



BALDFACED HORNET

Dolichovespula maculata

Family Vespidae

The baldfaced hornet is an ‘aerial yellowjacket’ - one of 7 or 8 species in the genus *Dolichovespula* in North America. However, it is not a ‘true’ hornet – it is a yellowjacket. The only hornet in North America is the European hornet, *Vespa crabro*, and it is an accidentally introduced species. All of the yellowjackets in the genus *Dolichovespula* build nests in bushes and trees (sometimes on the outside of buildings), and produce the characteristic football shaped, grey papery nests.

The baldfaced hornet is found in most of the 48 contiguous states and D.C., throughout Canada and in Alaska, and is the most common of the species in *Dolichovespula* in Pennsylvania.

DESCRIPTION

The baldfaced hornet gets its name from the ivory-white markings on the face. The thorax, legs and abdomen also have white markings. The queen and her offspring range in size from 13 mm to 20 mm – the queen is usually the largest yellowjacket in the colony.



Steve Jacobs
PSU Entomology



Steve Jacobs
PSU Entomology

LIFE HISTORY AND BEHAVIOR

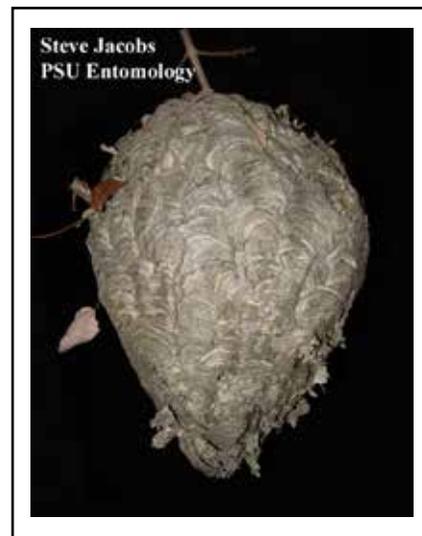
In the spring, fertilized queens that have overwintered in protected places such as in hollow trees, rock piles, under bark and in the walls and attics of buildings, become active and begin to build a nest. The queen collects cellulose from weathered and rotting wood, chews the wood adding her saliva, and takes this paste and makes a papery material to construct the nest. She creates a few brood cells within the nest and deposits eggs in them and feeds the larvae when they hatch. This first brood will assume the duties of nest building, food collection, feeding the larvae and protecting the nest. As the summer progresses, the colony grows until there may be 100 to 400 workers. In Pennsylvania, a large colony will have upwards of 300 individuals.

Nests are usually located in bushes and shrubbery – at least 3 feet off the ground – and in trees as high as 60 feet or more, and are sometimes found under the eaves of buildings and other man-made, protected locations. They are a grey color and in Pennsylvania can reach up to 24 inches in height and 18 inches across.

Early in the spring and summer, protein in the form of live prey is the usual diet consisting of flies, other yellowjackets and many other types of insects. Some nests are so full of yellowjacket remains that the inside has a yellowish cast to it. As the season progresses and there are fewer larvae to feed, the workers will take nectar and other forms of carbohydrates. Most of the colony, other than newly fertilized potential queens that will overwinter, will die before or shortly after the first hard frost.

MANAGEMENT

Baldfaced hornets can be considered a beneficial insect in that they reduce populations of unwanted insects (including other yellowjackets) and will help pollinate flowers when they are searching for nectar. Therefore, unless the nests are located close (within 10 feet) of an



Steve Jacobs
PSU Entomology

entrance to a building, under an eave that is close to the ground or in shrubbery next to a lawn that is mowed, the nests can be ignored. However, individuals with known sensitivities to wasp and bee stings should have any nests close to their homes removed by professional pest management personnel (pest control companies).

Those individuals without medical concerns and with a degree of daring can kill the colony by spraying a ‘wasp and hornet’ spray into the nest opening during the nighttime. The nest should be scouted during daylight to determine the best approach that will not disturb the wasps prior to introduction of the insecticide. DO NOT stand away from the nest and spray only the exterior as this will anger the colony and increase the risk of stings during the next several days. Effective control can only be achieved by stealthy approach and then spraying the pressurized material directly into the nest opening – holding the nozzle against the hole. The pressure of the spray in addition to the nozzle will retard any attempts by the wasps to exit. It is advisable to wear long sleeved clothing, long rubber gloves and goggles to protect yourself from any insecticide that falls out of the nest or splashes off the surface. Launder clothes and take a shower immediately after application if any insecticide falls on you.

WARNING

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

Steven B. Jacobs
Sr. Extension Associate

Dept. of Entomology
Revised, February 2015

PH-12

©The Pennsylvania State University 2015

This publication is available in alternative media on request.

Where trade names are used, no discrimination is intended and no endorsement by The Pennsylvania State University or Pennsylvania Department of Agriculture is implied.

Entomological Notes are intended to serve as a quick reference guide and should not be used as a substitute for product label information. Although every attempt is made to produce Entomological Notes that are complete, timely, and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

Issued in furtherance of Cooperative Extension Works, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. D. Jackson, Director of Cooperative Extension, The Pennsylvania State University.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work

environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Bouke Building, University Park, PA 16802-5901, Tel 814-865-4700/V, 814-863-1150/TTY.