



## The Wasp — a vital pollinator and pest controller: both a nuisance and a blessing

*Information from natur&emwelt on wasps in day-to-day life*

When we say wasp, we mean nine species in particular. These species carry the familiar black and yellow stripes on their backs, and they also include the hornet, one of the larger species. However, of the *Vespidae* family, we only count those species that build nests and live in a colony. All *Vespidae* can tuck in both their front two wings (they have two pairs of wings in total) while at rest. Here in Luxembourg approximately 500 wasp species are indigenous; most of them are solitary, going through life largely unobserved and unnoticed by us. The nine species we are talking about here are different from one another. The [Dolichovespula](#) (the social wasps) are peaceful and are not interested in the kind of food we humans eat. They form colonies of 100 to 500 wasp workers. The *Dolichovespula* also include the Red Wasp ([Vespula rufa](#)), a non-aggressive species that nests in the ground.

Just two of our native species are responsible for most of the problems we have with wasps: they are the “common wasp” ([Vespula vulgaris](#)), and the “[German or European wasp](#)”. Both species form colonies with between 1,000 and 10,000 workers, and build their nests mainly in dark, hollow spaces, such as mouseholes or roller shutter casings. They are the ones that tend to feed regularly on human food and carrion and can get aggressive when disturbed. Also, they can remain active until the first frosts in November.

### The life cycle of a wasp

During spring, a queen wasp finds herself a place to nest. Different species nest in different spots, ranging from dark crevasses and abandoned mouseholes to suspended nests in trees, bushes and on buildings. Starting with a single cell and a

simple covering with the first few eggs, the queen establishes the colony, searches for food and raises the larvae until the first workers hatch and can take over from the queen. Only around one in ten of the young queen wasps will be successful in establishing a colony. As the workers grow in number they expand the nest and ultimately take over the search for food, and the feeding and raising of the larvae. During summer, the colony grows and grows. The adult wasps feed on plant nectar during which, unintentionally, they make an important contribution to the plants' pollination. The larvae are fed insects, which the wasps hunt by using their poisonous sting. A hornet colony can consume some 500 mosquitoes, flies and caterpillars per day, among them many ornamental plant and crop pests. This is equivalent to the amount of food needed by five families of tits. A much bigger colony of Common or European wasps, however, needs a significantly greater amount of food. In mid-summer male wasps and young queens are raised and fly out to mate. These fertilised young queens then hibernate over the winter in order to establish their own colony the following year. The remaining males and (female) worker wasps gradually die off, and by late summer the colony is virtually extinct. Only colonies of hornets and of the two aggressive species manage to survive until the first frost.

[Hornets](#) often make a lot of noise and certainly make the biggest impression on people. This larger species of wasp is, however, not aggressive at all. According to popular myth, just three hornet stings can be fatal for a human being, yet their poison is in fact no stronger than any other wasp's. It would take more than a thousand stings to kill outright. Also, hornets are the only indigenous wasp species that flies at night. As such, they regularly get disorientated around illuminated patios and either drop dead from sheer exhaustion or are swatted by annoyed party guests.

### Dealing with wasps

Nests are usually noticed only at the height of summer, when the colonies have already reached their peak size. Depending on the species, the colony will then soon perish anyway. But even with the Common and the European wasp it is possible to live in harmony, as long as we keep a few rules in mind. Getting rid of a nest doesn't necessarily mean that you won't be paid a visit by wasps from another colony at your lunch or breakfast table.

- Avoid thrashing around in a panic.
- If a wasp has managed to crawl into your clothes or your hair, stay calm and allow it to crawl out.
- Don't blow at nests: the carbon dioxide in your breath triggers a state of aggressive defence by the colony.
- Don't shake a hive or spray water on it — you'll only endanger yourself.

- Fence off a nest and try to prevent things like balls or frisbees from hitting it.
- Don't obstruct or divert the wasps' flight path to the nest.
- Wasps' aggressiveness can be weather dependent (think thunder & lightning).
- When eating or drinking outside, try to cover food and drinks and always watch out before you take a bite or a sip. Use drinking straws. Don't let children eat or drink outside on their own.
- Give up on (spray) repellents as they kill only individual wasps. Similarly, traps baited with sweet liquids and light only attract more wasps and also kill other useful insects.

If you still find it hard to live with wasps, there are some simple ways of dealing with a nest. You can, for example, install strips of cloth to deflect wasps leaving the nest, or attach a length of plastic pipe to alter the access route. You can even call in a professional to relocate the nest. If you have an empty nest and don't want another colony to settle in it the following year (residual nests tend to attract new settlers), you can remove it during the winter. Use a pair of working gloves as there is always a risk of encountering hibernating young queens.

If you want to preserve the nest for display, just spray it with either hairspray or spray paint. This way you can conserve it and prepare either horizontal or vertical cut-aways.

You can contact **natur&ëmwelt** on any points concerning nests in your area, and if necessary we'll put you in touch with the right people.

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