

Cottonwood Leaf Beetle

Skeletonized leaves

Name and Description—*Chrysomela scripta* Fabricius [Coleoptera: Chrysomelidae]

Mature larvae of the cottonwood leaf beetle are about 1/2 inch (13 mm) long, black, and have two white spots on each side (fig. 1). Adults are about 1/4 inch (6 mm) long and have yellow wing covers with black stripes and black heads (fig. 2).

Host—Cottonwood, willow, and alder

Life Cycle—There can be three to four generations per year, depending on location. All life stages can be found throughout the growing season. Bright yellow eggs are laid in groups on the undersides of leaves. Early instar larvae hatch and feed gregariously, skeletonizing leaves and creating a windowpane effect (fig. 3). Older larvae and adults consume the entire leaf except for major veins and petioles (fig. 4); adults also feed on the succulent new shoots. Adults overwinter in duff around the base of host trees or under loose bark on the tree.

Damage—Young trees are generally more affected than older trees. Heavily defoliated trees are weakened. Defoliation also reduces growth rate and can lead to deformed trees when young leaders are attacked. Young trees can be killed by repeated defoliation events.

Management—Management is not typically warranted. However, large populations can be a nuisance, especially in landscape situations. In heavy infestations, chemical sprays can be used to kill both adults and larvae.



Figure 1. Cottonwood leaf beetle larvae. Photo: Whitney Cranshaw, Colorado State Forest Service, Bugwood.org.



Figure 2. Cottonwood leaf beetle adult. Photo: Whitney Cranshaw, Colorado State University, Bugwood.org.



Figure 3. Windowpane feeding by cottonwood leaf beetle larvae. Photo: Lacy L. Hyche, Auburn University, Bugwood.org.



Figure 4. Cottonwood leaf beetle damage. Photo: James Solomon, USDA Forest Service, Bugwood.org.

1. Ostry, M.E.; Wilson, L.F.; McNabb H.S., Jr.; Moore, L.M. 1989. A guide to insect, disease and animal pests of poplar. Agricultural Handbook 677. Washington, DC: U.S. Department of Agriculture, Forest Service. 118 p.
2. U.S. Department of Agriculture, Forest Service. 1985. Insects of eastern forests. Misc. Publ. 1426. Washington, DC: U.S. Department of Agriculture, Forest Service. 608 p.