Structural Wood Pests

Forest Health Fact Sheet

December 2018

Adults are < 1/3" long

Delta Optimist Newsletter

There are many different types of insects that attack seasoned wood and structural or decorative materials. Many of these insects are beetles. These insects typically feed on wood made from the sapwood rather than the heartwood of a tree because it contains more dietary starch. Once these insects infest wood, there is nothing to do to remove them although heat or gas treatments can kill them. To prevent their entry, a barrier such as a boric acid treatment, paint or varnish (not stain alone) can be applied. It is common for these insects to tunnel out of (even painted or varnished) wood materials years after they have infested due to their slow growth on this nutrient-poor food source.

Powderpost or Shothole beetle (Lyctinae)

Bugwood.org

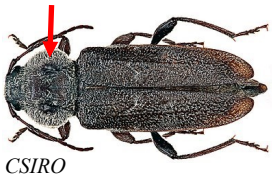
3-7mm long adults that are slightly flattened. Exit holes are 0.8-1.6mm wide and frass (boring dust) is fine. Attacks newer hardwoods and bamboo and may repeatedly reinfest wood.

False powderpost beetle (Bostrichidae)

Salvador Vitanza

3-6mm long adults with blunt, slanted front and rear ends with head not visible from overhead. Exit holes are 3-7mm and frass may be fine or coarse but is clumpy. Attacks newer hardwoods and sometimes softwoods but rarely reinfests the wood.

Old house borer (Cerambycidae/Hylotrupes)



CSIRO

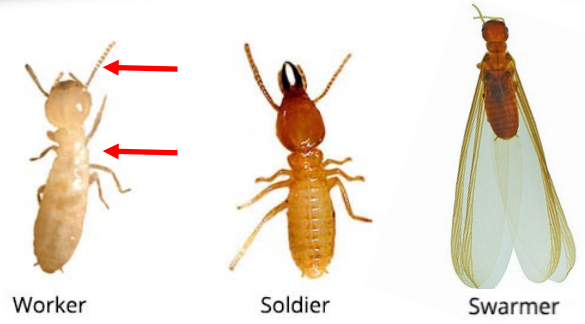
20-25mm adults with two bumps on pronotum (arrow). 6-10mm oval exit holes and powdery frass. Attacks newer softwoods.

Furniture or Deathwatch beetle (Anobiidae)

3-7mm long adults with heads not visible from overhead. Pronotum structure covers head and is pointed. 1.6-3mm exit holes and frass is coarse and packed or in oval pellets. May make tapping or clicking sounds. Attacks newer softwoods and aged softwoods and hardwoods.

Termites

There are two common species of termites in the PNW: the western subterranean termite (Reticulitermes hesperus) and the Pacific dampwood termite (Zootermopsis angusticollis). A third species, the drywood termite (Incisitermes minor), has been found occasionally but there is no evidence that it has become established. The drywood termite occurs in furniture or lumber imported from southern states. The western subterranean termite is more common east of the Cascades, whereas the dampwood termite is more prevalent in western Oregon. If a termite infestation is suspected, contact a certified structural pest control company to identify the termite and determine if control measures are necessary. Termites have straight antennae; ants have elbowed antennae and a narrow waist (see comparison next page).



Thebugguys.com and W.P. Armstrong composite

Holperspest.com and executivepestcontrol.com

Carpenter ants

Carpenter ants are predators that do not feed on wood. They are 0.6-2.5cm long and some individuals have wings. They excavate and nest in moist wood and can be an indication of leaks or other moisture in wood. Removal of moist wood will clear up an infestation.

Various other insects that do not attack wood may be found in structures and may be confused with these insects. These include: skin, larder, hide, leather, carpet, khapra, drugstore, sawtooth, stored grain, red flour, cigarette and mealworm beetles; lesser grain borer, various weevils and India meal or clothes moths.

Management highlights

Kill insects within wood:

- Heat wood at 60° C (140°F) for 60 minutes
- Methyl bromide gas treatment (poisonous, expensive)

Prevent insect attack:

- Apply boric acid product (e.g., Timbor) to surface
- Paint or varnish the surface (stain alone is not an effective barrier)

When using pesticides, always read and follow the label

More information:

Oregon Dept. of Forestry, Forest Health
http://tinyurl.com/odf-foresthealth
2600 State St. Bldg. D, Salem, OR 97310
503-945-7200

Other references:

USFS Forest Health Protection
www.fs.usda.gov/goto/fhp/fidls

OSU Forestry Extension
http://extensionweb.forestry.oregonstate.edu/