

Powder Post Beetles

Phil Pellitteri –U.W.Insect Diagnostic Lab

Powderpost beetles attack porous hardwoods such as oak, walnut, mahogany, hickory and maple. Wood infested with powder post beetles contains many round "shot holes " that are 1/32-1/8" in diameter. A fine dust like powder (similar to talcum powder) is pushed from the holes and often is the first sign of attack. Indoors beetles can be found infesting hardwood flooring and trim, barnboard, rough-sawn timbers, furniture, tools and picture frames.

It takes powderpost beetles a number of years to do significant structural damage. The adult emergence holes cause cosmetic damage to finished wood surfaces. Finding wood with holes does not mean the beetles are still infesting the wood. The loose powder in feeding tunnels can sift out long after the infestation has died out. Unheated buildings, very damp basements, barns, seasoned firewood, and lumber stored outdoors are most often attacked. Take time to properly assess the problem and possible treatments.

Life cycle-Adults are small ,chestnut colored beetles that lay eggs in the pores of wood. Grubs develop and bore into the wood, taking a year or more to mature. Adults are most active in A leave small round 1/32-1/8 inch emergence holes when they leave the wood. Generally in April or May. They are common in dead trees and can be found in seasoned firewood.



Powder -like frass



Emergence holes in wood



Control Options

Proper kiln drying will kill powderpost beetles. However after drying, low moisture wood can become infested in storage if not protected. Recycled barnboard and beams should be examined carefully before installation. Treated lumber is protected from powderpost beetle.

There are some insecticides registered for treating infested wood. They can be sprayed, or painted on the surface. These materials often have an odor and need to be tested for staining and annual treatments may be needed for 2-3 years as they only cover the surface.

A borate wood treatment is an alternative that can be commercially applied or as a do-it-yourself project. The borate product (sodium octaborate; TIM-BOR, BORACARE, or PENNETREAT) is applied to the surface and diffuses into the wood as it dries. This is a stomach poison and kills any insect that feeds on the treated wood. Borate products can be applied by spraying, soaking, or painting unfinished surfaces. Wood that is painted or sealed would first need to be stripped to allow the borates to soak into the wood. This treatment is usually less toxic, has little odor and lasts much longer than an insecticide treatment. For outdoor use the borates must be sealed into the wood or they can leach out with high amounts of moisture. Look for these products at lumber yards, log home supply companies, or on the internet.

For newly installed trim it may be most cost effective to replace the wood. Wood can be fumigated but this treatment requires professional help, is expensive, and does not protect the wood after treatment. Once a surface is sealed, or painted powder, post beetles can not infest the wood.

For small objects such as picture frames, freezing will control the problem if the object is taken from a warm active state and placed at 10° or colder for 3 days. Warming the object up for 48 hrs or more and then re-freezing is added insurance. It is the sudden shock more than the cold that kills the beetles.

For more information: See UW-Extension Bulletin A2509, or contact your County Extension Agent:

© 1999 by the Board of Regents of the University of Wisconsin System doing business as the division of Cooperative Extension of the University of Wisconsin Extension.

An EEO/Affirmative Action employer, University of Wisconsin Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements.

References to pesticide products in this publication are for your convenience and are not an endorsement or criticism of one product over similar products. You are responsible for using pesticides according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.

Thanks to Susan Mahr and Karen Delahosut for reviewing this document.