

Two-lined Chestnut Borer

The Insect

The two-lined chestnut borer, *Agrilus bilineatus*, is a native beetle that attacks weakened oak trees. All oak trees are at risk, but especially red oak. Even if a tree is healthy, TLCB will go after broken branches and pruning wounds; the beetles capitalize on high stress situations for trees and move in when they are most vulnerable¹.

Signs & Symptoms

- Dieback of branches; infested oaks will have sparse and small discolored foliage.
- Branch dieback begins at the top of the tree, moving downward.
- The attack is most recognizable in mid July. Most dieback occurs in late summer, once the attack is done for the year.

Positive Identification

Two-lined chestnut borers are bluish-black beetles with two yellow lines that run down their wing cover. Infested trees can be identified by a “dead, red, and green” pattern moving downwards¹.



S-shaped TLCB galleries. (2).



Adult beetle on a leaf (1).

Implications for Minnesota

Because the damage is hard to recognize and happens very rapidly, stands of oak trees often go unchecked leading to a rapid spread of the beetle. Between the TLCB and oak wilt, all oaks are at risk, but especially red oaks which could see a more drastic decline¹.

Management & Prevention Considerations

- The best prevention is to keep the tree healthy and watered; mitigate stressors when possible.
- Avoid soil compaction in planting sites².
- As most pests spread through movement of deadwood, keep infested trees away from healthy stands.

Sources

- 1) https://www.dnr.state.mn.us/treecare/forest_health/tlcb/index.html
- 2) <https://extension.umn.edu/tree-and-shrub-insects/metallic-wood-boring-beetles>