

# TREE GUIDE

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## **GUIDE TO TREES IN MICHIGAN LEGACY ART PARK**

This guide is designed to help visitors differentiate between species of trees found within Michigan Legacy Art Park. If you are trying to identify trees outside of the park, It is recommended using other or additional guidebooks/tree ID keys. There may be similar-looking species that are not mentioned in this booklet.

If you spot a species not mentioned in this booklet, please send an email with information to [info@michlegacyartpark.org](mailto:info@michlegacyartpark.org).

## GLOSSARY OF TERMS

**Compound Leaf:** A leaf that is made up of more than one leaf blade, termed leaflet

**Doubly toothed:** Many large and small teeth along the leaf edge.

**Elliptic:** Longer than wide, with rounded ends.

**Lanceolate:** Lance shaped, broadest at the base of a leaf blade. Much longer than broad, tapers to the leaf tip.

**Leaflet:** A single segment of a compound leaf.

**Node:** Joint on a stem, represented by point of origin of a leaf or bud.

**Oblong:** Two to three times longer than broad.

**Ovate:** Egg shaped in outline, narrower at the tip.



### **ASH, WHITE OR GREEN**

*Fraxinus americana* or *Fraxinus pennsylvanica*

White ash and green ash have compound leaves with 5-9, but usually 7, leaflets. The mature bark has a criss-cross, diamond-shaped pattern. Along your walk, you may notice numerous dead standing or fallen tree trunks. If you look closely, you will see that many of them are ash trees. The cause is an invasive insect called the emerald ash borer. This beetle, arriving in Michigan in 2002, has since wiped out tens of millions of ash trees in the United States. The vast majority of live trees in the park are small saplings. There is, however, one young tree near Sanctuary that has managed to survive.





## **BIGTOOTH ASPEN**

*Populus grandidentata*

The leaves are broadly ovate to round, or slightly triangular in shape with large, irregular teeth along the edges. The leaf stem is flat. The bark of young trees is smooth and light, but after a few decades it darkens, becomes rough, and develops grooves. Bigtooth aspen is rare within the park, but you can find an old, mature tree near Serpent Mound.



## **QUAKING ASPEN**

*Populus tremuloides*

Overall, quaking aspen is similar to bigtooth aspen in appearance. The leaves are broadly ovate to round, but the edges have much smaller teeth. The leaf stem is flat. The bark is green-white or gray-white, but it darkens, thickens, and becomes furrowed with age, especially at the base of the tree. There are few within the park, but there is an old, mature tree in the discovery grove. Individual trees do not live long, only about fifty to sixty years in the Great Lakes region, but clonal stands of quaking aspen can survive for thousands of years.





## **AMERICAN BASSWOOD**

*Tilia americana*

The leaves are toothed, slightly heart-shaped, 2 to 5 inches wide, and are often uneven at the base. The bark has parallel-running furrows and flat ridges. American basswood, along with sugar maple, american beech, and eastern hophornbeam, are the most commonly encountered trees along the trail. The wood is popular for hand carving because it is easy to work with and light. The Native Americans used the sap as a drink, the young leaves as food, and made medicine with extract from the leaves and bark.



## **AMERICAN BEECH**

*Fagus grandifolia*

The leaves are toothed, oval to narrowly oval-shaped, and narrowing to a point at the end. The leaves can be shiny or dull. The bark is light gray and quite smooth. This is one of the dominant tree species within the Art Park and is located throughout the park. However, many beech trees in Michigan are now affected by beech bark disease.



Beech bark disease is caused by two organisms: an insect and a fungus. First, the scale insect penetrates the bark to feed on the sap. The scale-modified bark is then invaded and killed by the *Neonectria* fungus. The white, cottony substance you see on the the beech trees is a product of the scale insect.



## **BLACK CHERRY**

*Prunus serotina*

The leaves are 2 to 6 inches long, an ovate to oblong-lanceolate shape, and are finely toothed along the edges. On the underside of the leaf, the rib in the middle is often covered in a white, orange-brown, or red-brown fuzz. When mature, the bark is dark gray-brown and scaly in appearance. Its location within the park is scattered, but it is mainly at the forest edges and clearings where it can reach sunlight, as the tree does not grow well in the shade. You will find small saplings as well as large, mature trees. The wood is prized for furniture and cabinet making due to its rich red-brown coloration, strength, and hardness.



## **CHOCKECHERRY**

*Prunus virginiana*

The leaves are oval to broadly elliptic and finely toothed. The flowers and berries grow cylindrical along a separate stem coming off the twigs. Chokecherry, black cherry, and serviceberry leaves can all look similar. Black cherry leaves tend to be longer and more narrow, as well as often having a hairy midrib on the underside of the leaf. For serviceberry, look to the arrangement of the flowers and berries to differentiate. This small tree is uncommon in the art park and is mainly found along the open, sunnier parts of the Ridge and Stockade trail, in between Wheels of Progress and Stockade Labyrinth. **WARNING:** The leaves, bark, stem, and stone (center of the berry) of chokecherry are poisonous.







