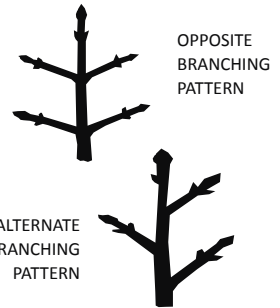


TREE OF THE MONTH

ASH TREES IN BERKSHIRE COUNTY

WHAT MAKES AN ASH TREE AN ASH?

Ash trees are one of the trees - along with maples, dogwoods, and non-native horse chestnuts - that have an opposite branching pattern, as opposed to alternate. Ash trees also have stout twigs and compound leaves, with paired leaflets along the stalk and one terminal leaflet. (Ash-leaf maple or boxelder has similar branching and leaves.) Ash flowers appear in spring in loose panicles (bunches) just before new leaves emerge. The flowers are inconspicuous with no petals and are wind-pollinated. Ash tree samara (fruits) are shaped like single wings and occur in clusters, as opposed to maples where the samara are paired.



IN THE BERKSHIRES, WE HAVE THREE NATIVE ASH SPECIES

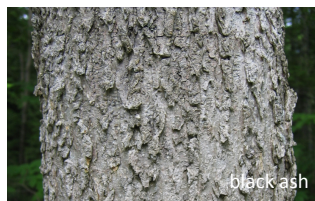


Green ash, *Fraxinus pennsylvanica*, leaves are similar in color on upper and lower sides, and twigs are smoother than white ash. Green ash buds are paired with a leaf scar beneath the bud that looks like the letter “D” turned on its side (like a smile). The winter buds are reddish-brown, with a velvety texture. Leaves typically have between 5 and 11 leaflets. Green ash is a pioneer species that inhabits riparian zones and disturbed areas.



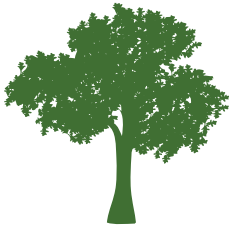
White ash, *Fraxinus americana*, leaves have grayish undersides that are lighter in color than their upper sides. The outer surface of white ash twigs may be flaky or peeling. Buds are paired with a leaf scar beneath the bud that looks like the letter “C” turned on its side. White ash is typically a forest tree found with species such as sugar maple, but it is also planted as a street tree. The wood is light in color, dense, strong, and straight-grained. It is the timber of choice for baseball bats and tool handles. It is also used for interior wood projects such as furniture and flooring. White ash is rarely used for outdoor construction because of its propensity to rot if left in contact with the ground.

Black ash, *Fraxinus nigra*, typically has between 7 and 13 leaflets. Its winter buds are dark brown to blackish, with a velvety texture. Black ash is typically found in swamps, but may be found in cool, moist forests as well. Black ash wood is used by Native Americans of the Northeast for making baskets and other devices. The Shakers also made extensive use of the black ash for baskets. Also called basket ash, brown ash, swamp ash, hoop ash, and water ash. It is also a popular wood for making electric guitars and basses, due to its good resonant qualities.



Tree of the Month is a collaboration between BEAT, the City of Pittsfield and Pittsfield Tree Watch. The Berkshire Environmental Action Team (BEAT) works to protect the environment for wildlife and in support of the natural systems that sustain us all. Find out more at thebeatnews.org.



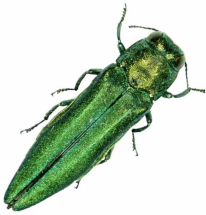


TREE OF THE MONTH

ASH TREES IN BERKSHIRE COUNTY

THREATS TO ASH TREES

There are a number of threats to ash trees – anthracnose, ash decline or ash die-back, Ganoderma root rot, Laetiporus root rot, ash rust, and ash yellows – but perhaps the biggest threat is from Emerald Ash Borer (EAB), a non-native invasive insect that was first discovered in North America in 2002 in Michigan. EAB is native to eastern Russia, northern China, Japan, and Korea.



Adult EAB are a dark green metallic color and approximately 1/2 inch long. Larvae are white, 1 to 1.25 inches long. Pupae are present in the spring and look like cream-colored adults that begin to darken as they develop. The larval and pupal stages are found beneath the bark of their host trees, as the larvae feed on the nutrient and water conducting tissues of the tree. Adults emerge in May and June to mate and lay tiny, flat, oval shaped eggs that are initially whitish-yellow in color and turn reddish-brown as they develop. Eggs are difficult to see as they are approximately 1/32 of an inch and laid in cracks and crevices of the bark. On average, females can lay 55 to 150 eggs in their lifetime. Adult emergence creates tiny D-shaped exit holes in the bark of the ash tree.

Emerald ash borer will attack healthy ash trees. When emerald ash borer populations are high, small trees can die within 1-2 years of initial infestation, while larger trees may take 3-4 years before succumbing to this pest. Heavily infested trees exhibit canopy dieback, beginning at the top of the tree. Some ash trees will push water-sprouts or epicormic shoots from their base or branches.

For more information on EAB: <https://ag.umass.edu/landscape/fact-sheets/emerald-ash-borer>

Benefits of Urban Trees

Research has linked the presence of urban trees to...

- REDUCING RATES** of cardiac disease, strokes, and asthma due to improved air quality
- PROTECTING BIODIVERSITY** including habitat for migrating birds and pollinators
- REDUCING OBESITY LEVELS** by increasing physical activity including walking and cycling
- MANAGING STORMWATER**, keeping pollutants out of waterways, and reducing urban flooding
- COOLING** city streets by 2-4° F, reducing deaths from heat and cutting energy use
- INCREASING** neighborhood property values
- FILTERING** up to a third of fine particle pollutants within 300 yards of a tree
- REDUCING STRESS** by helping interrupt thought patterns that lead to anxiety and depression

The Nature Conservancy