Beetle Structural Pests in Oregon

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Chemical Applicator’s Short Course
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Proper Identification is ESSENTIAL for Proper Treatment
Anobiidae (now in Ptinidae)  
Deathwatch Beetles, Furniture Beetles, False Powderpost Beetles

- Adults stout and cylindrical
- Head tucked into thorax, not visible from above
- Antennae with outer segments larger, forming loose club
- **REINFEST!**
Anobiidae: Larvae

- Stout
- C-shaped
- Legs
- Large head capsule

*Anobium punctatum*
Anobiidae: Damage

- Round adult exit holes
- Ill-defined galleries filled with fine frass
Anobiidae: *Priobium punctatum*

- ~2% of infestations in Washington (Suomi & Akre 1993)
- Hardwoods and softwoods
Anobiidae: *Xestobium affine*

- ~2% of infestations in Washington (Suomi & Akre 1993)
- Hardwoods and softwoods
Anobiidae: Pacific Powderpost Beetle

*Hemicoelus gibbicollis*

- ~96% of infestations in Washington (Suomi & Akre 1993)
- Softwoods
Pacific Powderpost Beetle Damage

- Crawl spaces, basements, subfloors
- Most infestations associated with moderate wood moisture, 11-20% (Suomi & Akre 1993)

Suomi & Akre 1993
Figure 27
Anobiidae: Furniture Beetle

*Anobium punctatum*

- World-wide - some WA records, one OR record
- Both hardwoods and softwoods
Bostrichidae
True & False Powderpost Beetles
Adults variable in form

- Slender and flat
- Slender and cylindrical
- Stout
- REINFEST!
Bostrichidae
True & False Powderpost Beetles

- Loose antennal club
- Often with “rasps” on the thorax
Bostrichidae: Larvae

- C-shaped
- Enlarged anterior
- Small head capsule
- Legs
Bostrichidae: *Lyctus*

- True powderpost beetles
- World-wide distribution
  - Hardwoods
  - Often in flooring
- 3 common species
- Once own family, now in Bostrichidae

*Lyctus cavicollis*
True Powderpost Beetle Damage

- Tiny round adult emergence holes (may not be visible)
- Very fine powdery pale frass filling ill-defined galleries
- Adults may be found at windows
Other Lyctinae Genera

- Imported with wooden or bamboo art
- Not known to be structural pests here
Bostrichidae: *Stephanopachys*

- North American natives
- 2 common species in Pacific Northwest
- Softwoods

*Stephanopachys substriatus*
Bostrichidae: Lead Cable Borer: *Scobicia declivis*

- North American native
- Hardwoods (wine casks, lumber)
Bostrichidae: *Polycaon stoutii*

- Southern Oregon, northern California
- Hardwoods, esp. furniture & flooring
Bostrichidae: Bamboo Borers: *Sinoxylon*

- Asia & the tropics
- Hardwoods and bamboo
- Several similar genera (*Dinoderus*, etc.)
Bostrichidae: *Heterobostrichus*

- Tropical and southern U.S.
- Imported furniture, wooden art
- Several similar genera

*Heterobostrichus haematipennis*
Buprestidae: Metallic Wood Borers

- In non-kiln dried lumber
- Don’t reinfest after adults emerge
- Larvae present when milled
- May be larvae for 50+ years

Golden buprestid
*Buprestis aurulenta*

Black smoke-chaser
*Melanophila acuminata*

In lumber from fire-salvaged timber
Buprestidae: Larvae

- Enlarged anterior
- No legs
- Only mandibles visible
- Slender, linear body
Buprestidae: Damage

Sinuous, flat galleries

Galleries packed with fine frass

Oval adult exit holes
Cerambycidae
Long-horned Beetles
Adults

- Slender antennae half as long to longer than the body
- Slender, cylindrical bodies
- In structures, generally dull-colored
- In structures, generally medium-sized (~1/2 inch long)
- Non-structural species often brightly colored with stripes or bands
- Often in firewood brought into homes
- Don’t reinfest (except Old House Borer)
Cerambycidae: Larvae

- No legs
- Front slightly broader than rest of body
- Body straight, relatively stout
- Head capsule visible

The inspiration for chain saw teeth!
Cerambycidae: Damage

- Round (sometimes oval) adult exit holes
- Galleries with coarse or fibrous frass
- Galleries not flat
- Galleries often deep in wood
Cerambycidae: New House Borer

*Arhopalus productus*

- Recent infestations in Georgia
- Green lumber from fire salvage timber
- Don’t reinfest
Cerambycidae: Old House Borer

*Hylotrupes bajulus*

- Major structural pest
- Seasoned and dry softwoods, esp. pines and Douglas-fir
- Reinfests
- Cryptic – adults rarely seen
Old House Borer Damage

- Attics, roof and support beams
- Most infestations in warm and dry locations

Suomi & Akre 1993
Figure 27
Old House Borer Damage
Curculionidae: Scolytinae
Ambrosia beetles

- Green, sometimes moist kiln-dried or seasoned lumber
- Many species (a functional group rather than a taxonomic set of species)
- Actually feed on mutualistic fungi (hence “ambrosia”)
- Don’t reinfest
Ambrosia Beetles

- Anisandrus
- Trypodendron
- Xylosandrus
- Platypodinae
- Cyclorhipidion
- Xyleborinus
- Gnathotrichus
- Xyleborus
- Xyloterinus
- Monarthrum
Ambrosia Beetle Damage
Not Beetles: Woodwasps
Not Beetles: Carpenter Ants
Not Beetles: Termites
Not Beetles: Carpenter Bees

Large Carpenter Bee

Small Carpenter Bee

insectexpertphd.com

msue.anr.msu.edu

static.wixstatic.com
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