The caterpillars of this bug are leaf-eating machines! They can totally strip every leaf from oaks (their favorite food) and many other tree species.
**Identification**

Late stages of the larvae (caterpillar) are usually about 2 inches long. They have a mottled yellow to gray pattern with tufts of bristle-like hairs and a unique color pattern of five pairs of blue dots followed by six pairs of red dots along their backs.

Gypsy Moth (*Lymantria dispar*) egg masses are usually 1.5 inches long and about 0.75 inch wide. They can contain up to 1,000 eggs and are covered with "buff" or yellowish hairs.

The female Gypsy moths do not fly, they crawl and lay eggs. Here we see an egg mass covered with "buff" or yellowish hair from the abdomen of the female.

Male gypsy moths (*Lymantria dispar*) are brown with a darker brown wing pattern, and have a 1.5 inch wingspan. Females are almost white, have dark saw-toothed patterns on their wings and are slightly larger.

Male gypsy moths also have feathery antennae!
Gypsy Moth (Lymantria dispar) egg masses can be found between August and April. After eggs hatch in the spring, the caterpillars (larvae) feed on tree leaves.

The larvae grow in stages called "instars" and must molt in between each stage. Male gypsy moths have five instars and females, six. The larvae are what cause all the damage to the trees and can be found from May to June.

After the final instar stage, the larvae transform (pupates) before becoming an adult moth. Gypsy moth pupae can be found early to mid-July.

Here we see an adult male and female moth ready to reproduce late in July.

Photo credits:
1507053 USDA Forest Service Region 8 Archive  1441160 USDA Forest Service Rocky Mountain Region Archive  5020053 Pennsylvania Department of Conservation and Natural Resources - Forestry Archive
Aspen is another favorite of the gypsy moth. The bigtooth aspen (Populus grandidenta shown here) has alternate, oval to ovate, shiny leaves with flattened bases attached to long stalk, making them easily ripple in the wind. As its name implies, it has "big teeth" on the edges of its leaves.

Gypsy moth also feeds on several types of birch trees. The outer bark of this paper birch (Betula populifolia) is smooth, thin and white. The inner bark is orange. The Paper Birch grows along stream banks, lakeshores, and on the moist slopes of hills.

Gypsy moths can feed on over 100 species of wood plants but oak trees are one of its favorite foods. With over 50 species of Quercus in the U.S. alone, oak leaves come in many different shapes!

Oaks tend to grow large and round, reaching heights of over 100 feet or more. Acorns are a sure sign you have spotted an oak tree.

Sweetgum (Liquidambar styraciflua) is also preferred by gypsy moth. These trees can reach 100 feet tall, have 3-7 lobed, star-shaped leaves and a distinctive spiky fruit. Sweetgum leaves are green most of the year but can turn many different colors in the fall.
GYPSY MOTH

Symptoms

Keep alert for egg masses on trees, logs, stones, walls, and other object in the outdoors. An egg mass can contain up to 1,000 eggs and is covered with buff. They average 1.5 inches long and three-fourths of an inch wide.

Branch that has been completely defoliated by larval feeding.

Early second instar larvae with shot-hole damage on chestnut oak.

Gypsy moth larva feeding on leaves - Caught in the act!

Closeup of leaves that have been skeletonized by gypsy moth larvae.
**Gypsy Moth**

**Damage**

<< An entire stand of trees can be defoliated by gypsy moth.

Defoliated forested area in late spring.

<> Gypsy moth defoliation of oaks and other broadleaf trees.

Summer defoliation caused by an extensive gypsy moth infestation.

Special color infrared aerial photos are taken to show heavy defoliation by the gypsy moth. ☑️

**Photo Credits**

0886007 Tim Tignor, Virginia Department of Forestry, Bugwood.org

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0758032, 0758038 William M. Ciesla, Forest Health Management International, Bugwood.org
Pheromone lure traps effectively capture male adult Gypsy moths. They aid in determining emergence of the moth to a specific area.

Spray treatments are considered if gypsy moth populations are at damaging levels.

Gypsy moth populations can only reach outbreak levels where their preferred species are abundant; otherwise they crash because of starvation and disease.

Deer mice are an important native and natural enemy of gypsy moth.

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1523119 Daniel Herms, The Ohio State University, Bugwood.org
2253091 Bill Antrobus, USDA Forest Service, Bugwood.org
2122011, 0488029, 2122004 John H. Ghent, USDA Forest Service, Bugwood.org
Why Do Plants Need Heroes?

Every year, plant pests and diseases damage and kill millions of trees, both in our neighborhoods and in natural areas. This damage has a negative impact on vital ecosystem services like air and water purification and costs billions of dollars in cleanup and lost revenue.

Who are the Plant Heroes?

The Plant Heroes are four young adults who share a love of nature and interest in science. A non-governmental organization (NGO) has heard about their passion and invited them to join together as a ‘super team’ to detect and combat bugs and diseases that harm plants and ecosystem health. The Plant Heroes scout for these threats and report suspicious sightings to their county extension or local forester, who contacts officials and provides mission details and scientific supplies in order to defeat the bad bugs and diseases.

How can you be a Plant Hero?

Help neutralize the threat of plant pests and diseases by becoming a part of the Plant Hero team. Take the Plant Hero Pledge and explore the website to learn more about what to look for and how to report suspicious plant pests and diseases. The more you know, the more you can protect the plants in your own yard, neighborhood and community!

Plant Heroes is brought to you by the American Public Gardens Association

Founded in 1940 as the American Association of Botanical Gardens and Arboreta, the American Public Gardens Association adopted its new name in 2006. Over the last seven decades, the Association’s has emerged as the premiere association for public gardens in North America.

Today, the Association’s 500 member institutions are located throughout the United States, the District of Columbia, Canada, and seven other countries. Our vision is “A World Where Public Gardens Are Indispensable” as they provide botanic, conservation, community, education, and economic resources to their community.

The Association is committed to increasing the knowledge of public garden professionals throughout North America—through information sharing, professional development, networking, public awareness, and research—so that they have the tools to effectively serve visitors and members.