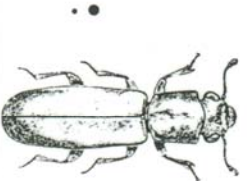
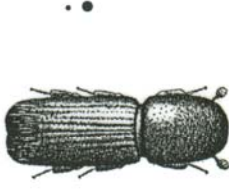
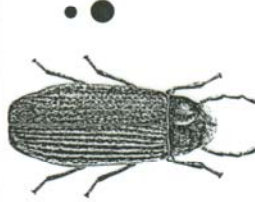
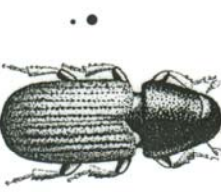
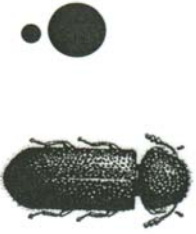
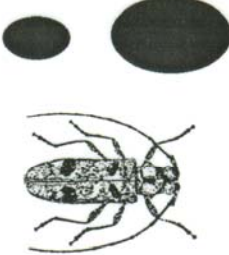

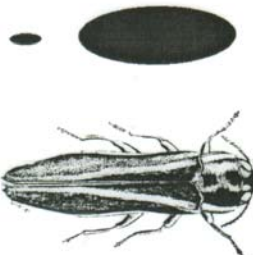


# Distinguishing Major Groups of Wood-Infesting Insects

<p><b>True Powderpost Beetles</b></p> 	<p>1/8 to 5/16 in (3-8 mm) long, somewhat flattened; light brown to black. Antenna with two-segmented club. Attacks only newly seasoned (dried) sapwood of hardwoods.  <b>Exit holes</b> circular, 1/32 - 1/16 in (0.8-1.6 mm)  <b>Frass</b> -fine smooth flour like, loose in tunnels  <b>Can Reinfest wood</b></p>	<p><b>Ambrosia Beetles</b></p> <p>1/50 – 1/8 in (0.5-3 mm) long, resemble false powderpost beetles except with round club antennae. Prefer hardwoods.  <b>Exit holes</b> circular, 1/50 1/8 in (0.5-3mm) Leaves a distinctive purple to blue black stain around deep gallery and exit hole.  <b>Frass</b> – No frass in holes  <b>Cannot Reinfest wood &lt; 30%</b></p> 
<p><b>Furniture Beetles</b></p> 	<p>1/16 -3/8 in (1.6 -3 mm) long, head hidden beneath hood like thorax; brown to variable color. Antenna with three enlarged segments. Can attack seasoned hardwoods and softwoods  <b>Exit holes</b> circular, 1/16 - 1/8 in (1.6-3 mm)  <b>Frass</b> – fine sand like, loose in tunnels  <b>Can Reinfest wood</b></p>	<p><b>Bark Beetles Engraver beetles</b></p> <p>1/8 in (3mm) long; resemble ambrosia and false powderpost beetles; have round club antenna. Tunnels have unique pattern engraved under bark. Only surface damage  <b>Exit holes</b> – 1/8 in circular, through the bark.  <b>Frass</b> – tightly packed in tunnels  <b>Cannot Reinfest wood</b></p> 
<p><b>False Powderpost Beetles</b></p> 	<p>1/4 in (8mm) long, stubby looking, with bumps on front edge of thorax, head hidden. Usually black to dark brown. Antenna with three enlarged segments. Attacks sapwood of hardwoods usually.  <b>Exit holes</b> circular, 3/32 -9/32 (2.5-7mm)  <b>Frass</b> – fine to coarse powder tightly packed in tunnels.  <b>Can Reinfest wood, rarely</b></p>	<p><b>Longhorned Wood Borers</b></p> <p>1/3 – 2 in (8-50mm) long or more Long antenna, multi colored. Kidney shaped eyes.  <b>Exit holes</b> – slightly oval to cylindrical, depending on species  <b>Frass</b> – coarse sawdust like tightly packed in tunnels.  <b>Cannot Reinfest wood except Old House Borer</b>, who only attacks softwoods, usually well seasoned.</p> 
<p><b>Carpenter Bees</b></p> 	<p>1 in (25mm) long, shiny blue to purple black abdomen on bee. Fly and hover actively, chase other male bees aggressively. Attack large bare branches and flat vertical wooden boards. Prefer to attack softwoods like yellow and white pines, redwoods and fir.  <b>Exit holes</b> circular, 1/2 in (13 mm)  <b>Frass</b> – sawdust like, empty tunnels except for wood partitions  <b>Can Reinfest wood</b></p>	<p><b>Metallic Wood Borers</b></p> <p>1/4 -1 1/2 in (6-33 mm) long; slightly flattened body. Oval eyes, many are metallic colored.  <b>Exit holes</b> – elongated ovals. Tunnels are very flat and winding; walls scarred with lines  <b>Frass</b> - tightly packed sawdust like or pellets.  <b>Cannot Reinfest wood.</b> May have long delay (years) in emerging from cut and seasoned wood.</p> 
<p><b>Carpenter Ants</b></p> <p>1/2" – 1" long large black ants. <b>Galleries are irregular in shape; smooth texture like having been sanded;</b> follow the grain of the wood. Often with sawdust and sometimes with other dead insects inside galleries.</p>	<p><b>Subterranean Termites</b></p> <p>1/4" long whitish bodied insect; winged termites are 1/4" – 1/2" long, black with clear or smoky wings. <b>Galleries are thin, follow the grain of wood and most often have dirt or mud inside.</b></p>	