



BEEKEEPER FAQS

What should I do if I find a suspected hornet or nest?

The best defence against yellow-legged hornets is to report any suspect hornets or nests. Contact Biosecurity New Zealand as soon as you've found something. Delays can make it harder to investigate.

Photograph it and catch it, if it's safe:

- Use the online report form: <https://report.mpi.govt.nz/pest/>
- Call the exotic pest and disease hotline on **0800 80 99 66**

Where are the hornets in New Zealand?

To date (5 November 2025), four queens and their primary colonies have been found and are limited to the North Shore of Auckland (Glenfield and Birkdale areas). We believe it's unlikely they are present outside of Auckland. However, Biosecurity New Zealand is closely monitoring the situation and is encouraging people to remain vigilant and report any suspected hornet or nest sightings.

What risk will they pose to my hives? How do they damage a beehive?

Yellow-legged hornets (*Vespa velutina*) are known to cause damage to honeybee colonies in other countries. This is mainly through predation on foraging honeybees at the beehive entrance.

This 'hawking' by the hornets can eventually stop honeybees from collecting pollen and nectar, increasing the risk of starvation. Honeybees in New Zealand (*Apis mellifera*) do not have any adapted defences against hornets.

Can my hive defend itself?

Honeybees (*Apis mellifera*) are not good at defending themselves against yellow-legged hornets.

The best defence against the yellow-legged hornets is for beekeepers to report any suspected sightings to Biosecurity New Zealand.

What is Biosecurity New Zealand doing when they locate a hornet nest?

There is a widespread public awareness approach, and targeted engagement with residents on Auckland's North Shore in the area where these hornets have been found.

The best surveillance tool we have right now is for people to report any sightings of suspected hornets or hornet nests online or through our pest and disease hotline.

To support surveillance, Biosecurity New Zealand has laid traps in a measured way in areas where females have been found. We have 135 traps in the field

All known hornet nests in Auckland have been killed and collected.

Can I do anything to help my hives?

Use the online report form: <https://report.mpi.govt.nz/pest/> or all the exotic pest and disease hotline on 0800 80 99 66, or call the exotic pest and disease hotline to report any suspect hornets or nests you may see.

Are yellow-legged hornets dangerous to humans?

Only female hornets sting. Stings may induce anaphylaxis in people with allergies, similar as with allergies to bee or wasp stings. Generally, they are not aggressive unless you disturb their nest. Beekeepers are not at an increased risk of hornet stings.

What are yellow-legged hornets doing in other countries?

This hornet has recently been spreading in Asia and Europe where they have caused bee colony losses.

Do yellow-legged hornets rob honey? Or brood? Workers?

They primarily target honeybee workers. If the beehive becomes sufficiently weakened, they may enter the hive and scavenge honey and bee brood.

I want to move my hives, can I still do this?

There are no restrictions on hive movements.

Are weak hives more of a risk?

Weak beehives are at greater risk. This includes nucleus colonies and queen mating nucs. However, both strong and weak colonies can be affected because the hornets kill foraging bees at the hive entrance.

Is there anything I can do in my own apiaries?

Keep an eye out for hornets that may be visiting your hives. If you see something suspicious photograph it and catch it, if it's safe:

- Use the online report form: <https://report.mpi.govt.nz/pest/>
- Call the exotic pest and disease hotline on 0800 80 99 66

I do wasp control; can I get prepared for managing hornets?

Beekeepers perform a helpful service to the environment and public by destroying wasp nests. However, if a beekeeper finds a hornet's nest, they should **not** destroy it. Take a photo and report it online at <https://report.mpi.govt.nz/pest/>

How do I recognise them?

Hornets are much larger than honeybees and wasps (*Vespula* sp. and *Polistes* sp.). They are distinctive by their large all-round size.

A size chart is available on this pamphlet: [Look out for hornets – factsheet](#). For further information [Yellow-legged hornet sightings in Auckland in 2025 | NZ Government](#)

What do I do if I see one/a nest?

The best surveillance tool we have right now is for people to report any sightings of suspected hornets or hornet nests online or through our pest and disease hotline.

Reports can be made through report.mpi.govt.nz or by calling Biosecurity New Zealand's exotic pest and disease hotline on 0800 809 966.

Will my bee suit protect me from them?

