Selecting Trees for Emerald Ash Borer Treatments

A Pictorial Guide for Home Landscapes

Laurie Stepanek, Forest Health Specialist

Ash trees provide many benefits to home landscapes. This publication provides information to help you select those trees most suitable for treatments to protect them from emerald ash borer (EAB).

Good Candidates for Treatment

Good candidates for treatment are trees that are in very good health. Trees in good health will:

- Respond better to treatments.
- Better handle the damage that some treatments cause.

Trees in good health typically have had a history of proper care including:

- Supplemental watering during extended dry periods.
- Periodic mulching with an organic mulch such as wood or bark chips.
- Protection of the tree from harmful levels of lawn herbicides and other weed control chemicals.
- Protection of the roots from the following:
  - soil disturbance such as excavation for building construction, installation of sidewalks, patios or driveways, or trenching for utility lines.
  - soil compaction from heavy foot traffic or vehicles parked under the tree.

When selecting trees to treat, keep in mind the drawbacks and limitations of treatments:

- Required for the lifespan of the tree
- May cause damage to the tree
- May pose a risk to humans, pets and wildlife
- May have other harmful environmental impacts
- Monetary cost
Poor Candidates for Treatment
Examine your trees for the following signs of poor health. These trees are not good candidates for treatment.

Look at the canopy of the tree:

Stand back and look at the canopy of the tree. **Dead branches and thin foliage** (the sky is easily seen through the leaves) are indicators of poor health.

Note: While thin foliage often indicates poor health, a canopy thick with leaves is not always an indication of good health. See information about sprouting next.

Look for sprouting on the trunk and branches:

**Epicormic sprouts** (water sprouts, suckers) are small diameter branches growing from the trunk and major limbs. They can grow several inches to several feet in one year. Although these sprouts often produce many leaves and may give the illusion of a full canopy, they are a sign that the tree is in poor health.

Look for trunk or branch damage by insects and diseases:

**Holes and tunnels** made by insects feeding in the branches or trunk are often seen in trees that are in poor health. Trees may be deformed or scarred as a result of this feeding. **Fungal conks (mushrooms) on the trunk or large branches indicate internal decay.** Trees with extensive decay may have hollow trunks. Such trees may be structurally weak.
Look at the base of the trunk:

**Injury at the base of the trunk** is often caused by mowers and string trimmers. It is frequently seen where grass is allowed to grow next to trunk. Often called "mower blight."

**Girdling roots** wrap around the base of the tree either above or below ground and restrict water movement in the trunk. **Trees that do not have a root flare** may have a girdling root below ground. The root flare is the natural widening of the trunk at the ground as it transitions into roots.
Other Considerations

Tree location:
High value trees that may be good candidates for treatment include prominent trees in the landscape or trees located on the south or west sides of the home that provide shade.

Trees under wires or too close to sidewalks or buildings generally should be removed rather than treated.

Tree size:
Removing small trees and replacing with a different species may be more economical and more sustainable than lifelong treatments for EAB.

Proximity to EAB:
Treatments should not be considered until EAB is known to be within 15 miles of your trees. Visit the Nebraska Forest Service for locations of EAB.

More information on EAB and treatments:
Nebraska Forest Service: [www.nfs.unl.edu/EAB](http://www.nfs.unl.edu/EAB)