



Forest Insect & Disease Leaflet

Poplar Borer



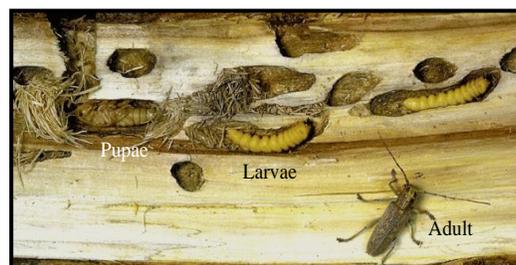
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Poplar borer

The poplar borer, *Saperda calcarata*, belongs to the family Cerambycidae commonly referred to as longhorned beetles. The poplar borer prefers larger diameter trees but will infest trees as small as saplings. The adult beetles occasionally attack other poplar, cottonwood and willow. Developing larvae bore tunnels throughout the interior portions of the tree. Heavily infested trees may be more prone to wind breakage as borer tunnels reduce wood strength and provide infection access for canker and decay fungi.

Life Cycle: This beetle takes about 2 to 3 years to go from egg to adult. The adult beetle ranges in size from $\frac{3}{4}$ " to $1\frac{1}{4}$ " long. The body is a grayish-blue and is striped with fine brown dots that overlay a faint yellow pattern. The antennae are almost as long as their body (hence the term longhorned beetle). Adults emerge from infested trees from May through August and feed on new shoots and foliage. Females start to lay eggs about 7-10 days after emergence. The female lays one or two eggs within niches chewed into the bark. Eggs hatch in about two weeks with larvae moving into the sapwood and heartwood as they feed. Larvae feed for approximately two years creating extensive tunnels throughout the wood. Pupation occurs in pupal cells at the lower end of larval mines. Adult beetles exit in May-August of the third year.



Life stages of the poplar borer
(photo by J.D. Solomon, USDA, Forest Service)

How to tell if a tree is infested: Wet spots with reddish colored oozing sap from small openings in bark. Chronically infested trees have a varnish like stain on the bark below the entrance holes. Frass may be observed at tunnel entrances, bark crevices or at the base of trees. Damage appears as swollen areas on the trunk and larger branches. Woodpecker activity is also a sign of infestation.



Wet spots with oozing sap
photo by Judy Sedbrook, Colorado Master
Gardener, Colorado State University
Cooperative Extension, Denver

Control: Cultural control includes planting trees in an appropriate site, planting in groups where trunks are shaded and maintaining healthy trees with proper watering and fertilization. Remove trees that are heavily infested. In forests, maintain well-stocked stands as poorly stocked or thinned stands may be more susceptible to beetle attack. Consider harvesting decadent or infested stands when 10% or more of the trees are attacked. Clearcutting is the most effective treatment to increase stand regeneration. In ornamental settings, registered insecticides may prevent successful attack. Proper timing of insecticide treatments is critical. Follow label directions when applying insecticides. Killing larvae within the tree is difficult using systemic

insecticides and satisfactory control may not occur.

For assistance in developing a management plan in forested areas, contact the Utah Division of Forestry, Fire and State Lands.



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