

# Advices on WASPS

for Luxembourg



Émweltberodung Lëtzebuerg asbl

# Table of contents

- Why protect wasps? (p. 1)
- Life cycle of social wasps (p. 2)
- The wasp nest (p. 3)
- If there were only one thing to remember (p. 4)
- How to cohabit with wasps? (p. 5)
- Infographic “Visiteurs d'été indésirables” (p. 7)
- What the law says (p. 8)
- **Identification** (p. 9)
  - Vespula (p. 10)
  - Dolichovespula (p. 11)
  - Vespa (p. 12)
    - Special case: the Asian hornet (p. 13)
  - Polistinae (p. 14)
- What about bees? (p. 15)
- Wasp advisory network (p. 16)
- Frequently asked questions (p. 17)

# Why protect wasps?



## In Luxembourg:



- more than 300 wasp species
- of which **15 are social species**  
(forming colonies and living together in nests)  
→ all other species are solitary
- only **2 species** represent a **potential conflict** for humans

Wasps are useful animals that play a **fundamental role in the balance of nature.**



They **pollinate** the flowers.



They act as "**sanitary police**" by hunting insects, making them natural **pest control** agents.

→ *free insecticides!*

## Objective:

To tolerate nests in non-problematic areas.

- With the right behaviour, there is little danger!  
→ *Contrary to popular belief, they very rarely sting.*
- Wasps easily adapt to humans.  
As soon as they are used to your voice and habits they are no longer disturbed by your presence.
- In the vast majority of cases, coexistence between humans and wasps is not problematic.  
→ *Exception: presence of an allergic person.*



- Furthermore, the unjustified **destruction** of nests is **prohibited** by the "Nature Protection Law". Nests that do not represent a direct danger are therefore not allowed to be destroyed.

