

THE PAPER MAKERS

by Chet Ryndak, Naturalist



From late summer until the first hard frost of autumn, the most frequent telephone calls to our nature centers relate to "bee" problems. Usually, the actual problem animals or culprits are not bees but wasps. During mild autumn weather, these insects gather on ripened fruit, harass picnickers, fly about the sides of buildings (seeking out the warmth of the sun) and cruise into the interiors of homes (hunting for food or a place to winter over). Wasps prey upon other insects and are largely meat eaters. When swatted at, wasps are quick to retaliate and to turn the tables. Female wasps are armed with a stinger, which can be used several times in succession, and will furiously defend their nest.

Ants, bees, and wasps all belong to the same group of insects, the order of *Hymenoptera*. Many of the species in this order are called "social" insects. They live in a "colony" consisting of a queen, a mated female, who does the egg-laying; unmated females, the workers, who do most of the chores; and drones, a colony's only males, who mate with new queens. Workers, who make up the majority of the colony's population, function under a caste system in the division of labor.

The bald-faced hornets, the yellow jackets, and a species called the paper wasps are grouped together as "paper wasps," because they rear their young in intricate cells of paper similar in appearance to the honeybee's

wax comb. These wasps are the world's finest paper makers, constructing their paper nests from chewed pieces of wood and paper. An egg is laid in each chamber and the grubs are fed by the queen and later by infertile female workers.

Quite conspicuously, the species named paper wasp builds an umbrella-like comb which is suspended by a short stem from beneath eaves, windowsills and other over-hanging structures on houses; or in trees and shrubs. The queen hibernates in winter, using the walls of a building or crevices in logs or trees as a hiding place. When she emerges in the spring, she constructs a small wood-pulp nest, made up of only a few cells. After the first eggs are laid and hatched, she busily feeds the growing larva until they cover the cell with silk. Upon emergence, the wasp is now an adult worker who aids in feeding young and nest building. The nest usually reaches a diameter of four to six inches. Toward the end of summer, males and queens are produced. Mating occurs, and the young queens go into hibernation. The workers and males do not survive.

The bald-faced hornet builds an oval nest, which can be larger than a basketball. It is suspended from the branch of a tree or anchored amongst the stems in a bush. The nest contains many levels of paper combs and has an outer covering made up of sheets of gray to brown paper. A bald-faced hornet nest can contain thousands of hornets. They are extremely aggressive to any intruder. When summer is over, workers and males perish and only the young queens survive by hibernating.

In contrast, a yellow jacket's nest is built within something else such as in the ground, in hollow trees, stumps, and in the outside walls of houses. The paper combs are in layers, enclosed in sheets of brown paper. Other

than nest location, this wasp's life style is similar to the two species described above. It is the species commonly found around areas used by people.

To avoid being stung by wasps and bees, there are some precautions you can take. When being pestered by a wasp or bee, rather than swatting at the insect, walk away from it. By trying to shoo them away, they can become more aggressive. When on a picnic, keep food covered so as not to attract wasps. Also, use bottled pop rather than canned soda. An open pop can become an invitation to a yellow jacket or bald-faced hornet. Once in the can, the risk of being stung in the mouth or throat can become quite real. If you have fruit trees, remove any fallen or rotting fruit, as this becomes a congregating place for wasps. If a hornet nest should be built in your yard, avoid removing it until the first hard frost. If the nest is in a precarious position, where there is constant danger of someone being stung, then a competent animal removal agency should be contacted to eliminate the nest. Rotting or hollow railroad ties and any rotting timbers in flower or vegetable gardens should be removed, for they offer ideal locations for yellow jacket nests. Also mortar should be tuck-pointed and wood frame structures caulked tightly, to prevent the yellow jackets from nesting in the home. Using petroleum jelly, Vaseline, in the ceilings of bird nesting boxes usually stops the paper wasp from building its nest, which will aid both the nesting bird and the person monitoring or examining the box.

A word to the wise, let it be, even if it isn't!

