

Help your woods resist pest outbreaks

In Your Backyard Woods

Insects and microorganisms abound in your backyard woods. These tiny creatures recycle nutrients, decompose plants, control other organisms, and affect your woods over time. A woods without insects and microorganisms would not be healthy; in fact, it would cease to function!

However, epidemics of tree insects and microorganisms can hurt your woods. You should be prepared to protect your trees. Your first focus, however, should be on making changes to your woods that make it more resilient and less susceptible to pests in the first place.



Bill Beatty, Wild and Natural, WV

Most leaf-feeding insects are not pests, so you do not need to spray when a few caterpillars are feeding on your trees. Usually a tree can have half of its leaves eaten before any damage or growth loss occurs.

Preventing Pests

The best time to think about pests is before they attack your woods. A woods with a diversity of tree species that are well adapted to the site has fewer pest outbreaks. If your woods has only a few tree species, plant other native types. Trees become stressed when they are over crowded and are more likely to be attacked by pests. Thinning and harvests can keep your woods vigorous.

“Pest” is a general term that includes insects, plant pathogens (fungi, bacteria, or viruses that cause tree diseases), and other living things that compete with human desires. Organisms become pests when their numbers are high enough to cause damage. Less than 1 percent of insect species are considered significant pests.



Identifying Problems

Often the first clues of a pest problem are symptoms such as red needles, yellowing leaves, or wilting foliage. Note the pattern

of these symptoms on individual trees. Then, consult reference materials to see if you can identify the pest or seek professional assistance.



Dennis Haugen

Not all forest health problems will be easy to figure out. Some trees have problems that are the result of multiple factors. These trees are suffering from oak decline caused by drought, insects, pathogens, and other factors that stress trees.

Treating Pests

If you do have a pest outbreak in your backyard woods, don't automatically think about spraying pesticides. Various other control options exist.

- Infested trees may be cut and destroyed to keep the problem from spreading.
- Natural enemies of the pest should be conserved.
- Insect traps and barriers may be effective if your pest problem is only impacting a few trees.

- Pesticides are another option to consider if warranted. As with any pesticide, follow the label directions and apply it only for the pests for which it is registered.



Natural enemies can keep potential pest populations at bay. Here a ladybug beetle larva feeds on aphids.

Bill Beatty, Wild and Natural, WV



Pruning the infected lower branches of white pines can reduce damage caused by white pine blister rust.



A spray plane applies an insecticide to control gypsy moths on the Nantahala National Forest in North Carolina.

In the Forest

Forest managers control pests on public and private forests to protect economic, environmental, and social values. Many potential pest problems are avoided and forests stay healthier using management practices that allow forests to recover quickly from stress. When managers discover serious pest problems, however, they apply suitable treatments to reduce the pests while sparing other living things. This holistic, ecological approach helps assure the long-term productivity and health of the forest.

Did You Know . . . ?

The gypsy moth was intentionally imported into Massachusetts in 1869. A French naturalist attempted to interbreed gypsy moths with silkworms to develop a silk industry in North America. The experiment failed and gypsy moths escaped. Gypsy moths have spread slowly throughout the Northeastern States over the subsequent 100 years, and are beginning to invade Midwestern and Southeastern States now.

Family Activity: Insects Are Everywhere!

Build an insect trap with your family (see instructions). Hang it on a tree. Check your trap after a few days. If you find creatures inside, use an insect field guide to try to identify them.

You'll need:

- * 2-liter, empty plastic bottle
- * Duct tape
- * String
- * Overripe banana, cut into small pieces
- * Scissors
- * Insect field guides (They can be found in the library, bookstores, and on the Web.)



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Cut the bottle off about 1/3 from the top. Plop in pieces of an overripe banana, other smelly ripe fruit, or peanut butter. Insert the top portion upside down, back into the bottle, and use duct tape to secure it. Tape string on the sides to make a handle, and your trap is ready to go!

Insects are among the most numerous creatures on the Earth, and there are many places to find them. Try looking . . .

- * Under wood and rocks
- * In compost piles
- * In the soil
- * On leaves and twigs
- * Near lights at night
- * In grassy areas (for jumping insects)
- * In the air (for flying insects)

Discuss whether insects are “good” or “bad.” Point out that people decide which insects are pests and which aren’t, based on what’s “bugging” them. Most insects do important work, such as recycling nutrients, pollinating plants, and preying on other insects.

Pesticide Precautionary Statement:

Pesticides used improperly can be injurious to humans, animals, and plants. Follow label directions and heed all precautions on the label. Store all pesticides in original containers and out of reach of children. Apply pesticides selectively and carefully. Do not apply a pesticide when there is danger of drift to other areas. After handling a pesticide, do not eat, drink, or smoke until you have washed. Dispose of empty pesticide containers properly.

NOTE: Registrations of pesticides are under constant review by the Federal Environmental Protection Agency. Consult your local county agricultural agent or State extension agent about restrictions and registered uses of particular pesticides.