# Life cycle of social wasps

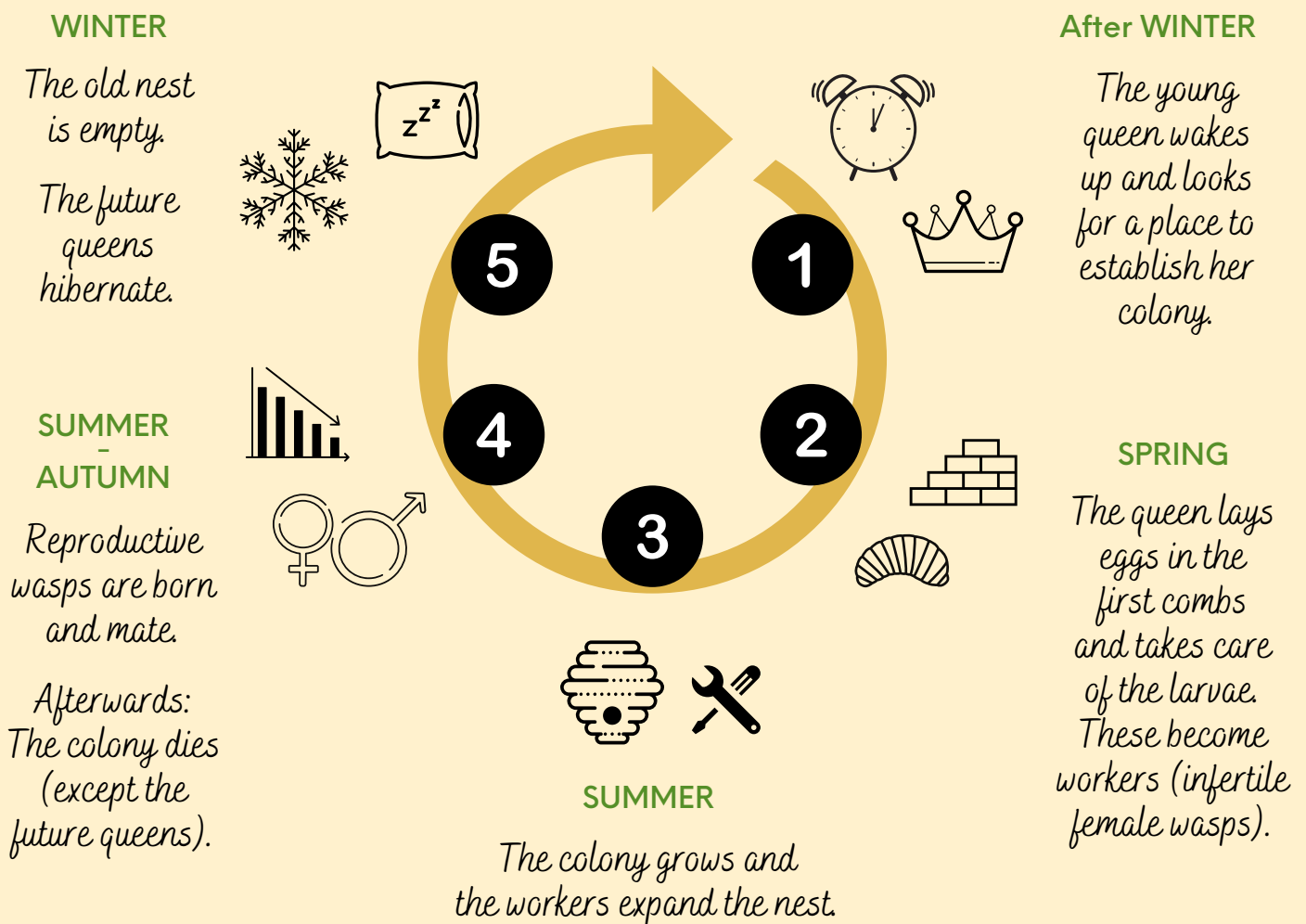


**Social wasps** live in **colonies**. They build a **nest**, more or less elaborate, which can contain several thousand individuals at the end of the season.

↳ *They are the ones who "pester" us throughout the summer.*



The colony is organised around a **queen** (fertile) and **workers** (sterile), with the birth of fertile males and females at a specific time of the year.

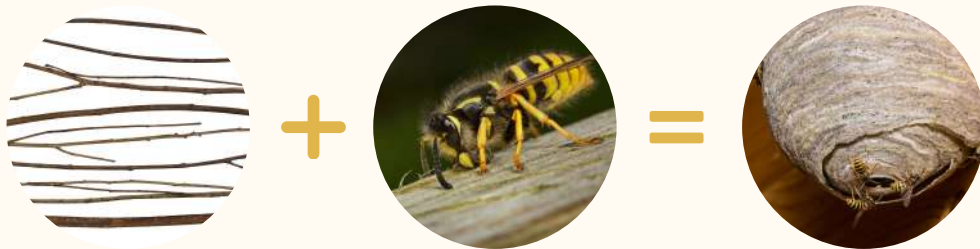


The majority of wasp species (90 %) are **solitary wasps**: they live and work alone, there is no distinction between queen and workers.

# The wasp nest



The nest is made of "papier-mâché", greyish/brown in colour. The wasp makes this pulp of vegetable fibres by mixing its saliva with **cellulose** (the main constituent of wood) which it collects by trimming old wood and bark very superficially.



Their nests can be found almost anywhere, occupying all or part of the available volume, while taking on the shape of the support.



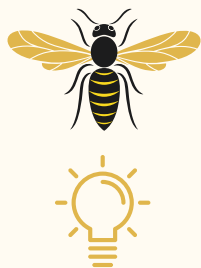
Each year, the wasps abandon their old paper nest and build a new one the following spring.

These nests are therefore **single use** and will never be recolonised the following year.



# ..... If there were only one thing to remember .....

## about wasp nests

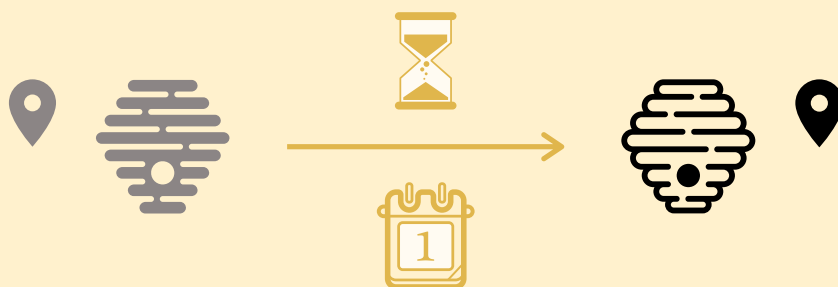


A wasp nest is only used for one season:  
it is a one-time use and is not reused the following year.

