

Bagworms Hatched Earlier Than Expected

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Bagworms are caterpillars that live inside spindle-shaped bags which they construct to protect themselves against birds and other enemies. These bags, composed of silken threads and bits of foliage, look so much like a part of the tree that they may go unnoticed until extensive damage has occurred.

Bagworms usually hatch out from an overwintered bag during the first week or two of June. I've discovered that there have already been signs of hatching, making their emergence a couple of weeks earlier than normal. This can be attributed to the early warmup we had earlier this year.

Some of the bagworm caterpillars will remain on the same tree, and will make new bags around themselves as they feed on the foliage. However, some of the bagworm babies will release a long strand of silk, which is caught by the wind. The baby bagworms are then carried by the wind for great distances, much like the baby spiders at the end of "Charlotte's Web." When the silken parachute brings them to another tree, they will begin to feed and create their own bags.

The caterpillars crawl part way out of the bags to feed. If disturbed, they retreat safely inside, and are almost impossible to pull out. By late August, they have reached their full size (about 2 inches long). At this time, the winged male moths emerge from their bags, and mate with the females, who never leave their bags. The female bagworm will lay up to 1000 eggs in her bag, and then die. The bags remain on the branches over the winter, and the eggs within will hatch out in late spring the following year.

Although bagworms can be found on almost every plant, they prefer to feed on evergreens, especially eastern red cedar and juniper. They begin feeding within the body of the evergreen, where they and their damage are not easily seen. As they enlarge, they begin moving outwards towards the tips of the branches. By the time most gardeners realize that they are present, entire limbs have been stripped. I've seen the tops of many large, stately cedars killed by heavy bagworm infestations.

Controlling bagworms is relatively easy, if you start early. The younger bagworms are more easily controlled than the larger ones. By August, they are almost impossible to kill.

One of the safest and most effective products to use is *Bacillus thuringiensis*, otherwise known as BT. It is sold locally by the trade names of Dipel, Biotrol, or Thuricide. It is a naturally occurring bacteria that only kills caterpillars, so it won't hurt bees, birds, or other beneficial insects. This product needs to be sprayed thoroughly onto and into the canopy of infested trees; a light spray just on the outer needles will not kill the bagworms. BT can be used throughout June with great effect.

Starting in July, the caterpillars are too large to be controlled by BT. Numerous other products will work, including Malathion, cyfluthrin (Bayer Lawn and Garden), and permethrin. Carbaryl (Sevin) will also kill them, but because it also kills many beneficials, expect a population explosion of spider mites if you use this.

Of course, if you have nothing else to do in the garden, you can just pick them off the branches and throw them in a bucket, to be disposed of later.

For more information on pest control, please contact the Purdue Extension Service at 812-435-5287.