West Virginia University
Extension Service

6003

Powderpost Beetles

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The phrase "powderpost beetle" is one that most homeowners recognize. The mere name conjures up images of shot-like holes spewing forth sawdust, and one's house ultimately being reduced to a powdery heap.

Identification

True powderpost beetles, also called "lyctid powderpost beetles", belong to the beetle family Lyctidae. Adult beetles are 1/8-inch to 1/4-inch long, dark brown, and flattened, with a head that is visible from above. Their excrement or "frass" is very fine, almost like talcum powder. Their exit holes are tiny and round, only about 1/32- to 1/16-inch in diameter.

Damage alone is not proof of an active infestation.

Anobiid powderpost beetles, sometimes referred to as "furniture beetles," belong to the beetle family Anobiidae. The adults are brown, 1/16-inch to 3/8-inch long, with their head covered by a hoodlike thorax. Their exit holes are round, about 1/16- to 1/8-inch in diameter. Their frass is powdery and contains tiny pellets that feel gritty when rubbed between the fingers.

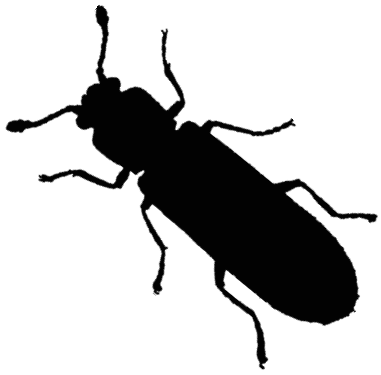
Biology and Habits

Lyctid powderpost beetles feed on wood from hardwood trees. They require wood with a high starch content and large pores, such as oak, in which to lay their eggs. Lyctids generally prefer newly seasoned wood and are sometimes encountered in hardwood flooring, paneling, and furniture. Since most structural lumber comes from softwood trees, lyctid powderpost beetles are not a problem in structural wood.

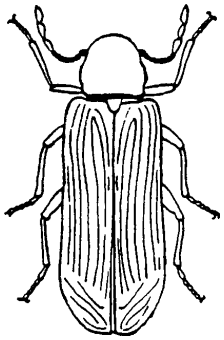
Anobiid powderpost beetles feed on hardwoods such as yellow-poplar and softwoods such as pine, sometimes infesting structural wood. They cannot develop successfully in wood with a moisture content below 12 percent. They are most often encountered in crawl spaces, garages, and outbuildings because of the high humidity in those areas. Most anobiid powderpost beetle infestations begin in crawl spaces and, if not controlled, can spread upward into wall studs or flooring. The life cycle of anobiid powderpost beetles normally lasts one to two years.

Prevention Methods

Powderpost beetles are very sensitive to dehydration and are unable to complete their development without adequate wood moisture. Moisture control is often an effective prevention method. The moisture content of wood in crawl spaces can be reduced with plastic soil covers, also known as vapor barriers or moisture barriers, used in combination with ventilation openings. In living areas or basements, an air-conditioner or a dehumidifier can be used to control moisture.



Lyctid powderpost beetle



Anobiid powderpost beetle

Is the Infestation Active?

The most difficult question to answer is whether a powderpost beetle infestation is active. West Virginia's treatment standards for wood-destroying insects requires confirmation that an active infestation exists before treatment can be applied. Since it can be difficult to distinguish recently made exit holes from old ones, sometimes even an expert will find it difficult to decide if an infestation is active and requires treatment.

The presence of an active infestation can be confirmed by the presence of live larvae or adults, or by frass having the color of fresh-cut wood. Dull-colored frass and exit holes often are inappropriately used as evidence. Damage alone is not proof of an active infestation. It is important to remember that the beetles may be long gone and the infestation completely inactive, but the exit holes and frass will always remain.

Moisture control is often an effective prevention method.

Control Strategies

If you do have an active infestation, there are several control options. The method of choice should depend on the extent and accessibility of the infestation.

A limited infestation in a damp area such as a crawl space often can be controlled by a reduction in humidity and wood moisture content. (See desription of techniques in Prevention Methods.)

A more extensive powderpost beetle infestation may require the services of a professional pest control operator. There are few do-it-yourself products on the market for powderpost beetle control. Professionals have the knowledge to decide how the treatment should be carried out and which product is the right one to use.

A very extensive or inaccessible infestation may require fumigation. This method provides immediate control of all life stages of the insects, but is expensive and leaves no residual insecticide to prevent later reinfestation. Fumigation may be necessary for a house involved in a real estate transaction in order to ensure that the house is insect-free at the time of sale.

A less drastic, and less expensive, control method is surface application of a residual liquid. Several pyrethroid insecticides are labeled for application as surface treatments. A surface treatment may not provide immediate control of the larvae, but should control adult beetles as they emerge, thereby preventing reinfestation.

Some of the newest items in the pest control operator's beetle-control toolbox are the boric acid products. These are available as liquid concentrates and water-soluble powders for application to the wood's surface. Ingredients in the formulation aid in diffusing the active ingredient throughout the wood.

If you do find yourself with an powderpost beetle infestation, beware of high-pressure sales tactics. Don't let yourself be rushed into purchasing control services. Be aware that if there are noticeable signs, the infestation has been there for a while. Your house is not going to fall down overnight. You have time to get a second or even a third opinion. There is plenty of time to decide if treatment is necessary and to explore various treatment options.

Preparation of this document was financially aided by a grant administered by the Environmental Stewardship Initiative Team, West Virginia University Extension Service.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Rachel B. Tompkins, Director, Cooperative Extension Service, West Virginia University.