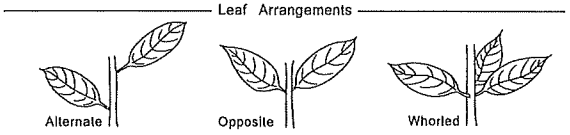
Pocket Tree ID:

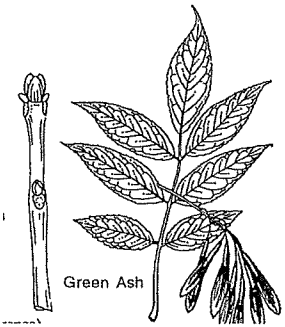
Identify the tree through leaf formation:
How are the leaves formed on the stem?
Alternate, opposite, or whorled:

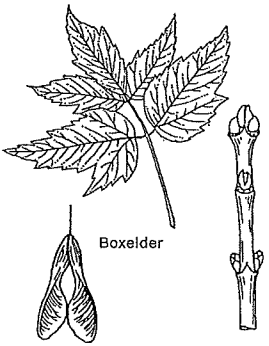


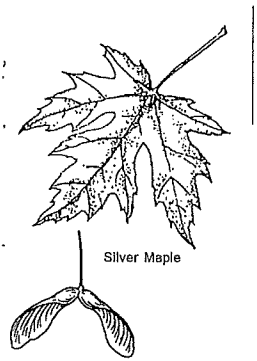
To identify trees with opposite leaf formation use the mnemonic device:

MADBuck:

"MAD" stands for **maple, ash, and dogwood**. All species of maples (Acer spp.), ashes (Fraxinus spp.), and dogwoods (Cornus spp.) have opposite leaves, "Buck" stands for buckeye (Aesculus spp.) This makes identification easy because there are not many woody plants that have opposite leaves.





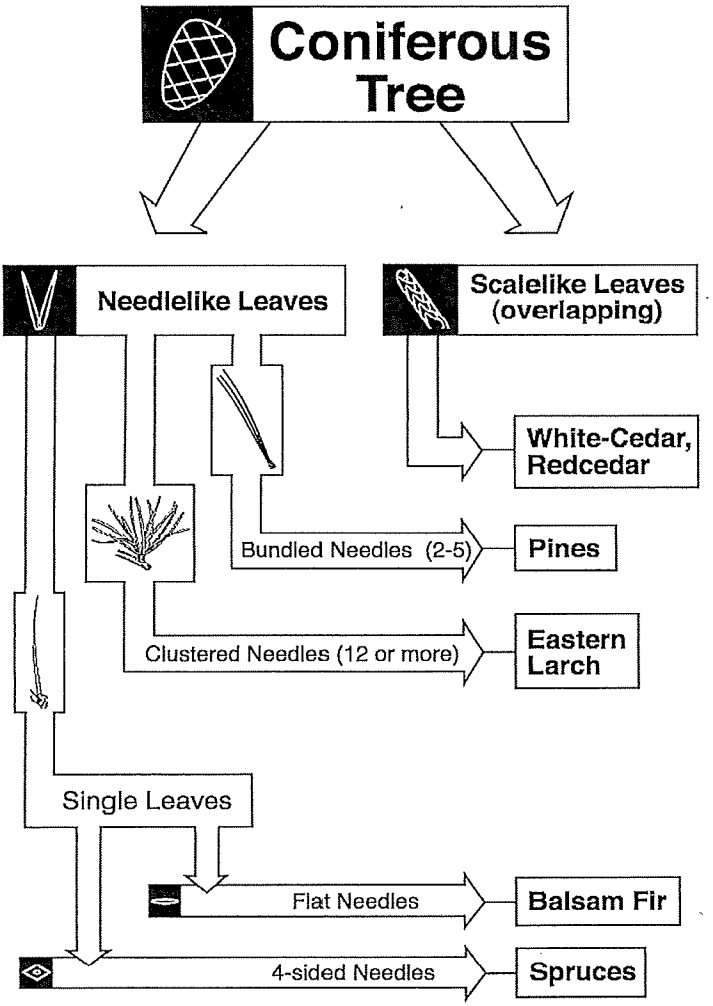


If your tree is not one of the MADbuck, the first step to identify a tree is to determine whether it is coniferous or deciduous. Coniferous trees have needles and seeds in cones. Deciduous trees have leaves and covered seeds. Deciduous trees drop their leaves in the fall while coniferous trees keep their needles year round, except for tamarack which drops its needles in the fall.

