

# Symptoms of Emerald Ash Borer

## Stage One:

Early fall color and leaf drop. Many ash trees in a group may show the same symptom.

**Recommendation:** For valuable trees in your yard, treatments at this time can save the tree. If it is a young, unhealthy, or poorly placed tree, replanting is a better option.



## Stage Two:

Tips of branches begin to die. Leaf canopy is not as full and becomes progressively more sparse as the infestation continues. Typically the top 1/3 of the canopy dies first and then works down the tree. You may notice increased woodpecker activity on the tree, small vertical splits in the bark and/or small (approx. 1/8") D-shaped exit holes from the adult bug.

**Recommendation:** In early stage two infestations, treatment for valuable landscape trees may be an option. For later stage two infestations, removal and replanting is advised.



### Stage Three:

Most of the branches will be dead or dying. In a last attempt to survive, the tree may send out new shoots on the trunk or at the base of the trunk (called epicormic sprouting). Bark will start to flake off, exposing S-shaped larvae feeding galleries in the wood directly under the bark. D-shaped exit holes can be seen more easily and adult borers may be seen.

**Recommendation:** Remove the tree and replace with a different species.



### Stage Four:

Tree is dead and could potentially create a hazardous situation **in a few years**.

**Recommendation:** Remove the tree and replant.

