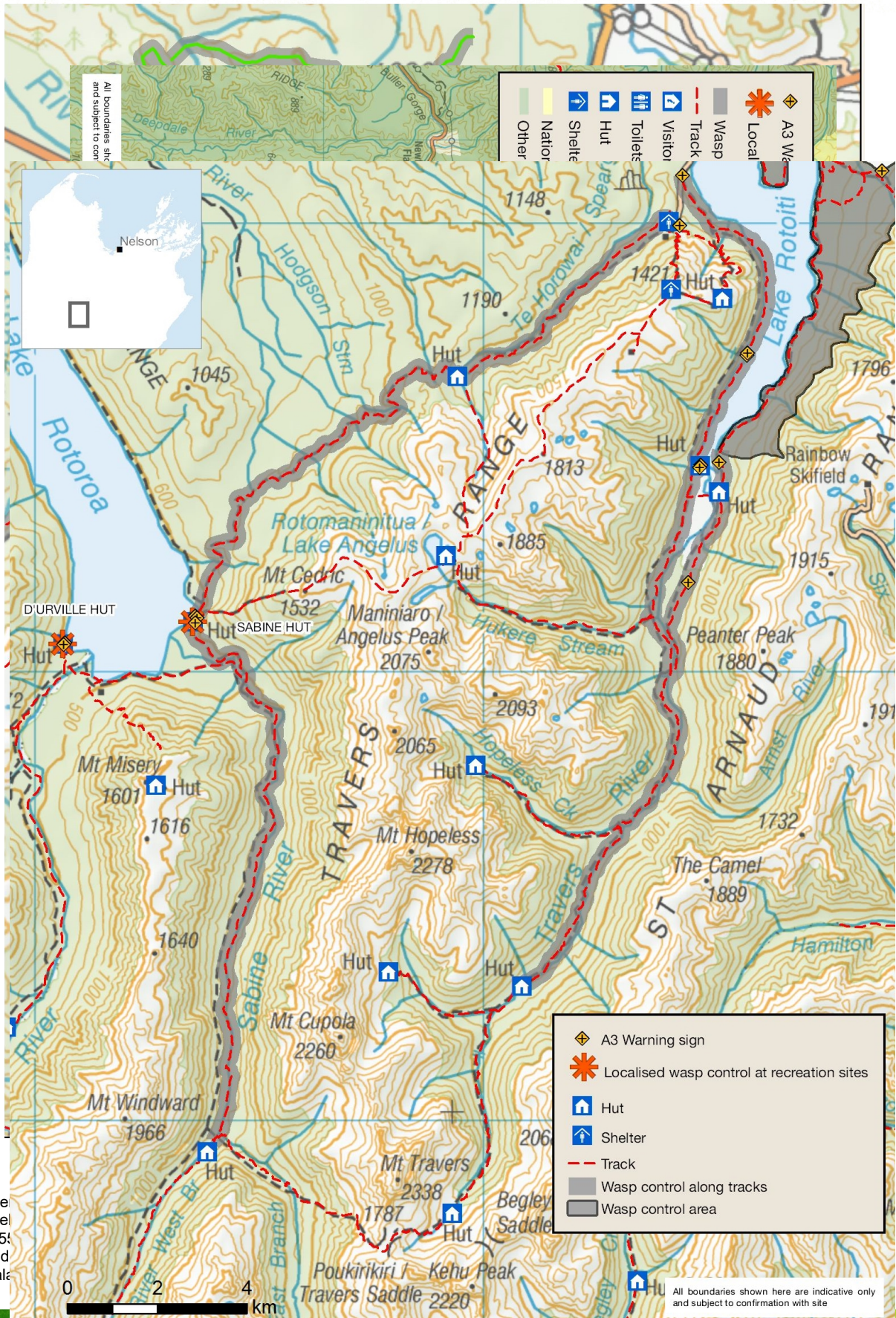
See attached maps for the areas to be treated in this operation.

What safety measures are there?

DOC will be working closely with the manufacturer of the toxic bait to ensure that the control operation is managed rigorously, applying the best practice and procedures developed at Nelson Lakes National Park. This includes the practice of removing the bait that the wasps have not eaten, using a monitoring programme to ensure bait is applied at the correct time and the overall success of the wasp control.

If you have any questions or require further information about the operation, please contact:

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All boundaries shown here are indicative only and subject to confirmation with site



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◆ A3 Warning sign
 ☆ Localised wasp control at recreation sites
 🏠 Hut
 🏠 Shelter
 - - - Track
 🌫️ Wasp control along tracks
 🌫️ Wasp control area

All boundaries shown here are indicative only and subject to confirmation with site

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