Colorado Insect of Interest

Pole Borer

Figure 1. Pole borer

Scientific Name: *Parandra brunnea* (Saussure)

Order: Coleoptera (Beetles)
Family: Cerambycidae (Longhorned Beetles)

Identification and Descriptive Features: The adult insect is typically about 18-20 mm long, but can vary greatly in size (10-22 mm) depending on diet during the larval stage. They are shiny, reddish-brown, with prominent jaws that project forward. Unlike other members of this family (Cerambycidae), which are known as longhorned beetles, the antennae of the pole borer are not unusually long. Because of this, and other habits, it is sometimes referred to as the "aberrant wood borer".

Figure 2. Range of size among pole borer adults (10-22 mm length).

Larvae are a typical "roundheaded borer" that is cream colored, with an elongated body and small dark head with prominent mandibles. The are usually found riddling the interior of tree trunks that have some decay, producing tunnels that are oval in cross section.

Distribution in Colorado: Statewide

Life History and Habits: Adults are active in midsummer. During initial attacks the females insert eggs into areas of dead wood, sometimes in groups of up to a dozen eggs at a site. The larvae, a type of round headed borer may take up to three years to develop, producing a tunnel that may extend for several feet. They pupate in cells at the end of the larval tunnels and usually emerge to mate and initiate new attacks. However, as infestations progress, some adults may not leave the tree, mating and laying eggs within the galleries of existing tunnels. Previous exit holes are also sites used by migrant adults visiting a previously infested tree.

Figure 3. Pole borer larva

Figure 4. Pole borer larva and riddled wood produced by feeding.

In addition to dying trees, any situation where wood contacts the soil may be attractive to the egg laying adults. On living trees, areas such as wounds or pruning scars are occasionally used. Most larval feeding is in sound wood and the tunneling, along with the subsequent decay fungi continue to expand the damaged areas. Larval tunnels ultimately can honeycomb the wood.

The pole borer develops as a typical roundheaded borer, tunneling wood. Attacks of living trees are almost always restricted to the base of the plant, usually initiated at wounds where the sapwood has been exposed. Repeated attacks of this insect, in association with wood rotting fungi that are almost always associated with it, result in a honeycombing of the wood after a few years. Larval tunnels can extensively riddle the wood inviting collapse or storm breakage. Telephone poles and timbers in contact with the soil have also been sometimes damaged by this insect, leading to the name "pole borer".

Willow, maple, elm, poplars, and many other hardwoods are known hosts. Pole borer has also been known to attack conifer wood.