To distinguish different species of trees, you need to examine the tree's form, bark, leaf or needle, and fruit

SHORTCUT GUIDE TO MINNESOTA TREES

Read the signs and follow the arrows to find your tree



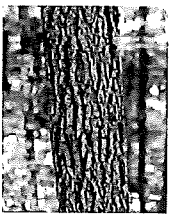
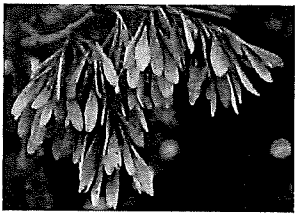
How do I identify an ash tree?

The first step in preparing for emerald ash borer is determining if you have any ash trees on your property. There are several varieties of ash trees in Hennepin County – green, white and black. Look for the following characteristics to determine if your tree is an ash tree:

- Branches that grow directly opposite from one another.
- Compounds leaves, or multiple leaves on one stalk joined to a branch. Leaves commonly have 5 to 9 leaflets.
- Bark with diamond-shaped pattern.
- Seeds are oar-shaped samaras that typically hang in clusters

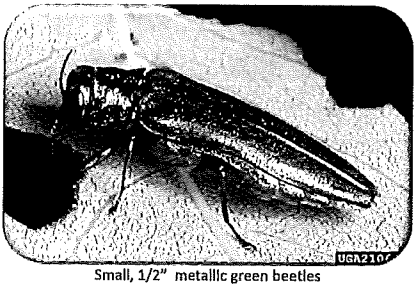
To learn more about identifying an ash tree, download the ash tree identification factsheet at **mda.state.mn.us/news/publications/ext/ashtreeid.pdf.**



Verify the Signs and Symptoms of EAB:


1/8" "D" shaped exit holes


Small, 1/2" metallic green beetles


"S" shaped tunnels under the bark


Thin/dead branches


Trunk sprouts


Bark splitting

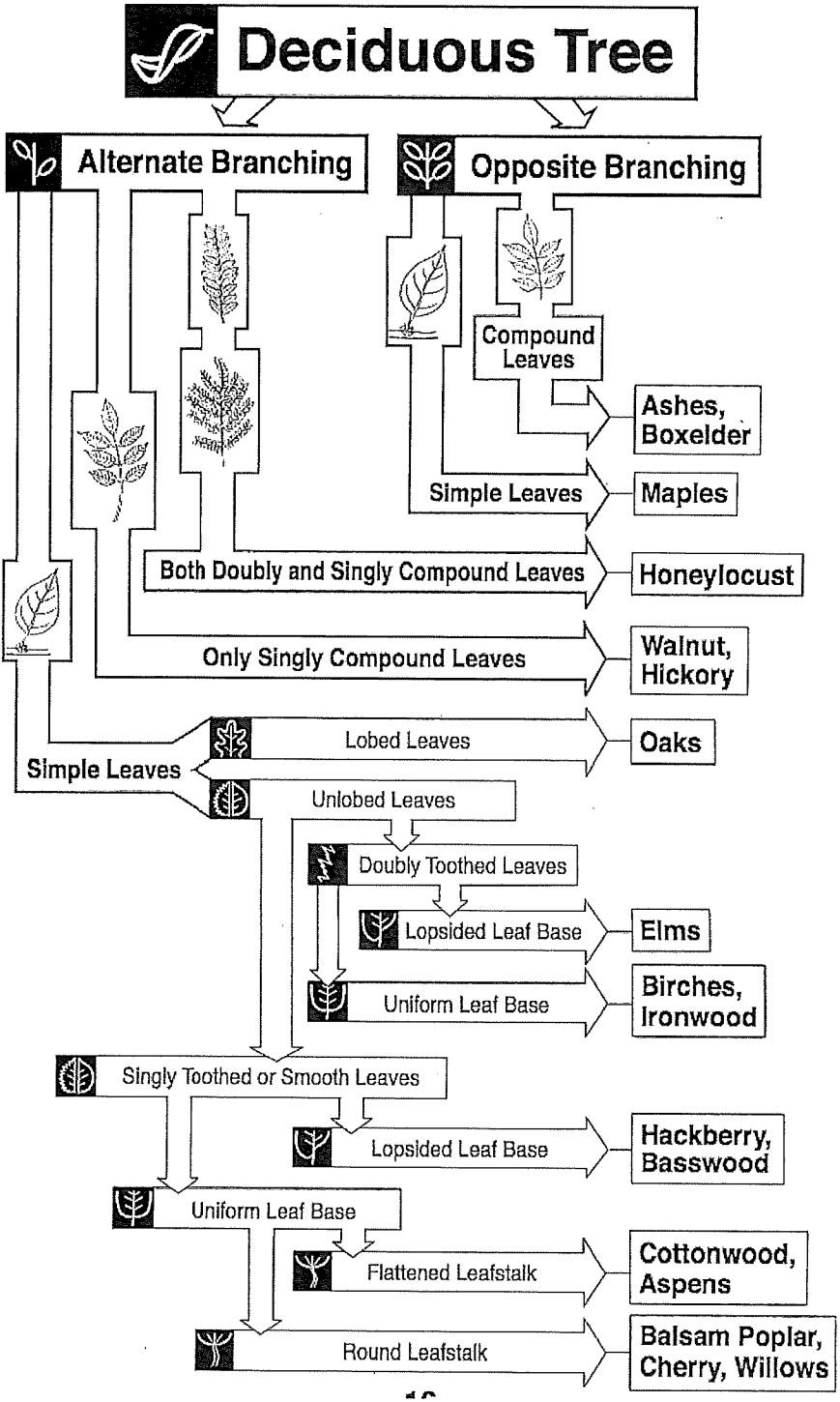

Excessive woodpecker activity

Where has the emerald ash borer been found?
Trees infested with emerald ash borer have been found in Blue Earth County. Because it can take several years to detect an emerald ash borer infestation, the impact is probably more widespread than we are currently aware. It is likely that the number of ash trees infested and dying from the emerald ash borer will increase greatly in the next five years.

How do I identify an ash tree?
The first step in preparing for emerald ash borer is determining if you have any ash trees on your property. There are several varieties of ash trees in Minnesota – green, white and black. Look for the following characteristics to determine if your tree is an ash tree:

- Branches that grow directly opposite from one another.
- Compounds leaves, or multiple leaves on one stalk joined to a branch. Leaves commonly have 5 to 9 leaflets.
- Bark with diamond-shaped pattern.
- Seeds are oar-shaped samaras that typically hang in clusters

Why prevent the spread of EAB?
Emerald ash borer is a devastating pest; our choices now for ash trees near an outbreak are either treat or remove. Slowing the actual spread of EAB may mean economic viability for cities that are affected. If nothing is done to slow the spread, EAB can kill all area ash trees in a very short time. Slowing the spread means a city can spend $1 million a year on ash tree removal for eight years, instead of spending $8 million in one year for all the dead trees. Spreading the costs over many years is easier on any city's budget, and that city's taxpayers. Another reason is to buy time to let the science catch up: detection methods are improving and more is being learned about EAB weaknesses. Additional research is needed, but it takes time. While it's unlikely there will be a silver bullet, if scientists can find enough weaknesses in EAB, we may be able to save ash tree species in the U.S.


Deciduous Tree
Alternate Branching
Opposite Branching
Compound Leaves
Ashes, Boxelder
Simple Leaves
Maples
Both Doubly and Singly Compound Leaves
Honeylocust
Only Singly Compound Leaves
Walnut, Hickory
Simple Leaves
Lobed Leaves
Oaks
Unlobed Leaves
Doubly Toothed Leaves
Lopsided Leaf Base
Elms
Uniform Leaf Base
Birches, Ironwood
Singly Toothed or Smooth Leaves
Lopsided Leaf Base
Hackberry, Basswood
Uniform Leaf Base
Flattened Leafstalk
Cottonwood, Aspens
Round Leafstalk
Balsam Poplar, Cherry, Willows

Why Learn Tree ID?

On May 14, 2009, emerald ash borer (EAB) was discovered in a South St. Anthony Park neighborhood of St. Paul, Minnesota. *Agrilus planipennis* or commonly called EAB is a serious invasive tree pest, and consequently, is regulated in an effort to slow the spread of the insect to other areas of the state yet to be impacted. **Minnesota forests are home to an estimated 1 billion ash trees.** The spread of EAB will have a serious impact in Minnesota. Learning how to identify ash and check for signs of EAB will help to slow the spread. It is also incredibly important that people **do not move wood,** especially ash.

Learning the names of the trees and how to identify them fosters a greater connection with and appreciation for the natural world. Additionally, tree id can help in locating choice edible mushrooms. Morels, for example, favor elm trees. While maitake (hen of the woods) favor oaks.

Resources for further reading:

EAB:

https://www.dnr.state.mn.us/invasives/terrestrialanimals/eab/index.html

Tree Identification:

https://conservancy.umn.edu/bitstream/handle/11299/49816/6593.pdf?sequence=1&isAllowed=y

https://www.dnr.state.mn.us/trees/native-trees.html

Foraging:

https://minnesotamycologicalsociety.org/