

Black Cherry Pest Alert!

WI DNR Forest Health Protection

Mark Guthmiller and Dave Hall, February, 2001

Peach bark beetle

Phloeotribus liminaris

Introduction: Thousands of adult peach bark beetles attacked a stand of mature black cherry during the late summer of 2000 in Columbia County, Wisconsin (Fig. 1)



Figure 1. First reported location of Peach bark beetle attacking black cherry in Wisconsin.

They have not yet killed the attacked trees but they have penetrated the live bark causing the trees to produce many small, conspicuous globules of gummy pitch (Fig. 2, 4, 7).



Figure 2. Many pitch globules from multiple beetles attacking black cherry.

The attacking beetles had emerged from logging slash resulting from a September 1999 harvest. Many large-diameter tops produced ideal brood material for the beetle population to build up (Fig. 3).



Figure 3. Logging slash used as brood material for the build up of the bark beetle population.

History: This native insect, long a serious pest of peach orchards in southeastern U.S., has not previously been known to damage black cherry in Wisconsin. It has, however, caused serious mortality in forest grown black cherry in New York State. This bark beetle is known to attack individual trees repeatedly until the trees die. It attacks black cherry that has been stressed by insect defoliation. The Wisconsin infestation is in cherry that was stressed by saturated soil in the summer of 2000.



Figure 4. Wounds in the inner bark.

Biology: The Wisconsin population is overwintering in the adult stage. The adults are tiny -- 1 ½ to 2 millimeters long (Fig. 5).

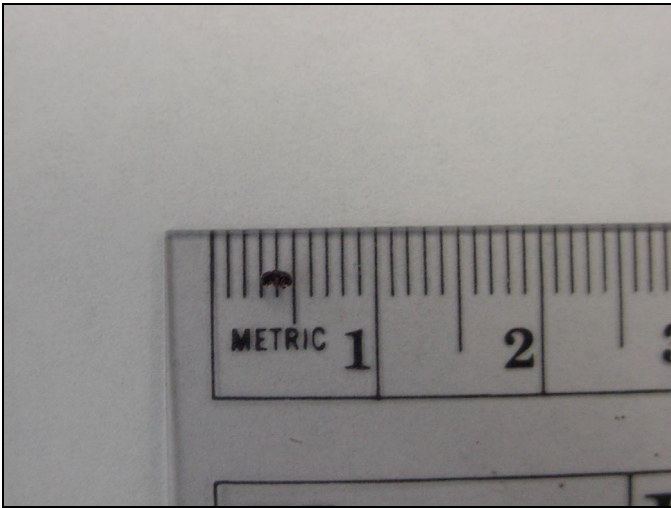


Figure 5. Peach bark beetle is 1 ½ -2 mm. Long.

They emerge in May to make reproductive attacks. The females initiate the reproductive attack by boring a short entrance tunnel through the inner bark to the outer layer of wood. The males enter, mating takes place and the females construct an egg tunnel at right angles to the trunk (Fig. 6). Eighty to one hundred eggs are deposited in niches along each tunnel. Larvae tunnel at right angles to the egg tunnel feeding on the inner bark and outer wood.



Figure 6. Peach bark beetle galleries showing characteristic egg tunnel at right angle to tree trunk.

We do not know how long the developmental period is in Wisconsin, nor how many generations occur in a single growing season. Several generations occur in SE United States.

Recommendation: Caution is urged when making partial cuts in black cherry. Utilization of the logging slash as much as possible would be a wise practice until we learn more about this bark beetle.



Figure 7. Black Cherry infested with peach bark beetle up the entire bole of the tree.