Forest Preserve District of Cook County

Editor's Note: Any person who is stung and then shows signs of high blood pressure, nausea, high temperature or other allergic symptoms should call a physician.

(cont'd. page 10)

Country Club Greens Grade Fertilizers

Gold Cup quality for great-looking
greens, tees & fairways.



PRODUCT	TURFGRASS USE	ORGANIC CONTENT	SQ. FEET COVERAGE
Country Club 18-4-10	Greens Tees Fairways	90%	9,000
Country Club 18-3-12	Greens Tees Fairways	70%	9,000
Country Club 18-0-18	Greens Tees Fairways	80%	9,000
Country Club 8-4-24* 100% Sulfate of Potash	Greens Fall Fairway Year Round	30%	12,000*

The particle sizing is a small homogeneous granulation for less mower pickup.

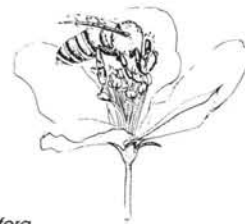
Brian McGuffin

Lebanon
TOTAL TURF CARE

1332 Reichert Road Crete, IL 60417 (708) 672-7537

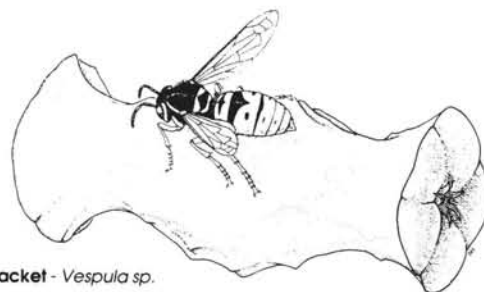
Bees & Wasps

Illustrations by Nancy Halliday, Naturalist
Forest Preserve District of Cook County



Honeybee - *Apis mellifera*

Size: worker 1/2 in., drone 3/4 in., queen 3/4-1 in.
Body Color & Characteristics: Black base color with orange (or amber) colored bands. Body very hairy.
Nest Type: Wax combs with hives developed within a protective structure i.e. commercial hives, building walls, hollow trees and the like.



Yellow Jacket - *Vespa sp.*

Size: 3/4 in.
Body Color & Characteristics: Blue-black base color with bright yellow stripes encircling the abdomen. Body smooth and glossy.
Nest Type: Paper comb built below ground in tunnels or under other protective cover i.g. the siding of buildings.
Comment: This wasp is the nuisance at most picnics. It's the species that goes after soda, hot dogs, pastry and the like.



Paper Wasp or Polistes - *Polistes sp.*

Size: 3/4 in.
Body Color & Characteristics: Blue-black base color with bright yellow stripes encircling the body and orange patches on the abdomen. Body smooth and glossy with the abdomen very tapered at the front (waspish waist).
Nest Type: Umbrella-shaped paper comb, suspended from beneath an overhanging protective structure i.e. windowsills, roof eaves, soffits etc.
Comment: This wasp and its nest is the most common species observed around the home.



Bald-faced Hornet - *Vespa maculata*

Size: Worker & drone 3/4 in., queen 1 in.
Body Color & Characteristics: Blue-black base color with yellow or white bands or patches at tip of abdomen. Body mostly smooth and glossy with some hair and having a chunky appearance.
Nest Type: Paper comb in a ball shaped nest suspended from tree branch.
Comment: This docile species is frequently seen in yards stripping fiber off of weathered wood.

Gregory E. Martin
General Partner

1700 North Farnsworth

Suite Thirteen

Aurora, Illinois 60505-1512

708-851-9977

**Martin
Design
Partnership**

Landscape
Architecture

Golf Course
Architecture

Land Planning

OLD



DUTCH

SAND COMPANY, INC.

APPROVED TOP DRESSING SAND
GOLF COURSE AGGREGATES
TRAP SAND

Call for direct quotes on all your
Aggregate needs

Richard E. Mika

(312) 374-2303

(219) 938-7020