

## From the U to You...Studies Funded by the MTGF

## **TWO-LINED CHESTNUT BORER**

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Damage to oaks is noticeable this time of year. People's first concern is often whether the problem is oak wilt, but twolined chestnut borer damage is also apparent now. In Minnesota, these borers equally attack most oaks, including red, white and bur oaks, as well as ironwood trees. However not all oaks are equally susceptible to oak wilt. Red oaks are most susceptible to oak wilt while white and bur oaks are less susceptible.

Adult beetles emerge from wood in late May through July, causing characteristic D-shaped holes. They are slender, darkcolored beetles with two yellowish stripes, running from head to tail. These beetles are secondary borers, i.e. they attack unhealthy, stressed trees and do not survive in vigorously growing ones. Females lay eggs on the bark which hatch into worm-like larvae. These legless larvae



Damage to Oak Trees created by the Two-Lined Chestnut Borer.



Two-lined Chestnut Borer

bore through the bark into the phloem tissue.

Their meandering tunnels girdle the branches, cutting off the flow of nutrients and water, resulting in dieback just above the infestation. Attacks generally start in the upper crown. Leaves dry quickly and turn brown. These symptoms are first apparent in late summer. If the bark is removed from dead limbs, larval tunnels can be seen. The D-shaped exit holes may also be noticed from previous infestations. These dieback symptoms may be confused with oak wilt. The only sure way to correctly distinguish oak wilt is to have it tested at a diagnostic lab. Tree infested by two-lined chestnut borers are likely to be reattacked in successive years. Trees are usually killed after several years of such infestations.

the soil grade or water drainage pattern, damaging the bark, allowing significant amounts of defoliation by insects or anything else that may stress the tree; anything that weakens tree health encourages borers.

Insecticides are of marginal value in

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protecting trees from borers. Properly timed applications in the spring can help prevent adults from laying eggs. However, coverage needs to be thorough, especially

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The best management against twolined chestnut borers is prevention; keeping trees healthy and vigorous will naturally allow woody plants to fight off invading borers on their own. Do this through proper watering and fertilizing. Also avoid compacting the soil, changing

in the upper crown or it won't be effective. Also keep in mind that insecticides do not replace good health. If a tree continues to be stressed and unhealthy, insecticides will not save it from two-lined chestnut borers.