At the end of the season, the colony dies  
and the new queens abandon their old nest.

In spring, the queens will build  
a new nest in a new location.

So, if you have a nest on your property, be patient:  
wasps are only passing through.



### *When will the nest be empty?*

This depends on the wasp species. In general:



(e.g. hanging freely in a bush or under the roof of a shed)



often a "non-problematic" species  
(**disappears early** / not annoying)



(e.g. in shutter box or under tiles)



often a **longer-lived** species  
which can become annoying in late summer

# How to cohabit with wasps?



Wasps only sting when they feel threatened.  
So: Stay calm and avoid **sudden movements**.



**Never blow** on a wasp to chase it away:  
CO<sub>2</sub> in the breath is a warning signal for these insects.



If you keep a **distance** of 2-3 metres from the nest and do not block the wasps' **flight path**, they have no reason to feel threatened.



Do not block the **passage** to the nest, as the wasps will look for another way out, which could be even more problematic. In addition, the colony will behave more aggressively.



*If wasps have settled in a problem area,  
contact an expert for advice..*



- Generally, cohabitation is possible until the colony declines.



- Sometimes - but rarely - it is possible to move a nest (this is a complicated operation)..



- **If killing is unavoidable and you call in a private agency to carry out the removal, be sure to ask about precautions to be taken after the application of the poison. In particular, when disposing of a colony in a shutter box, contamination of the indoor air may occur and exposure should be avoided for some time.**



The wasps die during the first frosts of autumn.  
You can then safely **remove the old nest** if you wish.  
Ideally: clean the area thoroughly, as new queens may be attracted by the smell.

# How to cohabit with wasps?



## IN THE HOUSE



To avoid wasps in the house:  
attach **screens** to windows and doors.  
*(priority: kitchen, bathroom, children's rooms)*



A wasp in the house? Tip:  
Place a glass over the insect and slide a piece of paper underneath to carry the wasp outside.

## OUTSIDE



Cover the **food** and dispose of the leftovers as soon as possible.  
Important: Keep an eye on your drink!  
Wipe children's mouths after eating.



If necessary: Place "**distracting foods**" at a distance.  
Ideal: overripe grapes.

*Not recommended: wasp traps filled with sugar juice or beer.  
The wasps die horribly and it is mainly the older wasps that enter the trap  
(the active colony is not decimated).*



Wasps are attracted to brightly **coloured clothing**.  
So, if necessary: choose white.



Have you been **stung**? Tip:  
Press slices of onion (anti-inflammatory) on the sting.



Plant **wild flowers** in your garden, so that you have a natural food supply for the wasps and they are less interested in your own meals.



Wasps can slightly damage wooden surfaces as they use the cellulose in the wood to build their nests.  
If necessary: Maintain your **wooden coatings** with environmentally friendly varnishes/paints.





# Unwanted summer visitors



## Wasps are disturbing me during my meals on the terrace!



Restez calme / évitez les mouvements brusques.  
Une guêpe n'attaque pas les humains, tant qu'elle ne se sent pas menacée.



Ne soufflez jamais sur une guêpe pour la chasser  
(le CO<sub>2</sub> de notre respiration = signal d'alerte pour les guêpes).



Très important: gardez un oeil sur votre boisson!  
Débarrassez les restes de nourriture de la table dès que possible.



**Prévention:** - Plantez des fleurs sauvages dans le jardin (réserve naturelle de nourriture).  
- Les vêtements de couleur vive attirent les guêpes (privilégiez le blanc).  
- Certaines herbes ont un effet répulsif sur les guêpes (p.ex. le basilic).

## Help, there is a wasp nest in my living space!



Pas de panique: avec le bon comportement il n'y a pas de danger, même à proximité du nid.  
(pas de mouvements brusques et de vibrations près du nid / ne pas obstruer l'entrée)



Un nid de guêpes ne sert que pendant une saison.  
Au plus tard en novembre le nid sera vide et les hôtes ne reviendront pas.



Si vous avez besoin d'aide, le Luxembourg dispose d'un réseau national de conseillers bénévoles pour les cas de guêpes.  
Contact: natur@emwelt (Conseil nature) / Umweltberodung Lëtzebuerg a.s.b.l.

