



SIMPLE ECOLOGY

The Family of VESPIDAE: Wasps

Paper wasps, yellowjackets, and bald-faced hornets all make paper nests. Paper wasps build umbrella-shaped nests. Bald-faced hornets construct large, football-shaped nests. Yellowjackets make their nests underground.

Wasps turn raw wood into sturdy paper homes. A wasp queen uses her mandibles to scrape bits of wood fiber from fences, logs, or even cardboard. She then breaks the wood fibers down in her mouth, using saliva and water to weaken them. The wasp flies to her chosen nest site with a mouth full of soft paper pulp.

The nest itself is comprised of hexagonal cells. The queen protects the brood cells by building a paper envelope, or cover, around them.

Wasps, yellowjackets, and bald-faced hornets don't overwinter. Their old nests degrade over the winter. Only the mated queens hibernate during the cold months, and these queens choose the nesting sites and begin the nest building process in spring.

Wasps we see in our area are of the family Vespidae. Vespids all construct paper nests.

Should you let a colony of stinging wasps live in your yard? Nest-making social wasps are largely beneficial insects. Paper wasps and bald-faced hornets prey on other insects and play an important role in controlling plant pests. If you eliminate these wasps entirely, you may give garden and landscape pests free reign to destroy your prized ornamentals and vegetables.

Our activity today is to create a model of a wasp nest, this will most resemble a bald-faced hornet's nest.

MATERIALS:

1 Balloon

Equal parts water and flour (start with 1 cup each)

Mixing bowl

Newspaper

PROCEDURE:

1 Cover your work area.

2 Blow up your balloon.

3 Rip paper into strips about 2 inches wide.

4 Mix flour and water to a smooth paste consistency.

5 Run strips of paper through the paste, smooth with hands and apply to the balloon.

6 Make sure the entire balloon is covered with "papier-mache" strips with no gaps.

7 Smooth and apply more paste if needed to hold paper to balloon and make a smooth surface.

8 Let dry – usually about a day.

9 Take a needle or pin and insert through paper to pop the balloon.

10 Paint with grey paint (mix black and white to make grey).