

White faced hornet Photo: Dr. Henri Goulet, Canadian National Collection of Insects



Yellowjacket nest Photo: Whitney Cranshaw, Colorado State University



Wasp nest with grubs and wasps Photo: Edward L. Manigault, Clemson University Donated Collection, Bugwood.org

### Wasps: What are they?

The wasps that are known as "yellow jackets" and "hornets" are medium-sized insect pests 10 to 25 mm, and are easily recognized by the bands of black and yellow or white on their stomachs. However, many other types of harmless wasps look similar and can be mistaken for pests.

A hollow stinger, found at the rear of the wasp's body, injects venom when it penetrates the skin. These stings can be quite painful.

Social wasp species are the most common and also the most dangerous because of their behaviour. Among them, German yellow jackets are considered the most aggressive. Many of these wasp species have a habit of scavenging in city garbage cans. Social wasps make paper nests in different shapes and sizes, some of them quite visible and others hidden. The paper nest can be fully enclosed with an opening near the base, or have an open structure, depending on wasp species.

In early spring, the hibernating queen comes out of cracks, crevices or tree bark to look for a new nesting site. Once found, she builds the first few paper cells and lays a single egg in each cell. After being nurtured by the queen, these new workers will take over all the colony duties like feeding and tending the queen, tending the new larvae, hunting and scavenging for food, building new brooding cells, and cooling the nest on hot summer days. The queen's sole role is then to lay eggs for the rest of summer.

All larvae become female workers, except in late summer where some of the eggs will hatch into reproductive males and females that will produce the next season's generation. Only the inseminated females survive the winter to start the cycle again as new queens. All workers and the old queen die, and the old nest is not reused the following year.

### What can they do?

Social wasps are common in urban and rural areas throughout North America and are the most common stinging menace in many Canadian cities.

Outdoor gatherings are often visited by wasps because of their attraction to sweet foods, but also to protein food earlier in the season. Stings can happen when people or animals bother wasps that are hunting for food or when they approach a nest by accident, triggering a defensive reaction from wasps guarding the nest. However, wasps may occasionally attack people or animals even when seemingly unprovoked.

Thousands of people are stung by these venomous insects each year. In some rare cases, severe allergic reactions to the venom have resulted in death. Get medical attention right away if your reaction to a sting includes unusual swelling, itching, dizziness or shortness of breath.

Unlike the bee, a wasp can sting more than once. Wasps can also damage ripe fruit by creating holes when they eat the flesh.

However, wasps are also beneficial in many ways. Workers catch insects, like flies and caterpillars, and carry them back to the nest to feed the developing larvae. They also act as pollinators when they visit flowers for nectar. They are a source of food for small mammals, birds and spiders.



### Pesticide Use Responsible

# Before Purchasing a Pesticide

 Use physical control methods and Identify the pest correctly

precautions before buying the product. The Read the label directions and safety alternatives to pesticides.

label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet Purchase only the quantity of product needed for the treatment treatment)

Consider hiring a licensed pest control operator.

## Using a Pesticide

· Carefully read all label instructions and precautions before using pesticides

Do not drink, eat or smoke while applying pesticides.

Persons and pets should vacate the area If kitchen area is to be treated, cover or during treatment. Cover or remove

## remove food, dishes and utensils.

· Always wash your hands thoroughly after handling any pesticide product After Using a Pesticide





### How can I manage them?

Given their beneficial role in nature, try to tolerate small populations of wasps. Try using preventive practices to stop them from becoming intolerable. Learn to tell the difference between harmful social wasps and the solitary ones that are mostly harmless and beneficial.

### Prevention

Before wasps become a problem, inspect your yard and home surroundings in early summer, looking for any wasp activity or paper nests taking shape. It is easier to discourage a single queen wasp from establishing too close to your home than handle a full-size nest later in the season.

### **Physical Control**

Since wasps hunt for high-protein food like insects for their larvae, make sure you don't leave moist pet food or picnic leftovers in the open. Because they are also attracted to sweet food and strong scents, avoid leaving food or drink uncovered when eating outside. Don't wear scented products like perfume and hair spray. Keep all garbage covered in tightly closed containers until it can be thrown out. Avoid walking barefoot on lawns or other grassy areas, especially in late summer when wasps are more abundant and active.

### **Traps**

Various commercial traps are available at garden centers and department stores. Food bait can be used with these traps to increase their effectiveness. Try to use protein foods like dog food instead of sweet foods so that bees are not trapped. Be aware that there may be more wasp activity around baited traps, so they should not be placed close to play areas or other places of human activity. These traps can be useful in the short term during outdoor events where wasps can be drawn away from food-serving areas.

If the location of the nest does not present a health hazard, it's best to leave the nest until November or December. Once it has been abandoned, you can remove the nest and dispose of it with minimal risk.

If the nest must be removed when the wasps are active, it should be done in the evening when wasps are least active. Nest removal can be dangerous and extreme caution must be used because of the risk of attack by a large group of wasps. Although a homeowner, with adequate protection, can remove a nest, professional help is recommended.

Depending on the location and structure of the nest, removal can be as simple as enclosing the nest in a plastic bag and detaching the single anchoring stalk from the supporting tree branch or structure. To dispose of the active nest, place in a freezer for at least 48 hours. Remember to always wear protective clothing, including a head net.

### **Products**

Treating the nest with an insecticide like pyrethrins is an effective way to control wasps. Spraying after nightfall is recommended because wasps are less active at night. Do not use a light directly on the nest as this will alarm the wasps and increase their activity. Use a red filter over your flashlight to provide visibility without increasing wasp activity. Always wear protective clothing when using pesticides.

### What to do if you are stung by a wasp

If a wasp lands on you, remain calm and wait for it to fly off or brush it off gently. Otherwise, you run the risk of getting a sting because the wasp will feel threatened by any sudden movement.

Stings can be soothed with ice packs or with a baking soda paste. A wasp's venom is very potent. Some people have allergic reactions and need medical attention. If the effects of a sting are severe, you should see a doctor right away. Effective anti-venom shots can reduce the number of severe reactions in vulnerable people.

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2010 HC Pub: 091080 ISBN: 978-1-100-15303-2

Catalogue Number: H113-1/19-2010E

Photo: Dr. Henri Goulet, Canadian National Collection of Insects

### **Health Canada Pest Management Regulatory Agency**

2720 Riverside Drive, Ottawa ON K1A 0K9 Phone from inside Canada: 1-800-267-6315 Phone from outside Canada: 613-736-3799 (long distance charges apply) Fax: 613-736-3798 www.healthcanada.gc.ca/pmra



### **Health Canada**

**Note:** These are general recommendations. Consult the label for specific instructions When in doubt, contact a professional

Follow the product label instructions or contact provincial authorities for disposal Wrap and dispose of in household garbage.

of pesticides

**Disposing of Pesticides** Do not reuse empty pesticide containers. required to send them to Health Canada (phone number on label). They are

Accidental Poisoning Call a poison control centre immediately and seek medical attention.

Always store pesticides out of reach of beverages.

children and pets and away from food and

treated surfaces until residue has dried Do not permit persons or pets to contact completely.

Provide adequate ventilation of treated

areas after use.

direct contact with food, such as counters, Wipe clean all surfaces that come in

tables and stovetops, including indoor and

outdoor surfaces

Pest Management Regulatory Agency www.healthcanada.gc.ca/pmra 1-800-267-6315

Report pesticide incidents to manufacturers

seek veterinary attention immediately. In case of accidental poisoning of pets Follow first aid statements on the label

you to the emergency facility or physician.

Take the pesticide container or label with