**Prévention (dès le mois de mai!):** Découvrez le nid avant qu'il ne soit trop grand:

- Activez régulièrement les volets de vos fenêtres.
- Surveillez les endroits sombres (remises, cabanes, ...).



Wasps are useful insects and do not sting as long as they are not threatened.



Thanks!



The emergency services (112) only intervene in case of an emergency that represents a serious danger for a citizen!

We, the wasp advisors, are here to help you!  
More info:  
naturemwelt.lu  
ebl.lu



Editor

Ëmweltberodung  
Lëtzebuerg a.s.b.l.  
ebl.lu / info@ebl.lu



In collaboration with:



# What the law says



## Legislation – Law of 18 July 2018

### *Protection of nature and natural resources*

(translated from French)

#### Art. 19.

#### **Bans on harm to wild animal species**

(1) Any unjustified exploitation, use, mutilation or destruction of wild animal species is prohibited. Any handling of individuals of these species must be done under conditions consistent with the biological requirements of their species and respect for their well-being.

#### Art. 75.

#### **Penals sanctions**

(2) The following is punishable by a fine of 24 euros to 1,000 euros:  
 10° Any person who, by contravention of article 19, paragraph 1 and in an unjustified manner exploits, uses, mutilates or destroys wild animal species.

#### Art. 28.

#### **Exemptions from species protection**

(1) The Minister may grant authorizations derogating from the provisions of Articles 18, 19, 20 and 21 for scientific, educational or public utility purposes or, with regard to particularly protected species, only on one of the grounds of paragraph 2. Authorizations granting exemptions are granted upon prior opinion from the Administration de la nature et des forêts (ANF), which is responsible for giving its opinion on the relevance of said exemptions, determining the conditions and modalities of their implementation and ensure administrative control and scientific monitoring.

You are not responsible for a nest that is on your land and its consequences (towards your neighbors for example), unless you deliberately placed it there.



# Identification



Wasps are **insects** belonging to the order **Hymenoptera**. They are black and yellow with characteristic spots and patterns for each species..

The **many species** of wasps can be classified into **4 different genera**:



## VESPULA

Most common species in Luxembourg:

- V. vulgaris
- V. germanica



## DOLICHOVEPULA

Most common species in Luxembourg:

- D. saxonica
- D. sylvestris
- D. norvegica



## VESPA

(hornet)

Most common species in Luxembourg:

- Vespa crabro (European hornet)



## POLISTINAE

(paper wasp)

Most common species in Luxembourg:

- Polistes dominula



Peaceful wasps

Very peaceful wasps

Lifespan: Short

Medium

Long



Identification is generally not easy with the naked eye, but there are some tricks (described on the following pages).



Identification gives us information on the lifespan and on the behavior of the wasp and its colony.



# Vespula

- Common wasp (*V. vulgaris*)
- German wasp (*V. germanica*)



## The small but telling details:

- The VESPULA antennas are all black.
- The distance between the eye and the jaw is very small or absent: the eyes almost touch the mandibles.



## The "hidden" nest:

VESPULA wasps often nest in a dark, confined place (e.g. in a shutter box, in a false ceiling, under a terrace, under tiles ...).

Appearance: grey or ochre/brown "shells".

Large colony: thousands of individuals.



## Average life cycle:

- Nest construction from mid-April or May.
- Active until late October / mid-November.

## Behavior towards humans:

Generally non-aggressive, **except in the vicinity of their nests.** But: These species can become **annoying in late summer** by invading the table during meals.



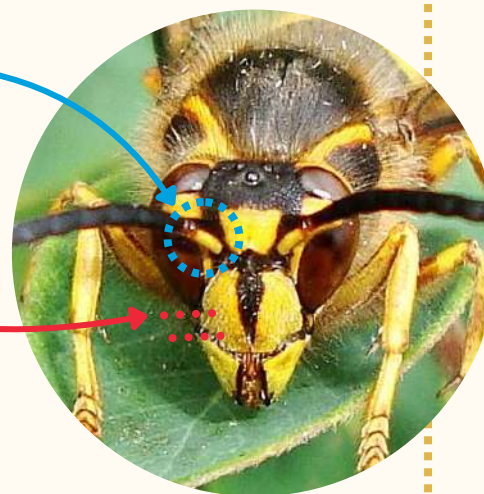
# Dolichovespula

- Saxon wasp (*D. saxonica*)
- Tree wasp (*D. sylvestris*)
- Norwegian wasp (*D. norwegica*)



## The small but telling details:

- The segment of the antenna that touches the head is yellow or orange.
- In DOLICHOVESPULA the head is more elongated than in VESPULA. The distance between the eye and the jaw is greater.



