

Bagworms on Evergreens

by

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After publication of my June 5th article on fungal diseases of Leyland cypresses, the Gloucester Extension Office received several calls requesting Tree Stewards to make home visits to identify their Leyland cypress problems and provide information on the treatment and care of these beautiful trees. One property owner had planted a wide variety of evergreens, including Leyland cypress and we were able to identify not only fungal disease, but infestations by bagworms as well.

Last week I received a note from a reader who enjoyed my article, but wished I had included information on the destruction wreaked by bagworms on Leylands. I don't know if this is synchronicity, but it made finding a topic for this week's column much easier.

Bagworm infestation is a serious problem, affecting not only Leyland cypresses, but junipers, arborvitae, spruce, and other evergreens, causing extensive defoliation and potential tree death. Bagworms are not the same as tent caterpillars or fall webworms. Virginia Cooperative Extension (VCE) Publication 2808-1008 identifies the offending caterpillar as *Thyrodopteryx ephaemeraeformis*, the larva of a small, hairy, brown moth. According to NC State Cooperative Extension Publication ENT/ort-81, female bagworms are wingless and die in their bags, after laying 500-1000 eggs during the fall. The larvae hatch in early spring and spin down on fine silken threads to be dispersed by the breezes. Most will land on their host tree, but some are "ballooned" to other trees. Once the larva lands on a tree, it will spin a silken bag, initially easy to miss at ¼ inch in length. As the larva grows, it will enlarge the size of the bag to about 1 ½ inches, camouflaging it with plant debris. The bags resemble upside-down ice cream cones hanging from the branches. The caterpillars mature into the pupal, or resting, stage in August. Mature male moths emerge in September or October, and mate with females in other bags, leaving the females to lay eggs for the next generation.

Bagworm larvae feed on the needles of evergreens and the leaves of some deciduous trees, which, unlike the evergreens, usually can produce new leaves. Bagworm infestation often goes unnoticed until major destruction has occurred and the bags are large enough to observe, so it is important for the property owner to check for the presence of small bags in the spring or early summer.

If only a few trees are infested, hand-picking the bags and disposing of them by burning is a feasible treatment. If the trees are large or many trees have been affected, a number of pesticides are available for use by the homeowner. Some chemicals require application by a commercial applicator. VCE Publication 426-366 recommends a biological product, *Bacillus thuringiensis* or BT, which is a bacterium that infects the young bagworm larvae, causing them to sicken and die,

usually within 72 hours. BT is available commercially under several trade names. The bacterium will not infect humans or animals. Any product used to combat bagworms should be applied during the first half of June in order to kill larvae while they are small and more susceptible to treatment, but application should still be effective at this point. Trees that contain bags over the winter will need to be treated the next spring.

Gloucester Master Gardeners and Tree Stewards are available to help you with bagworm or other problems, and to answer questions about pesticide use. Call the Gloucester Extension Office at (804) 693-2602. VCE Publications 426-706 and 426-710 contain crucial information about choosing and applying pesticides safely.

Let us hope for a summer with evergreens free of bagworms and fungal diseases!

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