



Cyberbee.msu.edu

Bugs Around Your House

Bald faced hornets

(Scientific name: *Dolichovespula maculata*;
Family: Vespidae; Order: Hymenoptera)

MICHIGAN STATE
UNIVERSITY
EXTENSION

Description The bald faced hornet (also called white-faced hornet) is technically also a yellowjacket. However, it is pale (instead of yellow) with black markings. It nests in trees, bushes, or structures. The queen can be slightly longer than 1 inch and starts the nest in April to May in Michigan. Workers are one third to one half the size of the queen. New nest is roughly egg-sized, with a disk inside two layers of envelopes and an opening usually near the bottom. Mature nests can be as large as tree feet long and two feet in diameter and may contain hundreds of workers. This hornet can be more defensive than the common yellowjackets (which nest underground) when the nest is disturbed.



Top: A queen bald faced hornet checking things out while the photo was taken.
Bottom: A football-sized nest (shown sideways). Photo by M. Langenburger.

Top: A queen (right) and a worker hornet.
Bottom: An exposed nest showing open and sealed brood cells. Photos by Zachary Huang

Behavior and biology Bald-faced hornets have an annual cycle similar that of bumble bees and paperwasps. The queens overwinter inside leaf litter or in other protected areas, occasionally inside houses. They construct their gray-colored, paperlike nest in densely branched trees or bushes, occasionally near house structures. The queen will forage for nectar as an energy source and for insects as a protein source and take care of her first batch of 'brood' (a term used for larvae and pupae of social insects). Once the workers (which are sterile, as in honey bees) emerge, she retires from foraging and stays home as a full time mother (egg laying only). Workers will forage for wood fiber for nest material. They continually expand their nest. To do so they have to tear down the the layers of envelope and add new ones. A nest around September may contain several thousand workers and can be over two feet long. New queens are produced in the fall and will mate and find shelters to overwinter. Only mated queens survive, males, workers and the old queen will die during winter.

Control and prevention Because these wasps prey on other insects, they are beneficial to gardeners and agriculture. If they are nesting near your house and a family member is allergic to stings, however, extermination may be the only option. Nest removal before workers are emerged would be easy in April and May. If the nest reaches football size, you must use a wasp and hornet spray. Wait until after dark for all workers to return home, then direct a stream of spray toward the entrance hole. Use the whole can if the nest is large. Wait for two to three days before disposing of the nest. If you are allergic to insect stings, have someone help you or call a pest control firm listed in your yellow pages.

Disclaimer: This fact sheet is for information only. Mention of products does not indicate endorsement. Prepared by Zachary Huang, Department of Entomology, Michigan State University, East Lansing, MI 48824, USA. Email: bees@msu.edu.

url: <http://cyberbee.msu.edu/column/stinging/hornets.pdf>