## The "hanging" nest:

The nests of DOLICHOVESPULA are often freely suspended (e.g. from a tree, in a bush, under the roof of a under the roof of a terrace or shed, under a table ...).

Appearance: slightly arched parallel veins.

Medium-sized colony: hundreds of individuals.



## Short life cycle:



- Nest construction from mid-April or May.
- Active until the end of July / August.

## Behavior towards humans:

They are "non-problematic", peaceful species. Not annoying, they do not invade the table during meals.

**Cohabitation with humans is easy.**





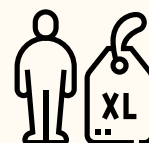
# Vespa

## The European hornet (*V. crabro*)



### *The small but telling details:*

- Hornets are the largest members of the wasp family. They can be more than 3 centimetres in size.
- The face is orange-yellow and the thorax is red-brown.



### *The hornet's nest:*

VESPA nests are often located in the shade and in high places. E.g. under a roof, in an attic, in the top of a tree ...

Appearance: ochre / brown (with air pockets)  
+ opening on the underside.

Medium sized colony: hundreds of individuals.



### *Long life cycle:*



- Nest construction from late April or early May.
- Active until October/November.

### *Behavior towards humans:*



- Hornets are **peaceful**, contrary to popular belief.
- Not annoying, they do not invade the table during meals.
- Nocturnal, hornets are attracted to light in the evening.



### **Not to be confused with the "Asian hornet"**

The Asian hornet is an invasive species of wasp and its presence must absolutely be reported ([vespa@neobiota.lu](mailto:vespa@neobiota.lu)).



## Special case: the Asian hornet

(*Vespa velutina*)

The Asian hornet (*Vespa velutina*) is an **invasive (non-native) species** in Luxembourg, where it was first observed in 2020.

It is a little smaller than the European hornet. It is also less common in Luxembourg, but its populations are **increasing**.



*Asian hornet*

- The Asian hornet has a **darker appearance** than the European hornet. Its thorax is **brown-black** and it appears, from a distance, as a dark spot on the nest. Only the fourth segment of the abdomen is orange-yellow.
- The **last segment** of its legs is **yellow**.
- The Asian hornet's nest is often **hung in a tree** (up to ten meters above the ground).



In comparison:

*the European hornet*



- The European hornet is less dark. Its thorax is **red-brown**, but a large part of the abdomen is **yellow**.
- Its legs are completely dark.
- The European hornet prefers to build its nest in a **protected space** (hollow tree trunk, birdhouse, under the roof, shed, etc.).



The Asian hornet is an invasive species of wasp and its presence must absolutely be reported, via [vespa@neobiota.lu](mailto:vespa@neobiota.lu) or to the "Administration de la Nature et des Forêts".



## Polistinae

The paper wasp  
(*Polistes dominula*)



### *The small but telling details:*

Paper wasps are quite easy to distinguish from other kinds of wasps.

- They are more slender (long and thin waist).
- They have long legs that hang down when they fly.
- In flight, they appear less nervous (a bit as if they were 'in a daze').
- Their antennae are often yellow-orange.

### *The nest of paper wasps:*

Polista nests are also easy to distinguish from nests of other genera. The cells are not covered by a wall and are therefore clearly visible.

Small colony: Less than 50 individuals.

### *Average life cycle:*



- Nest construction from March or early April.
- Active until mid-September.

### *Behavior towards humans:*



- paper wasps are very peaceful. They only bite in cases of extreme danger.
- Their sting is very weak, comparable to a nettle.

