



OLD HOUSE BORER

Hylotrupes bajulus

INTRODUCTION

The old house borer is one of the most injurious wood-boring insects inhabiting Pennsylvania. The name is somewhat misleading since a large number of infestations are noticed in homes just four to seven years after construction. The larva bores through wood and also feeds on it. Tunnels made by the larva weaken structural timbers. The borers feed only in pine, spruce, and other coniferous woods.

The old house borer is native to North Africa and is believed to have arrived in North America around 1875. The beetles currently range from Maine to Florida and west to Michigan and Texas.

DESCRIPTION

An infestation of old house borers is evidenced by the presence of the adults (Fig. 1), their emergence holes, or by the larvae (Fig. 2) and larval tunnels in the wood (Fig. 3). The black to gray beetles are 5/8 to 1 inch in length and possess long antennae. Fine, gray hairs are present on the thorax with two shiny raised areas on each side. Patches of gray hairs are visible on the wing covers in irregular lateral bands. The pointed abdomen of the females will typically extend beyond the ends of the wing covers. Emergence holes made by the adult beetles are somewhat oval and 1/4 inch in diameter. The cream-colored larvae are up to 1-1/4 inch in length. On each side of the head are three distinct, dark eyes

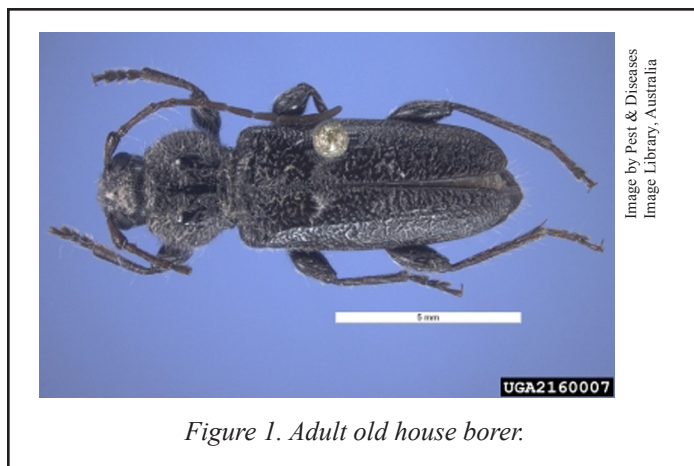


Figure 1. Adult old house borer.



Figure 2. Old house borer larva.



Figure 3. Old house borer larva.

(ocelli) arranged vertically behind the mouthparts. The larval body tapers towards the posterior end. Tunnels made by the larvae contain a sawdust-like material known as frass. The tunnel walls are sculptured (showing where the mandibles scraped away the wood), and the frass is barrel-shaped. The larva, while chewing with its hard jaws, emits a rasping or clicking sound (very similar to the sound produced by clicking fingernails), are often audible to the householder.

LIFE HISTORY

The adult beetles emerge mainly during July and August. They mate, then the female deposits her eggs in the natural cracks and crevices of the bark of felled logs and in wood stored in lumberyards. Subsequently, infested timber may be used in newly constructed buildings. In wood, the larval stage may last from three to fifteen years. The average time for the borers to reach maturity in Pennsylvania (in structures heated year long) appears to be from five to seven years. The majority of borers are secreted in the thicker timbers of a building. Very few ever have been located in wood less than one-inch thick. Nearly all the structural

infestations in Pennsylvania are started by old house borer larvae in some of the original construction timber. Most infestations remain localized. However, where excessive wood moisture is found, such as poorly vented attics and leaky roofs, beetles will flourish, spread to other structural items and cause much damage in a short period of time.

MANAGEMENT

The following points should aid in discouraging old house borer infestations:

1. Rough-cut lumber should be kiln-dried to kill all stages of the beetle.
2. Uninfested wood which is sanded and varnished will not normally be attacked by the adult beetles because they cannot find crevices in the wood surface into which they would deposit their eggs.
3. Surface sprays containing borates will prevent newly hatched larvae from entering the wood. However, this technique is not effective on wood which has been varnished, waxed or otherwise sealed from attack by moisture. The borates will last indefinitely, provided the treated wood is kept dry to prevent water from leaching the material.
4. Fumigation of lumber or structures is the only absolute method of eliminating old house borer infestations, particularly in structures. Fumigations are the use of volatile, poisonous gases which will readily penetrate wooden items and can only be contained within a gas-impervious tarp. Fumigations, however, are very expensive and do not provide lasting protection from re-infestation. Fumigations must be performed by certified, professional pest control individuals specifically licensed to do this type of procedure. The most commonly utilized fumigants contain either methyl bromide or sulfuryl fluoride.

WARNING

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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