

# A Tree-Owner's Guide to Emerald Ash Borer

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## Fast Facts

- The emerald ash borer is an invasive insect that attacks all species/cultivars of true ash and can also affect white fringetree. If left untreated, this wood boring insect will kill a tree over a period of 7-10 years.
- Adults are 1/2 an inch in length and are emerald green with copper coloring under their wings (Figure 1 below). As a larvae they are flat and white, and live under the bark of ash trees creating snake-like tunnels in the wood and depriving the tree of food and water.
- If you own an ash tree you need to assess the overall health of your tree to determine if it should be removed right away or is a candidate for insecticide treatment.

## Life cycle of emerald ash borer

The emerald ash borer has an annual life cycle and spends the winter as a pre-pupae/pupae underneath the bark of an infested tree. In the spring (April-May) adults will emerge and fly toward the tops of trees to feed on leaves and mate. As they leave the tree, the adults create characteristic "D" shaped holes in the bark. Females will lay eggs on the bark of the tree, which hatch about 2 weeks later. Young larvae will chew their way inside the tree and begin feeding in the phloem and cambium of the tree. Once they are nestled inside they will feed and burrow their galleries for the rest of the summer. As the leaves begin to fall, the larvae will initiate overwintering.



Figure 1



Photo by Jim Kalisch; UNL Entomology

## Diagnosis and Management of emerald ash borer

The earliest symptoms of an emerald ash borer infestation are upper canopy dieback and epicormic shoots. If you notice that the upper 1/3rd of your tree is not creating as many leaves as it used to, there is chance that tree has a new EAB infestation. Epicormic shoots are small branches that will grow on the lower trunk or even near the ground and can indicate many problems with the top of the tree, and EAB is one of them. More advanced infestations will see middle and lower portions of the canopy missing leaves, an increase in woodpecker feeding, and possibly even bark splits.

To manage emerald ash borer you will have to make some tough decisions. Ultimately, if you have an ash tree you will be spending money in the near future, you must decide if it is on removal of the tree or for tree treatments. The University of Nebraska encourages you to contact a certified arborist in your area to help you make an inventory of your ash and determine how healthy they are. If you have ash trees that are not important to your landscape or are wind-damaged, disease ridden, or suffering from other health issues those trees should be likely candidates for removal. If you have a tree that is important to you or is a key piece of your landscape and it is healthy, there are treatment options available. An arborist can help you make decisions about what treatment strategy is best for you and you can also consult the attached EAB decision guide. For more EAB information please visit:

<http://nfs.unl.edu/nebraska-eab>



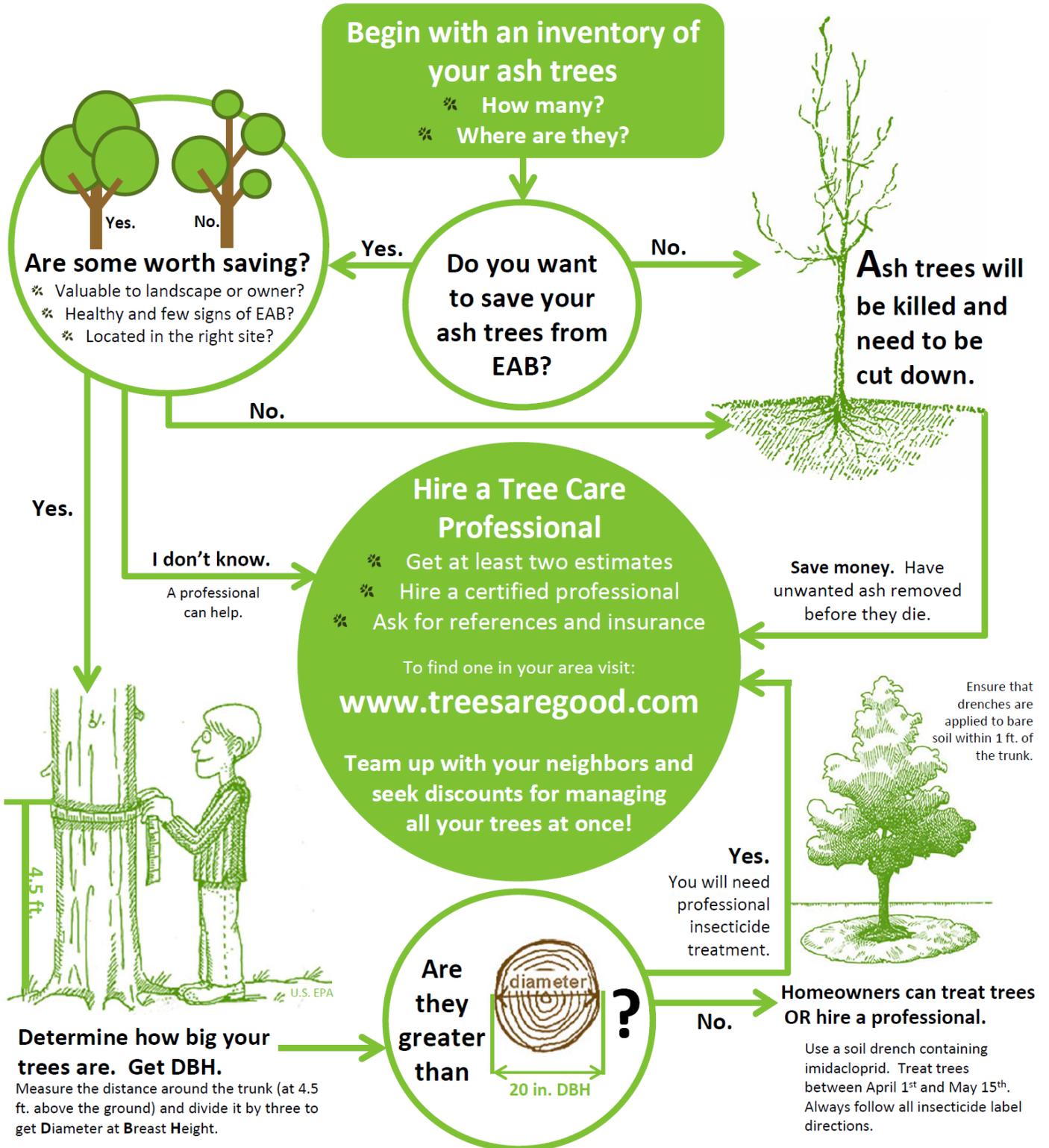
**EXTENSION**

Managing Emerald Ash Borer:

# Decision Guide



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