



Banded Ash Borer

Fact Sheet No. 11

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Identification and Habits

The banded ash borer, *Neoclytus caprea* (Say), is a member of the family Cerambycidae. These beetles are commonly called long horned beetles because of their long antennae. The larvae are usually called round headed borers and all but a few members of the family live in the tissues of trees or other woody plants. This particular species occurs in eastern Canada and throughout most of the United States.

Adults of the banded ash borer are dark brown to almost black and from 1/2 to 1 inch long. There is a line of fine, white or yellowish hairs on the thorax and four bands of the same material and color across the elytra (wing covers). The first two bands meet, almost forming circles.

The larvae of the banded ash borer are wood borers found under the bark or in the sapwood. Hosts of the banded ash borer include ash, hickory, elm, mesquite and, occasionally, white oak. This species generally will not attack a healthy tree, but is attracted to dead, dying, diseased or stressed trees.

Life Cycle

Adults emerge in early spring and fly to host material where they deposit eggs in crevices in the bark. Ash logs cut during the winter are especially subject to attack. The larvae feed under the bark for a period of time before boring into the sapwood where they feed for the remainder of the summer. Pupation occurs in the fall but the adult does not emerge until the following spring. There is usually one generation per year; however, if the infested material is sawed, stored and dried out, the life cycle may require several years to complete.

Control In Trees

Chemical control for this species and related borers on standing trees consists of spraying the trunk from the soil surface up to (and including) the major lower limbs with a suitable insecticide. Treatments with products containing chlorpyrifos or lindane are often recommended for wood borer control. The only other active ingredient in homeowner-type products labeled for bark treatments to control wood borers is carbaryl. Professional-type

formulations containing azinphosmethyl, bendiocarb, bifenthrin, cypermethrin, and permethrin are also available.

When treating trees for banded ash borers, the first application should be made around the end of April with subsequent applications made at 3-4 week intervals through the first half of August. Before purchasing or applying any insecticide, read the label to be sure the type of tree you want to treat is listed.

The banded ash borer generally attacks only unhealthy trees. Consequently, one of the control recommendations is to keep trees in good condition by pruning out damaged wood and maintaining good cultural practices such as proper watering and fertilization. Young trees should be wrapped from the soil surface up to the first large limb to prevent sunburn and borer attack.

Firewood Infestations

This insect is also one of the species that emerges from infested firewood brought into the home. When the wood is brought into a heated structure it "fools" the biological clock of the beetle into "thinking" it is spring and causes the beetle to emerge early. Under these circumstances emergence can occur anytime during the winter or spring. Many homeowners are alarmed by the sudden appearance of these beetles and, due to the black and yellow coloration, often mistake them for some type of wasp.

In the home these beetles are merely a nuisance. They will not harm people, pets or structures. They will only infest host material with the bark still attached and will not damage finished lumber. About the worst thing they can do is mate and reinfest the firewood.

Once they emerge in the home the simplest control measure is to merely swat them with a fly swatter, sweep them up and throw them outdoors or in the trash. They can also be killed by spraying them directly with aerosol household insecticides labeled for control of flying insects. Such chemicals as pyrethrins, resmethrin and chlorpyrifos are labeled for this purpose. These materials are expensive, generally leave an odor, and usually are not required for the number of beetles that have to be dealt with. If the firewood is found to be infested you can greatly reduce the number of beetles that emerge in the home by leaving the wood outdoors until you are ready to burn it.

Firewood piles may be repeatedly infested by these beetles until the wood dries out to the point it is no longer attractive for oviposition. One method to prevent reinfestation is to debark the wood, but this is difficult and time consuming. Storing the wood under clear plastic tarps has produced mixed results. If done properly, with the edges of the tarp sealed by piling soil on top of them, the temperature in the wood pile may rise high enough to kill the borers. You may experience some problems with condensation and mold growth on the wood with this method.

Black plastic is not recommended because the beetles can detect light coming through pinholes in the plastic, congregate at the holes, and chew their way out.

Spraying the firewood with insecticides is generally not recommended because multiple applications would be required and all bark-covered surfaces of the wood would have to be

sprayed to offer complete protection. This usually isn't practical in large wood piles and it is easier to use up small wood piles than it is to treat them.

Precautionary Statement

All pesticides have both benefits and risks. Benefits can be maximized and risks minimized by reading and following the labeling. Pay close attention to the directions for use and the precautionary statements. The information on pesticide labels contains both instructions and limitations. Pesticide labels are legal documents, and it is a violation of both federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for proper use. Always read and follow the label.

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