

German wasp

Vespula germanica

What does it look like?

The German Wasp, ranges in length from 12 – 17 mm (queens may be up to 20 mm). It is very similar to the common wasp. In these species, members of the colony cooperate in the care of the young, and the building and protection of the nest. Both species have distinctive yellow and black striped bodies and hold their legs close to their body when they fly. Both can use their sting repeatedly. They live in large nests that are usually the size of a soccer ball. German wasp nests are grey and the wasps have the capacity to maintain large nests through winter. German wasps are identified by:

- strong black markings including an arrow-shaped mark down the middle of the abdomen and black spots on either side.
- wings are long and translucent
- legs are yellow, antennae are black



Why is it a problem?

New Zealand has some of the highest densities of common and German wasps ('social' wasps) in the world. This is because their natural predators are not present here, there is an abundance of food sources, and our winters are mild. Large densities have been observed in beech forests containing honey dew.

Native wasps have never been a problem but introduced wasps are a significant pest. They

- Pose a danger to people working outdoors or who are allergic to their sting
- Reduce honeybees' productivity by raiding beehives and diminishing their food supply
- Have been known to kill newly hatched birds in their nest
- Eat native insects and honey dew, which are important food sources for many native species including kaka, tui and gecko



The German wasp is a successful invader of disturbed environments and natural ecosystems. It establishes large nests and the workers efficiently exploit food resources such as nectar and insects, which native fauna depend on. This species is difficult to control as a new colony can be established from a single inseminated female.

Control Methods

The best way to reduce a local wasp population is to find and destroy all the nests in the area. If a nest is small and you are not allergic to stings, then you can do it yourself. But, if the nest is large, contact a professional pest controller.

If you suspect or determine that you have multiple wasp nests, contact a specialist pest management firm. It is important to be aware that accidental contact or proximity with the nest will signal a threat to these wasps and they are capable of stinging numerous times.

Find and destroy a wasp nest

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1. Start by tracking wasps to their nest. It is usually within 200 metres and can be on a building, tree, or in the ground. If you search on sunny days, near dawn or dusk, the low light angles will highlight the flight path as wasps enter and leave the nest.
2. Buy an insecticide from your local garden or hardware store.
3. Carefully follow the instructions and place the insecticide at all entrances to the nest. It's safer to do this when the weather is fine and after dark when there are fewer wasps around.
4. Worker wasps will spread the powder into the nest and the colony usually dies within a day. If the nest is still active after a few days then repeat the procedure the next fine evening.

Safety Tips

- Don't shine your torch into the nest or wasps will fly up the beam toward you
- Vibration around the nest can stir up the wasps, so tread lightly
- If the entrance in the ground is covered with leaves, rake quickly, leave immediately, and return the next day to treat the nest

Trap wasps when they're out and about

If you can't find the wasps' nest then build a trap to catch them - all you need is a plastic bottle, water, sugar, and vinegar. [Make your own wasp trap](#).

Most wasps die off during winter and the queen hibernates until the spring. In October the queen starts a new nest, so early spring is the time to trap queens and stop them building new nests.

[TapTrap](#) offers some useful information about wasp traps.

NoPests' [Wasp Dome Trap](#) is an effective commercial product.

Control several nests over a large area

A meat based bait called Vespex has been developed in conjunction with the Department of Conservation (DOC) to control wasps over large areas. It is effective in environments where their food supply is scarce and at times of the year when they are eating protein. Vespex contains the insecticide fipronil and is placed in secure bait stations. Wasps eat the bait and take it back to their nests to feed (and poison) the rest of the colony.

This method and bait is especially useful when you can't find where the wasps are nesting. It is also targeted at wasps and is not attractive to bees.

Vespex is available from Nelson-based company Merchanto. All users must pass an online test and become an approved user to ensure they use it according to instructions. For information on Vespex see [DOC's website](#).

Note that Vespex may be used on public or private land, but members of the public wishing to carry out wasp control operations on public conservation land need to follow DOC's pesticide permission process.

Biocontrol

Biological control has been used to try and achieve widespread control of wasps. Since 1987, a parasitoid (called *Sphecochaga vesparum vesparum*) has been released at hundreds of sites throughout New Zealand. This parasitoid was brought from Europe where it attacks the same wasp species we have here. It lives in wasp nests, feeding on and thus destroying developing wasps.

In 2021 an application to release two biological control agents that would affect both the common and German wasps, was approved by the Environmental Protection Authority. The agents are a hoverfly (*Volucella inanis*) that lays its eggs inside the nests of *Vespula* wasps and has larvae which feed on wasp grubs, and a beetle (*Metoecus paradoxus*) whose larvae parasitise wasp grubs. These biocontrol agents are expected to negatively impact social wasp populations.

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Other trials used include the use of pathogens.

Related Links

Ministry for Primary Industries <http://apps.mpi.govt.nz/applications/nzpests-view/Article/1641/German-wasp>

GW Regional Pest Management Plan <https://www.gw.govt.nz/environment/pest-management/>

Kiwicare <https://www.kiwicare.co.nz/product/no-wasps-eliminator/>

Manaaki Whenua Landcare Research: Wasp Web <https://www.landcareresearch.co.nz/discover-our-research/biosecurity/invasive-invertebrates/vespula-wasps/>

GW Regional Parks <https://www.gw.govt.nz/parks/?activities=>

Vespex for wasp control <https://www.doc.govt.nz/nature/pests-and-threats/methods-of-control/wasp-control/>

Rules

Under Section 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute or otherwise spread any pest in a Pest Management Plan, or any unwanted organism. Not complying with Section 52 or 53 is an offence under the Act, and may result in penalties noted in Section 157(1).

An occupier within the Wellington Region shall, within 10 working days of receipt of a written direction from an authorised person, destroy all wasp nests on the property they occupy in order to remove the health and safety risk to the public.

Management Programme

Sustained Control programme