Only female hornets sting. Their stingers are longer than a honeybee. It is unlikely that a conventional bee suit will provide sufficient protection from hornet stings.

Will this affect the export of my honey products or live bees overseas?

There is no impact on trade or export of honeybee products or live bees.

Biosecurity New Zealand surveillance system

Biosecurity New Zealand has a surveillance programme where trained inspectors examine beehives for exotic pests and diseases. We also rely on the public to play their part in biosecurity system by remaining vigilant and reporting any unusual organisms.

Hornet traps are generally used overseas for control, but there are traps available that can be used for surveillance and eradication. Biosecurity New Zealand is convening a technical advisory group of independent scientific experts with expertise in the biology, ecology, and management of social wasps. The technical advisory group would look at the current situation and consider options for ongoing work regarding the hornet.

BIOLOGY OF THE YELLOW-LEGGED HORNET

Life Cycle of *Vespa velutina*

The colony life cycle of *Vespa velutina* consists of four distinct stages: foundation (spring), worker (summer), reproductive (autumn), and intermediate (winter) (Figure 1).

Foundation Phase (Spring)

Queens wake up from winter hibernation and start building small nests (Embryo/Primary nests), often inside buildings or other sheltered places.

- **Goal:** Lay eggs that will become the first generation of workers.
- **Development:** It takes about 48 days for an egg to become a worker.

Worker Phase (Summer)

The colony grows quickly, and the predation starts. Workers take over nest duties like gathering food and defending the nest.

- **Nest Transition:** Colonies often move from the small primary nest to a larger secondary nest, usually in trees.
- **Next step:** The colony starts producing males and new queens.

Reproductive Phase (Autumn)

New queens and males are born. They leave the nest to mate.

- **After mating:** Males die, and queens look for safe places to spend the winter.
- **Colony status:** The colony starts to decline as temperatures drop.
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Intermediate Phase (Winter)

Only the fertilized queens survive. They hibernate in protected spots like tree hollows or buildings.

- **Colony:** The old queen and all workers die due to cold and lack of food.
- **Ready for spring:** These queens will start new colonies when spring returns.