## **AMERICAN ELM**

*Ulmus americana*

The leaves are oblong to ovate in shape and doubly toothed. The leaves of elm may initially appear to resemble beech or hophornbeam. However, unlike beech and hophornbeam, the base of elm leaves are asymmetrical. The bark is gray to light brown, and can leave light colored patches where it peels off. There are not many elm trees within the Art Park due to Dutch elm disease. Like beech bark disease, Dutch elm disease involves an insect and a fungus. The fungus spores attach to young elm bark beetles as they feed on a diseased tree. When the adults emerge, they fly to a new tree, thereby infecting it with the fungus. The disease also spreads through connected elm roots. American elm is most prominent on the Ridge and Stockade trails, between the works Wheels of Progress and Barn Chair.





## RED ELM

*Ulmus rubra*

Like American elm, the leaves are oblong to ovate in shape and doubly toothed. It can be difficult to determine the species based on leaf alone. The bark of red elm is different from American elm in that it does not have layers of light and dark patches. Instead, the outer bark is a red-brown color throughout and has deep furrows. Red elm is found most prominently on the Ridge and Stockade trails, between the works Wheels of Progress and Barn Chair. An alternate name for red elm is slippery elm, which comes from the “slippery” quality of its inner bark. This bark was used in the past by Native Americans for sore throats, as an eye wash, or as a poultice for wounds.



## EASTERN HOPHORNBEAM

*Ostrya virginiana*

The leaves are similar to those of American beech except they are doubly toothed, oblong to ovate in shape, and fuzzy on top and underneath. When mature, the bark is light brown and appears to peel off in strips. When young, the bark is smooth and gray. This species is found throughout the park as an understory tree. The wood is very hard, hence the alternate name ironwood for the tree.





## **AMERICAN HORNBEAM**

*Carpinus caroliniana*

The leaves are oblong to ovate and very similar to eastern hophornbeam, except the leaves of American hornbeam trees within the park are not fuzzy above or below. The bark is smooth, gray, and has a muscular appearance, which is where the alternate name musclewood originates. The Michigan Legacy Art Park planted a couple of these trees by the entrance archway to the Art Park and the amphitheater. It is a native species, but not found naturally within the park. Like eastern hophornbeam, the wood is quite hard and heavy. American pioneers used it to make bowls and dishes as it is resistant to splitting and cracking.



## **SUGAR MAPLE**

*Acer saccharum*

The leaves generally have 5 main lobes, which can be shallow, blunt, or end in points. They are sparsely toothed and are typically as long as they are wide. Fall color ranges from yellow to orange to red. The bark is gray to gray-brown with deep furrows and grows darker with age. Sugar maple, along with American beech and American basswood, dominates this forest. You will find it everywhere within the park. Sugar maple is the primary species used to make maple syrup in modern times, because it has twice the sugar content of other maples.



## **RED MAPLE**





### *Acer rubrum*

The leaves have 3 to 5 lobes and are coarsely doubly toothed. The teeth are more numerous on red maple than sugar maple. In the fall red maple leaves turn a brilliant red, which, along with the red buds, flowers and twigs of the tree, is where the common name originates from. The bark is gray-brown, thin, and becomes furrowed and scaly on older trees. Red maple is not as common as sugar maple, but it is still found throughout the park.



### **SERVICEBERRY, DOWNY OR SMOOTH**

*Amelanchier arborea* or *Amelanchier laevis*

Leaves are oval to oblong in shape and finely toothed. Overall, they look quite similar to chokecherry. Unlike chokecherry, the flowers of serviceberry are grouped in clusters at the tips of branches. The trees are striking in the spring, for they open their showy white flowers before their leaves. The berries are edible, with a flavor similar to blueberries. Serviceberry is uncommon, but can be most easily seen around the Stockade Labyrinth and Barn Chair.



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## **PHOTO CITATIONS**

Red Elm Leaf Photo: Robert H. Mohlenbrock, hosted by the US-DA-NRCS PLANTS Database

American Hornbeam bark and leaves, chokecherry bark, quaking aspen leaves, red elm bark, serviceberry bark photos: By John Hilty, Illinois Wildflowers

All other photos by Caitlin Chism

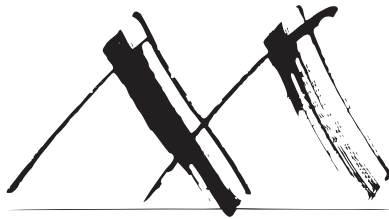
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Caitlin Chism, a Traverse City resident, has a Bachelor's of Science in Natural History and Interpretation from SUNY College of Environmental Science and Forestry. She is a volunteer for the Michigan Legacy Art Park and has led school tours of the park in its relation to Michigan history and environment for the spring and summer of 2018. She has also led a wildflower walk within the Art Park. In her spare time, she enjoys hiking, drawing, and painting the natural world.



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