



# Honeybees and 1080 – information for beekeepers

The use of sodium fluoroacetate (1080) cereal bait pellets to control introduced predators in New Zealand presents a very low risk to honeybees and honey products.

This factsheet can be used to help inform beekeepers when the Department of Conservation (DOC) is planning to aerially distribute 1080 bait.

Beekeepers and landowners are encouraged to carefully read the following information and to seek further guidance or support if needed.

## Research summary

Where there is sufficient food available, honeybees from healthy, unstressed hives are unlikely to be attracted to 1080 bait pellets.<sup>1</sup>

While it is very rare, under certain conditions honeybees might show an interest in 1080 bait. If honeybees are foraging for protein when there is a lack of pollen in the environment and poor weather, they may be attracted to 1080 bait and this can be fatal for them.

If honeybees are observed foraging 1080 bait in this way, there is still a very low risk of contaminating honey in hives. This is because any 1080 residue stored in the hives would be in the brood frames, and beekeepers avoid harvesting from brood frames.

Honeybees are only likely to encounter large quantities of 1080 bait while it is concentrated in one location (e.g. a loading site), rather than after individual pellets are distributed over a wide area.

The green dye used in bait pellets helps indicate whether honeybees have foraged on bait and deposited it in a hive. If a green colouration is observed in some cells, or if it was suspected that bees from a particular apiary had been foraging on toxic bait, this should be

1. Howlett BG, Evans LJ, McBrydie HM, Goodwin RM (2012) The effect of 1080 cereal bait or dust on bees, hives and bee products. Report SPTS No. 6589, prepared by Plant and Food Research, 31 pages.

## Research summary (continued)

reported to the Ministry of Primary Industries (MPI) who would determine whether to test the hive for residual toxic agents.

The potential for foraging honeybees to encounter dust from 1080 operations has also been researched.

The study did not find 1080 in samples of bees, pollen and nectar from hives that were deliberately placed within the boundary of an aerial predator control operation.

There were no detectable 1080 particles or residues on gorse and tamingi flowers, which were the main source of forage for bees in the area.

More information from Plant and Food Research on field trials with bees and 1080 can be found on the OSPRI website: [www.ospri.co.nz/assets/ResourcePDFs/TBfree-1080-and-bees.pdf](http://www.ospri.co.nz/assets/ResourcePDFs/TBfree-1080-and-bees.pdf)

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## Working together to help keep honeybees safe

DOC takes the following steps to help keep honeybees safe.

- ▶ We consult with landowners, occupiers and concessionaires within and adjacent to the operational area and bait loading site before a 1080 operation takes place. We enquire about any beekeeping activity and ensure they are informed about the operation. We provide information about the research and best practices relating to honeybees and 1080.
- ▶ We take measures to further reduce the very low risk to honeybees, such as minimising the time that large quantities of bait are exposed at helicopter loading sites. We also look closely for any unusual bee behaviour during this stage of the operation.
- ▶ If honeybees are observed foraging on 1080 bait at a loading site, we will try to contact the relevant beekeeper and the operation will be immediately halted until the bee behaviour can be prevented.

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## Guidance for beekeepers and landowners

While the risk to honeybees from 1080 operations is very low, beekeepers are encouraged to assess factors such as food availability that may affect the risk to their hives. Beekeepers are also best placed to make decisions about the location of their hives in relation to operational areas.

If landowners or beekeepers have questions or concerns about an upcoming predator control operation near them, they can contact their local DOC office.

For questions relating to food safety and 1080, beekeepers can contact MPI, the food safety regulator. The MPI website has general information on the legal requirements and standards for producing and exporting honey: [www.mpi.govt.nz/food-business/honey-bee-products-processing-requirements/](http://www.mpi.govt.nz/food-business/honey-bee-products-processing-requirements/)