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## European wasps

By Peter R. Davis, Entomologist, South Perth

European wasps are an exotic pest established in the Eastern States but not yet established in Western Australia. Every year hundreds or even thousands of fertilised European wasp queens are accidentally transported into the State in freight, boxes and containers of merchandise. Most of these queen wasps die before they can make a nest but every year some nests are produced.

European wasps are stout-bodied and bee-shaped, only slightly larger than a normal bee. They are brightly coloured with alternating bright lemon-yellow and black stripes with yellow legs. The antennae (feelers) on the head are entirely black.

European wasps fly swiftly with all their legs tucked up close to the body.

**European wasp nests** always have an outer covering and are shaped like a soccer ball but can be larger. Nests are normally underground with a single entry hole approximately 40 mm (1.5 inches) in diameter.

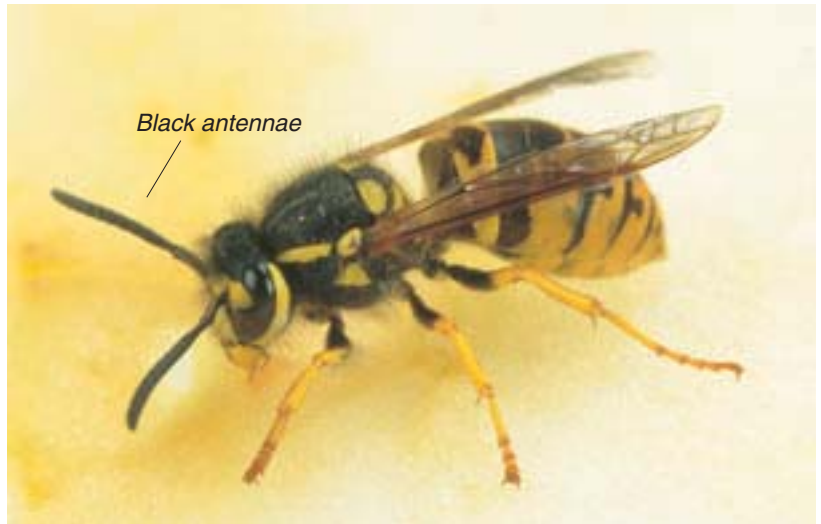


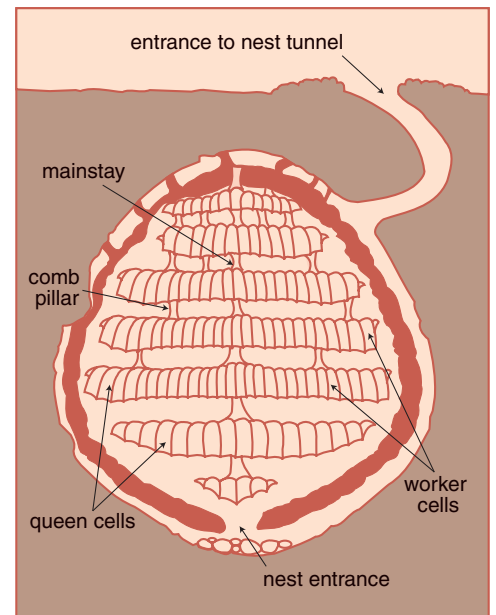
Figure 1. European Wasp

Occasionally nests are located in wall cavities, roof voids and hollow tree trunks.

European wasp nests typically contain 2,000 or more worker wasps.



Figure 2. European wasp nest with part of outer covering removed



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## What to look for

- European wasps are brightly coloured yellow and black – there are no other colours.
- They are quite squat in appearance, much like a bee, but slightly larger. They also fly like bees with their legs held close to their bodies.
- The antennae (feelers) on their heads are entirely black.
- The nests are concealed and are usually underground, but may be in a hollow tree or in a roof or wall cavity in a house.
- The multiple honey-comb layers of the nests are covered by an outer layer of papery material.
- Wasps are usually most noticeable near the entrance of their nests where streams of wasps may be seen entering and leaving an entrance hole (at least the size of a 50 cent piece if the nest is underground), especially on warm days.
- European wasps are unusual in that they feed on meat products as well as sweet foods.

## Why European wasps are pests

European wasps attack bees and bee hives, robbing the hives of honey and sometimes completely killing hives.

They also directly damage soft fruits and can cause substantial damage to grape crops.

European wasps have even been reported cutting pieces of flesh from cows' teats.

Environmentally, they are damaging through direct predation on native insects and competition with other species including birds.

Tourism is adversely affected in areas where they are plentiful because wasps are attracted to foods, drinks and BBQs in outdoor areas.

They can be a significant urban pest and the cost of having a nest destroyed by professional pest control operators is expensive – costs typically range from \$50 to \$350 per nest in the Eastern States.

European wasps can sting several times in an attack and stung victims can require medical attention. Fatalities have been caused by reactions in allergic patients and by multiple wasp attacks where nests have been disturbed.



Figure 3. European wasps feed on meat and fish

## Biology

In spring, lone mated European wasp queens search for a nest site and begin to construct a nest. The nest is made from papery material scraped from wooden objects and mixed with saliva. The queen constructs about a dozen cells and lays an egg in each cell.

When the eggs hatch into larvae she captures insects to feed the larvae until they pupate and eventually emerge as worker wasps in late spring or early summer. Once a worker population is available to gather wood fibre for nest construction and food for the queen and larvae, the queen is freed to concentrate on laying eggs and she remains in the nest.

The nest grows in both size and numbers of wasps over summer and reaches a peak in early autumn. Male wasps (drones) are then produced followed by new queens in late autumn.

The new queens and drones mate and the nests usually decline and finally die out during winter. However, the mild winters in southern Australia may not be sufficiently severe and nests can survive over winter. These overwintering nests may retain many new queens and, given the head start of not having to establish a new nest, can grow huge, containing tens of thousands of wasps.

**Any sightings of black and yellow wasps settling on pet foods, fish or other meat products should be regarded as particularly suspicious and reported immediately to your nearest Department of Agriculture office or the Pest and Disease Information Service on 9368 3666.**