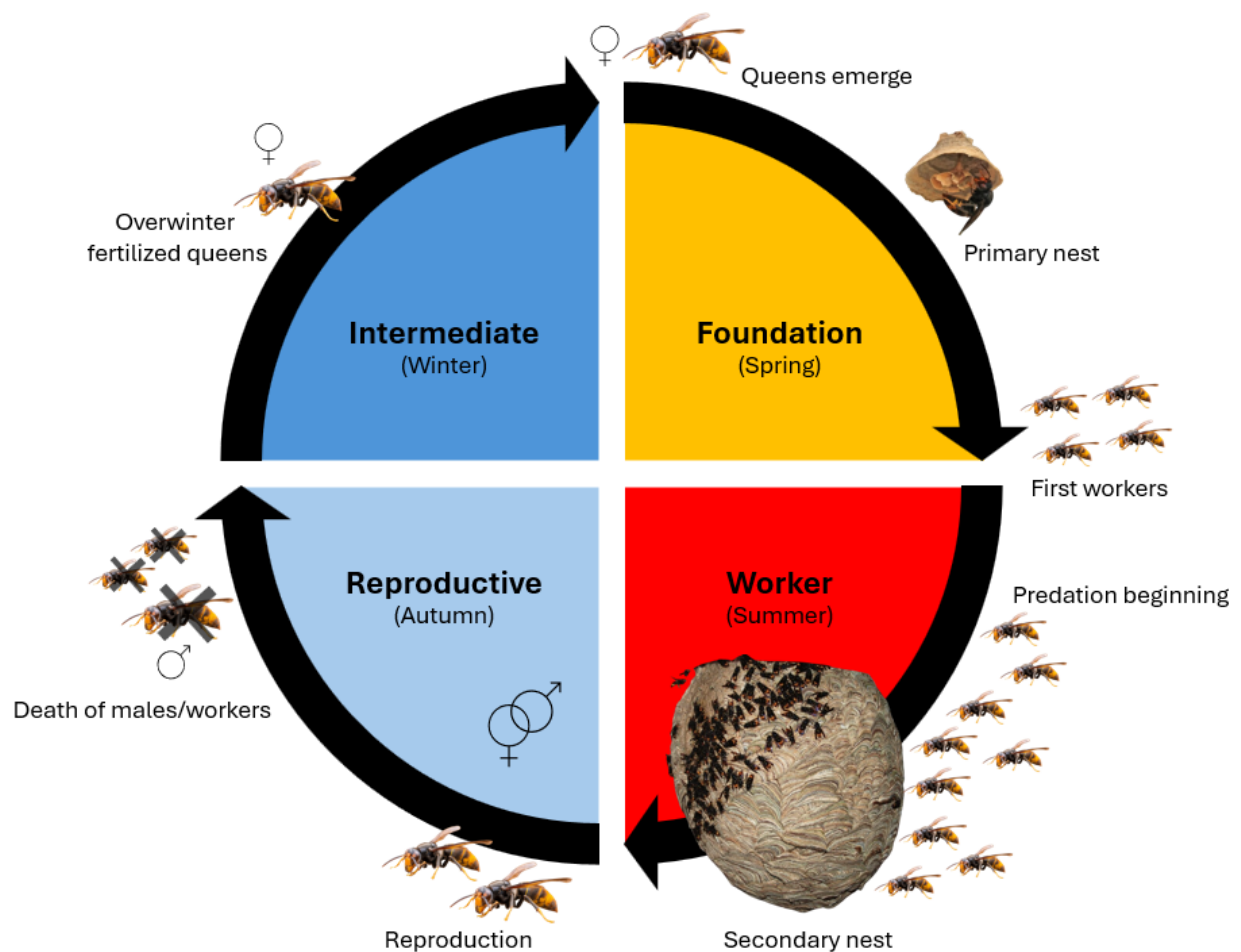


Figure 1. Life cycle of *Vespa velutina* (PHEL Entomology)

