



Adult yellow jacket
Jim Kalisch,
Dept of Entomology
University of Nebraska-Lincoln

Stinging Insects: Bald-Faced Hornets and Aerial-Nesting Yellow Jackets

Common name: Bald-faced hornets and aerial-nesting yellow jackets; also, see “yellow jackets”

Scientific name:

- Bald-faced hornet: *Dolichovespula maculata*
- Aerial-nesting yellow jacket: *Dolichovespula arenaria*
-

Also known as: white-faced hornet, bald-faced yellow jacket

Size: 5/8 to 3/4 inch long

Commonly confused with: honey bees, solitary bees, ground- and house-nesting yellow jackets, and hornets

Distinguishing marks

- Bald-faced hornet
 - black and white patterns on face, thorax, abdomen, and first antennal segment
 - mostly hairless
- Aerial-nesting yellow jacket
 - smaller than the bald-faced hornet
 - hairless body
 - abdomen black with yellow stripes and markings
 -

Distribution: throughout North America



Bald-faced hornet nest
Nicholas Calderone

Habitat: meadows, forest edges, and lawns



Yellow jacket eating sugary flesh of a peach
Jerry A. Payne, USDA ARS
www.insectimages.org

Damage: The bald-faced hornet causes little agricultural or structural damage. Yellow jackets and bald-faced hornets become very numerous towards the end of summer and may be persistent, unwelcome guests at picnics, where they scavenge for food.

Benefits: Both bald-faced hornets and aerial-nesting yellow jackets control many harmful insects, such as crane flies, flies and caterpillars.

Management: Bald-faced hornets and aerial-nesting yellow jackets should not be killed unless they pose a risk. Nests that are high in trees need not cause concern unless someone in the vicinity is allergic to their stings. If a nest is in a low-traffic area, it may be possible to mark off a warning-zone to alert people to its presence. Nests in high-traffic areas may re-

Helping You Put Knowledge to Work

quire treatment.

If control is necessary, apply an approved insecticide directly to the nest opening. Use an approved "Wasp & Hornet" spray that propels a stream of insecticide 15-25 feet. Treatment is most effective in the evening when most of the insects are in the nest. Be sure to dress appropriately. Wear eye protection, a long-sleeved shirt, long pants and boots, and secure your sleeves and pant legs. Establish an unobstructed escape route, and be ready to move quickly away from the area in case any of the insects fly towards you. You may need to repeat the treatment two or three times on consecutive evenings. Do not illuminate the nest, as that will make the insects more active and may attract them to you. If you require illumination, use a flashlight covered with red cellophane for light - wasps cannot see red. You may want to call in a professional, since there is a risk of being stung.

If yellow jackets are present, avoid using perfume or cologne, and do not wear bright colors, as they are attracted to anything that looks or smells like a flower. At picnics, keep all food and drink covered, except when actually serving or eating. Be careful when drinking from a can or bottle, as you may swallow a yellow jacket and receive a sting in the throat. Always keep trash containers covered.



Bald-faced hornet nest under an eave of a house www.unexco.com

Sting: Both the bald-faced hornet and the aerial-nesting yellow jacket are protective and will sting repeatedly if their nests are disturbed. They do not usually sting when away from the nest. Unlike honey bees, these insects have a smooth stinger and can sting repeatedly. Also, the venom of these wasps is different from that of bees, and may elicit a more painful sting. Check your shrubs for nests before pruning or gardening. If you are stung, cooling the area with ice may be soothing.

Remember! Insect stings can elicit a life-threatening, allergic reaction in some individuals. Check with your physician to determine what symptoms require a visit to the emergency room. Never attempt any control measure if you have a known allergy to insect stings

Further sources: Akre, R.D., A. Greene, J.F. MacDonald, P.J. Landolt, and H.G. Davis. 1980. Yellow jackets of America North of Mexico. U.S. Department of Agriculture, Agriculture Handbook No. 552, 102 pp.

Prepared by: Kathryn Gardner, Carolyn Klass, and Nicholas Calderone

Date Prepared: July 2004

For more information about stinging insects check out <http://www.masterbeekeeper.org/stinging/aerialyellowjackets.htm>

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York STATE MUST BE REGISTERED WITH THE New York state department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide and/ or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office. Read the label before applying any pesticide.