

Maple Decline

TREE DOCTOR TIPS

Maple Decline

DESCRIPTION:

Maple decline is a condition that causes dieback in maple trees.

HOSTS:

Many maple trees are susceptible to maple decline, but the most commonly impacted trees include sugar maple, Norway maple and red maple trees.

BIOLOGY AND SYMPTOMS:

Maple decline is the result of multiple stress factors. Some of these include:

- Drought
- De-icing salts
- Construction
- Poor soil conditions

The most obvious sign of decline can be seen in the foliage. Twig growth and foliage may be reduced or show signs of odd or premature discoloration. Dead or dying branches may become visible on the outer edges of the canopy and, overtime, larger and more visible branches may die. As decline progresses more and more branches will die. Maple decline can also make trees more susceptible to secondary infestations of insects, rotting diseases, decay and blight.

MANAGEMENT:

Early detection of maple decline is crucial in helping the tree respond to treatment. While there are no specific products that treat maple decline, cultural practices are used and have been helpful in returning maple trees to a healthier state. These practices include:

- **Watering:** Water maple trees every 1-2 weeks during dry weather. Slow water release helps the roots soak the water completely and should reach a depth of 12 or more inches.

- **Fertilizing:** A slow-release fertilizer can help to balance the soil's nutrients, thus helping to stimulate new roots and improve overall tree health and vigor.
- **Pruning:** Dead and dying branches should be pruned to help revitalize declining trees. Pruning also helps combat secondary diseases or insect infestations.
- **Salt defenses:** Road salt commonly impacts soil nutrients. By placing a barrier, like a ditch or curb, you can help catch or divert water runoff that contains damaging salt levels.

To find out if your trees are suffering from maple decline, consult your local arborist.



FIGURE A. MAPLE DECLINE DAMAGE AND DIEBACK IN CANOPY
(Photo credit: Jason Sharman, Vitalitree, Bugwood.org)

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