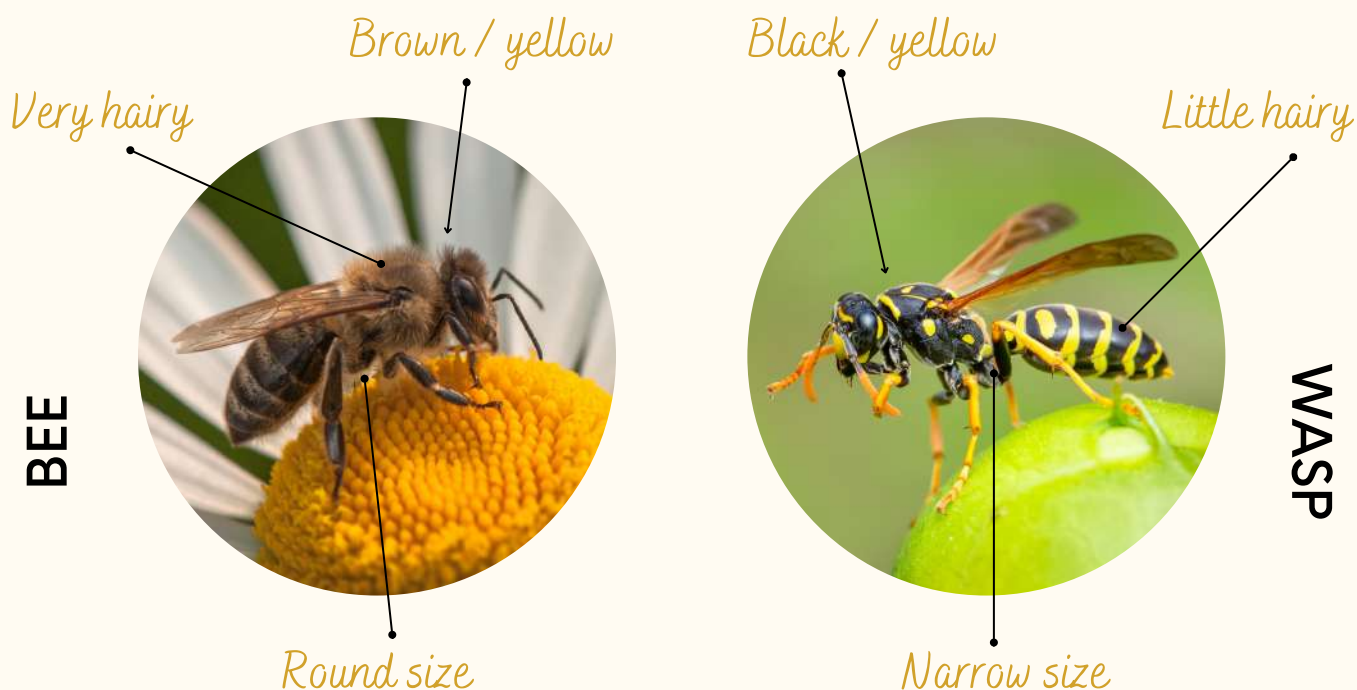




# What about bees?



Sometimes a colony of **bees** is mistaken for a colony of **wasps**.



In spring, part of the population of a bee hive may leave the hive to found a new colony elsewhere.

The swarm of bees may choose to settle in your garden, your chimney, behind shutters...

**Don't panic, don't kill them: call a beekeeper.**

Bees are protected species by law and the fire brigade or pest control companies are not allowed to destroy them.

Solution:

Call a local beekeeper who agrees to come and collect the swarm to increase his stock.



# Wasp advisory network



In Luxembourg, the association **natur&ëmwelt** ([naturemwelt.lu](http://naturemwelt.lu)) is an important contact for wasps.

In addition, due to the large number of calls concerning wasp nests, a **national network of wasp advisors** was created in 2019.

This network is made up of **volunteer advisors** who are willing to provide information and raise awareness.

In the vast majority of cases, simple guidance measures (without intervention) solve the problem.

Destruction of the nest is rarely necessary and should be considered as a last resort.

You can obtain the contact details of local advisors from natur&ëmwelt, municipalities, nature conservation centres, nature parks, biological stations or from the Umweltberodung Lëtzebuerg ([eb1.lu](http://eb1.lu)).

*Before calling an advisor, please collect the following information:*

*Location of the nest, approximate size of the nest, behaviour of the colony, potential dangers*

Please note: The advisors will not destroy the nests under any circumstances!