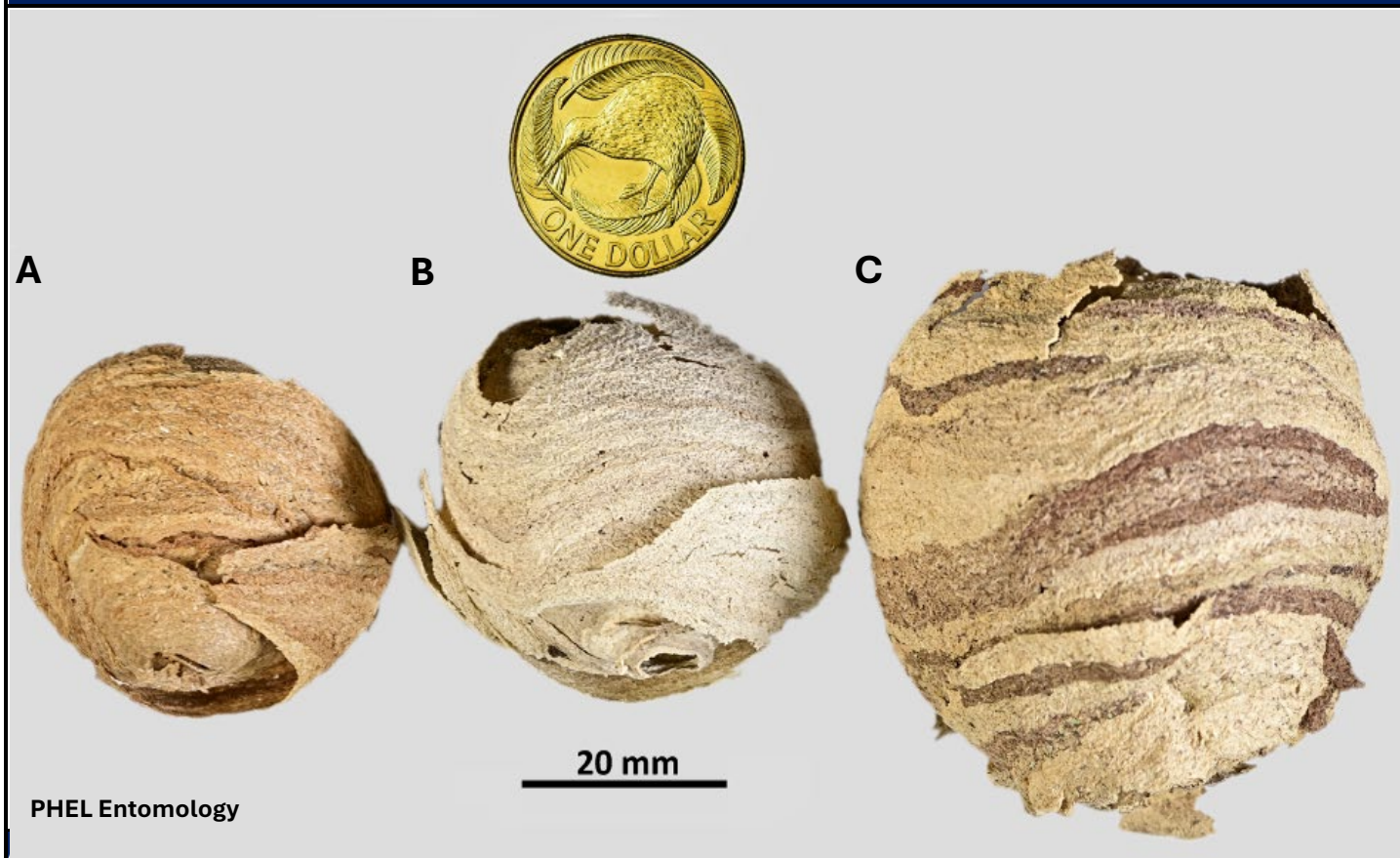
Nests

In spring, a single queen builds a small nest (Embryo nest) about **5–10 cm wide**, with one entrance at the bottom. These early nests are often sheltered in human made structures (Figure 2). As the colony grows, workers expand this nest into a larger, irregular primary nest, reaching up to 15 cm, about the size of a grapefruit.



Figure 2. Embryo nest of *Vespa velutina*, showing its characteristic spherical shape and basal entrance opening (Source: Porporato et al. 2014).

EMBRYO NEST



Common Wasp (Local)

Vespula vulgaris

German Wasp (Local)

Vespula germanica

Yellow legged hornet (Exotic)

Vespa velutina

Size: Similar to a ping pong ball.

Where to find them:

These small nests are often in enclosed spaces, such as: Inside sheds or under roofs / Between gaps or cavities in fences / Wall cavities or other sheltered man-made structures.

Size: About 5–10 cm in diameter.

Where to find them:

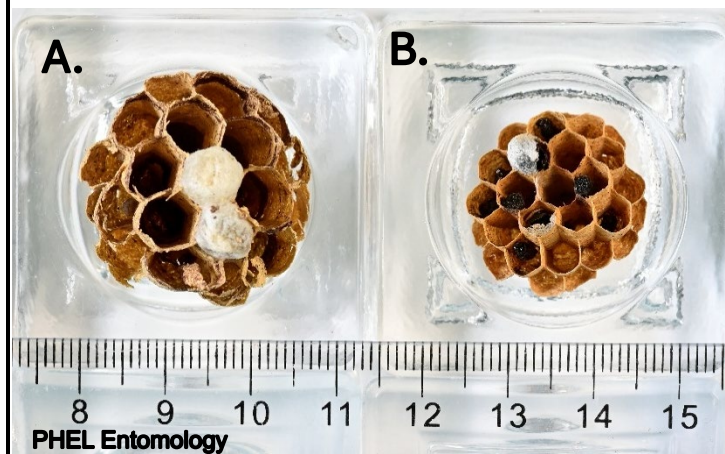
Nests can be found in sheltered environment; most of the times in human made structures. As the colony develops, workers expand the nest into a larger, irregular primary nest, up to 15 cm wide, about the size of a grapefruit.

SECONDARY NEST



A Common Wasp (Local) <i>Vespula vulgaris</i>	B German Wasp (Local) <i>Vespula germanica</i>	C Yellow legged hornet (Exotic) <i>Vespa velutina</i>
Nest locations: Nests are often found in enclosed spaces, such as inside sheds or under roofs, between fence cavities and underground, like in soil or under tree roots. Winter Survival: Unlike hornets, some workers can survive through winter, so secondary nests may not be abandoned during colder months.		Nest locations: Usually occur on high tree. Size: Approximately 60-80 cm in height.

CELLS FROM EMBRYO NEST



While local and exotic species have similar looking cells, *Vespa velutina* cells are generally slightly larger.

A. *Vespa velutina* (Yellow-legged hornet)

B. *Vespula vulgaris* (Common wasp)