

Vespa velutina

Asian Hornet

NEST IDENTIFICATION



An tIonad Náisiúnta
Sonraí Bithéagsúlachta
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Asian hornets and other wasps produce two types of nests; embryo/primary nests and secondary nests. All wasp and hornet nests look similar. To identify a nest, it is important to watch for, and identify, visiting insects from a safe distance.

Asian hornet embryo/primary nests:

- Embryo nests are small, 5-10cm in diameter, spherical, and have a small entrance hole at the bottom.
- Built in spring by an Asian hornet queen and usually found in a protected place such as brambles, a hedgerow, or in/on a building.
- Workers from this nest expand it into an irregular structure termed a primary nest (grapefruit sized, up to 15cm) with the embryo nest at the centre.

Only report embryo/primary nests if seen with Asian hornets.

Asian hornet secondary nests:

- Pear-shaped, entrance hole halfway up the nest, up to 60cm wide x 80cm tall.
- Usually found in trees but may also be in/on buildings and hedges.
- Use binoculars to identify secondary nests from a safe distance.

Do not disturb suspected nests and retreat from any wasp/hornet nests if flying insects are observed.

Please report Asian hornet sightings immediately with a photo

Use our online recording form:

<https://records.biodiversityireland.ie/record/invasives>

For more information visit www.invasives.ie or email invasives@biodiversityireland.ie

Secondary nests

In a tree canopy in summer (left) and winter (right).



Embryo & primary nests

At this stage, all wasp and hornet nests look similar. Only report if seen with Asian hornets. Embryo nest (left), primary nest (right).



Secondary nest in a hedge.



Secondary nest in a building.



Scan to report an Asian hornet or an Asian hornet nest.

Nests and objects that look similar



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Secondary Asian hornet nests can resemble wasp nests or other objects in trees. If you suspect one, check safely with binoculars before reporting.

The best way to be sure of the identification of a nest is to have a photograph of the insect that is using the nest.

Asian hornet (*Vespa velutina*) secondary nests

- Usually found in trees, may also be in/on buildings and hedges.
- Pear-shaped.
- Entrance hole halfway up the nest.
- Up to 60cm wide x 80cm tall.
- Tree nests can be at heights of up to 40 meters.



Other objects in trees

- Crow and magpie nests.
- Witch's broom/birch besom (galls).
- Squirrel dreys.
- Bird's nest (left), witch's broom (right).



Genus *Vespula*

e.g., common wasp, German wasp, red wasp.

Secondary nests:

- Usually underground.
- Common wasp nests often found in roof spaces.
- Enclosed spaces are preferred.
- Typically much smaller.



German wasp nest



Common wasp nest

Genus *Dolichovespula*

e.g., tree wasp, Norwegian wasp.

Secondary nests:

- Can be found both in enclosed spaces and hanging in shrubs and trees.
- Typical nest heights are lower than Asian hornet nests.
- Entrances are at the bottom of the nest.
- Outside layer patterns are not swirly and scalloped like Asian hornet nests; layers have straighter edges.



Dolichovespula
wasp nests:

i European hornet (*Vespa crabro*) occurs in Britain but not on the island of Ireland. Unlike Asian hornets, secondary nests are usually in hollow trees or chimneys, not in open air. Nests are cylindrical with a wide bottom opening and smaller (30x60cm).

Who is also involved



Image credits. Tree image adapted from: Trees in a hedgerow by Marathon, CC BY-SA 2.0. Witch's broom: The British Plant Gall Society. Asian hornet embryo and secondary nest images: John de Carteret. Primary nest image: Laurino et al. (2020) *Vespa velutina*: An Alien Driver of Honey Bee Colony Losses. Diversity, 12, 5. Norwegian wasp image: Miroslav Deml. Common wasp nest: Steven Falk. Dolichovespula nests: Charlotte Salter-Townshend (Bottom), Maurice Browne (top). German wasp nest: ©JuTa/via Wikipedia - CC BY-SA 3.0.

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