## Contact at natur&ëmwelt

Wasps hotline:  
621 969 444

Mail:  
[berodung@naturemwelt.lu](mailto:berodung@naturemwelt.lu)



# Frequently asked questions



## Does a nest cause damage, e.g. to shutter boxes ? Should the old nest be removed ?

Generally, there is little or no damage. However, it can happen that the wasps nibble at the shutter tape or block the system with dirt. It can also happen that a nest damages the insulation.

*Ôter l'ancien nid n'est donc généralement pas nécessaire. Si on souhaite l'enlever, il vaut toujours mieux attendre jusqu'en décembre et la chute des températures, pour s'assurer que le nid est bien vide.*



## What to do if there are allergic persons ?

If the wasps are of the "Vespula" type and the allergic person is likely to be in the vicinity of the nest, the nest can of course be destroyed. Note: Many people believe they are allergic without actually being allergic, e.g. by overinterpreting 'classic' reactions to stings (redness, etc.).

*An allergy test can help to clarify this.*



## In which cases can the nest be relocated ?

Relocation is possible in cases where the nest is attached to a mobile structure. It is however necessary to protect oneself correctly (beekeeper's jacket, gloves)!

*Relocation should only be considered if the danger is under control and the current location of the nest is really problematic..*



## In which cases is an extermination conceivable ?

If we already manage to avoid the extermination of wasps of the genera "Dolichovespula" and "Polistinae" (not dangerous and short life cycle), we are already taking a big step for the protection of nature. With regard to the "Vespula" type wasps, which can persist until November, the decision to call in a company to destroy the nest is understandable in cases where the nest is in a very disturbing place, where there is an allergic person present, etc. ...



## Do wasps sleep at night ?

Wasp activity is very low at night; the colony remains in its nest, except for the "late wasps" which sleep outside the nest (until the morning). The activity of the wasps resumes in the early morning (before most humans wake up).

*Exception: hornets are the only wasp species that also fly at night.*

# Frequently asked questions



## Can I call the fire brigade to come and remove a wasp nest ?

Since the reform of the emergency services in 2018, the removal of wasp nests is no longer one of the main tasks of the CGDIS, except in cases of real and imminent danger to the population.



## How can I prevent wasps from building a nest in my home ?

The queen wasp lays the foundations of her nest from mid-April and, until early June, the majority of nests are still in the early stages of construction. Therefore, if you discover a queen who settles in a problematic place, you have the possibility of disturbing her (without hurting her), so that she decides to look for another place.

- To disturb a queen, it must be done as soon as possible (do not wait until she has laid the eggs in the cells).
- Go around your living space at least once a week to inspect dark corners (attic, garden sheds, cabins, covered terraces, etc.).
- It is possible to disturb the queen in her construction project by simply using a broom (taking care not to hurt her, of course).
- The queen may try again and continue her construction in the same place, despite the disturbance. In this case, you have to be patient and disturb her again, until she abandons her project and looks for a new place.
- It is also possible to wash the place with dishwashing liquid, it repels the queen.
- Activate all the roller shutters in your home daily; thus you will disturb any queens that try to settle in a shutter box.

*A little extra tip: Essential oils can be used as a preventive measure, such as clove, eucalyptus, lemongrass, tea tree, cedar, lemon or walnut. Wasps do not appreciate these aromas. This is particularly useful in hard-to-reach places (eg under terrace boards).*



# Frequently asked questions



## I want the extermination of a wasp nest. Who must I call ?

There are several pest control companies in Luxembourg that can be hired to destroy a wasp nest.

### Warning:

- A pest control firm should only be contacted in **ultimate emergency situations** (wasp nest in a very disturbing place, presence of an allergic person).

Insect survival should be the priority when possible.

- To avoid unpleasant surprises when you receive your invoice, always ask for a quote!
- Pest control companies use **POISON**, which is toxic to animals AND humans. Firms do not necessarily provide information on the dangerousness of the poison. There is no insect poison that is harmless to other species (including humans).
  - Do not go near the spray area for several days.
  - If you have a pet, be aware that it may die if it comes into contact with the poison.



*In 99% of situations, we do not recommend calling a pest control company. Wasp colonies only stay in their nest for one season; it is generally possible to live in their company until they disappear.*



Advices on wasps for Luxembourg

*Version 2024*

Ëmweltberodung Lëtzebuerg asbl