# **Baldfaced Aerial Yellowjacket**

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### Introduction

The baldfaced aerial yellowjacket (*Dolichovespula maculata*), formerly called the baldfaced hornet, is a large, black insect with pale markings (Figs. 1 & 2). The face and head are largely white. Baldfaced aerial yellowjacket queens measure up to 20 mm (0.7") in length, while workers are smaller (about 13 mm or 0.5"). The dark wings are held neatly folded lengthwise at rest. Native to the U.S., it is widely distributed in Virginia.



Figure 1. Baldfaced aerial yellowjacket (Johnny N. Dell, Bugwood.org).



Figure 2. Baldfaced aerial yellowjacket (Thomas Quine, CC BY 2.0 via Wikimedia Commons).

### **Habitat**

The oval-shaped nests are constructed from the same paper-like material used by other wasps and

yellowjackets. A protective "envelope" surrounds the nests, which are of often quite large and are usually found attached to limbs of trees (Fig. 3). There is a single opening at the bottom of the nest usually guarded by a few hornets (Fig. 3). Nests are always abandoned at the end of the season and not reused the following year.



Figure 3. Baldfaced aerial yellowjacket nest in a tree (Philip N. Cohen, CC BY-SA 4.0 via Wikimedia).

Adult baldfaced aerial yellowjackets can be found feeding on flower nectar (Fig. 2). They serve as pollinators when pollen grains stick to the hairs on their bodies and are transferred to other flowers.

## Life Cycle

Baldfaced aerial yellowjacket workers die when cold weather arrives in the fall. Fertilized females (the future queens) hibernate during the winter in barns, attics, under rotten wood, and in other sheltered places. After successfully overwintering, each fertilized queen starts a new nest by herself in a new location in the spring. Once her new brood reaches the adult stage, the sterile female workers take over the nest construction and caring for the younger brood. They will expand the nest to accommodate the growing colony until the reproductive males and females leave the nest on nuptial flights and the old queen stops laying eggs. The workers and the old queen will stay with the old nest until they die in the fall. Old nests are not reused the following year. In

some places with warm winters in the far southern US, yellowjacket nests may not die out and the colony persists over the winter.

### **Harmful or Beneficial?**

Baldfaced aerial yellowjackets can sting repeatedly when disturbed, especially when protecting their nest. The stings are painful and can itch and swell for hours after the attack. People who are allergic to bee stings and other venomous insects should seek medical care if stung by baldfaced aerial yellowjackets.

However, baldfaced aerial yellowjackets help keep agricultural and nuisance pests in check by preying upon flies, caterpillars, and other soft-bodied insects that they feed to their developing young in the nest. In late summer and early fall, when the young have matured and no longer need meat or protein in their diet, the worker yellowjackets feed on sugary foods such as ripe fruit, spilled sodas, honey, flower nectar, and other sweet-tasting materials (Fig. 4).



Figure 4. Baldfaced aerial yellowjacket on rotting fruit (Jerry A. Payne, USDA ARS, Bugwood.org).

### **Control**

Baldfaced aerial yellowjacket nests located in trees or on buildings located away from the normal activity of people should not be considered dangerous. There is no need to remove nests in places where there is little risk of being stung.

If a baldfaced aerial yellowjacket nest is located in an area where people might be stung, then precautions should be taken while removing the nest. Wear protective clothing against being stung. Work at night when temperatures are low and it is fully dark; the yellowjackets will have returned to the nest and be less active at that time. Use a red light to locate the nest, as baldfaced aerial yellowjackets cannot see red light very well. Stand with the wind at your back to avoid getting the insecticide on you.

Use a foaming wasp and hornet spray that jets from a safe distance. Spray the nest directly, starting with the entrance hole if at all possible, and saturate the nest thoroughly. Never use gasoline and fire to destroy a yellowjacket nest as the risk of setting an unintended fire is too great.

Baldfaced aerial yellowjackets can be nuisance pests at picnics, outdoor eateries, and open trash cans where they are attracted to meats and sweets. Keep outdoor trash in a container with a tight-fitting lid and empty the trash can regularly. Clean up any spills, especially sugary liquids, that seem to be attracting yellowjackets. Other recommendations for not attracting yellowjackets outdoors include keeping food and drinks covered and avoiding using strong perfumes, scented lotions, or floral laundry detergent. Yellowjackets and other stinging insects tend to become more active as the day heats up, so holding outdoor events earlier in the day may help avoid attracting them.

#### Revised

Olivia C. McCraw, 2014; Theresa A. Dellinger, 2020 and 15 July 2025.

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