



Utah State University Extension
Fact Sheet No. 12
Revised February 1992

Blackhorned Pine Borers

Identification

The blackhorned pine borer, *Callidium antennatum hesperum* Casey, 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. These beetles are common species in western forests, attacking boles and limbs of dead or dying pine, Douglas-fir, and mountain hemlock.

The adult is flattened, bright metallic blue, violet or bluish-black, and from 3/8 to 1/2 inch long. The males' antennae are somewhat shorter than the body; the thorax is rounded with depressions on each side of the middle, and the legs are black with large femora.

They generally will not attack a healthy tree but are attracted to dead, dying, diseased, or stressed trees. Consequently, one of the control recommendations is to keep the tree 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 later borer attack.

Damage

Adults appear in early spring and fly to host material where they deposit eggs beneath bark scales on dead trees or on cutwood that has seasoned over winter. The larvae feed in the phloem and outer sapwood making broad, meandering, intertwined tunnels in the wood and pushing large quantities of frass through small holes in the bark. Pupation occurs in the wood in long cells plugged with wads of fibrous frass. There is usually one generation per year.

This species frequently causes serious losses to improperly-edged lumber in lumber yards. Rustic work and houses built of pine logs are also subject to serious damage, the wood being badly riddled and weakened and the bark so loosened that it falls away. Prompt utilization of logs, the removal of wane on cut lumber, and kiln drying are recommended methods of control.

Control in Firewood

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. In the home they 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 (Dursban) 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 that 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 label. 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 federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for its proper use. Always read and follow the label.

Dr. Jay B Karren
Extension Entomologist