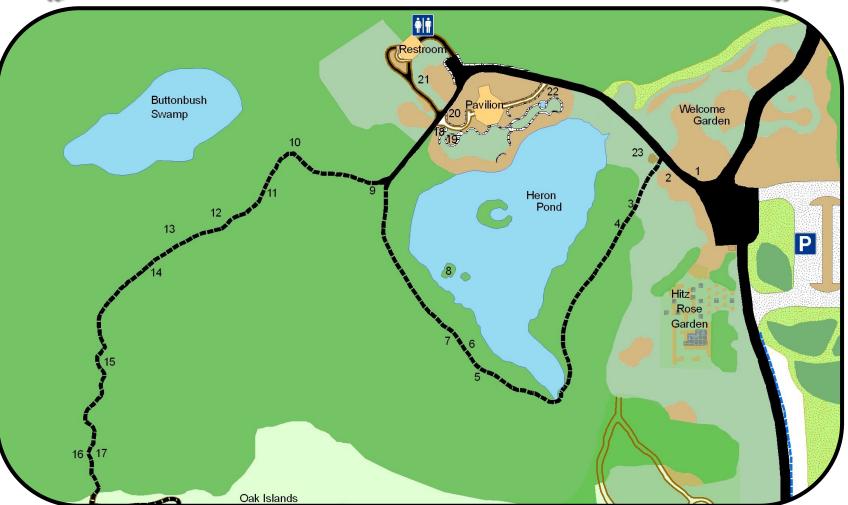
- **1. WHITE PINE** (*Pinus strobus*) is an evergreen conifer with soft bluish-green needles in bundles of five. Each whorl of branches on the trunk indicate one year of tree growth. Avoid planting this tree near roads winter-treated with salt, as the salt will "burn" the needles and harm the tree. Consider the fast growth and large mature size of 80' tall when using this tree in the urban landscape.
- **2. HILL'S OAK** (*Quercus ellipsoidalis*) is sometimes called Northern Pin Oak, and is closely related to Scarlet Oak. Oak species can be identified by overall shape, leaf, bud, and acorn characteristics. Hill's Oak has leaves with pointed lobes and pendulous, persistent lower branches like all pin oaks. Its beautiful fall color and tolerance of alkaline soils make it popular in urban landscapes.
- **3. & 5. BLACK OAK** (*Quercus velutina*) also has leaves with pointed lobes. It is adapted to growing on dry, sandy sites and it is the common oak of the Indiana Dunes. Black Oak is an important native species that cannot tolerate shady conditions and is found in savannas and open woodlands.
- **4. BUR OAK** (*Quercus macrocarpa*) is the logo tree of Gabis Arboretum and historically dominated savannas of the Midwest. Its leaves are dark on top with a pale undersurface and have smooth, rounded lobes. The Bur Oak name comes from the large acorns with fringed cups that can be seen in the fall. The wide-spreading branches and the thick, corky bark make the Bur Oak a beautiful specimen tree.
- **6. RED OAK** (*Quercus rubra*) is one of the most common oaks in Northwestern Indiana. It is an excellent food source for wildlife and is also a valuable lumber species. Red oaks transplant well in the spring and their use in the urban landscape is highly encouraged.
- **7. GREEN ASH** (*Fraxinus pennsylvanica*) has a compound leaf composed of seven leaflets that are green on both sides. It grows successfully over a wide range of conditions, but especially well in moist habitats. These trees lighten the shortening days of autumn with their bright fall foliage.
- **8. BALD CYPRESS** (*Taxodium distichum*) is unique because it is a conifer that is deciduous (loses its leaves in the fall). This is the same cypress that grows in the swamps of Florida. Under very wet conditions, the roots of the Bald Cypress develop "knees" that are like living sculptures arising from the soil.

Cabis Arboretum Tree Walk



- **9. HAWTHORN** (*Crataegus sp.*) are small native trees bearing red fruits that are eaten by many birds during winter. The dense, thorny branches provide excellent nesting sites as well. Hawthorns tend to grow in thickets next to old agricultural fields, and are one of
- 10. WHITE OAK (Quercus alba) is an important tree of oak woodlands in the Midwest and northeast. It has gray bark and leaves with rounded lobes and tips. The sweet acorns are attractive to wildlife and also favored by Native Americans as a food source. White oaks can be difficult to transplant, but are still a valuable tree for the urban landscape.
- 11. BLACK HAW (Viburnum prunifolium) is a shrub that can become a small tree if allowed to grow or pruned to tree shape. It has showy white flowers in late spring and colorful autumn foliage. The fruits that begin in a pale green cluster ripen to blue-black by mid-autumn. Black Haw has beautiful features through all seasons of the year and grows well in soil with good drainage.

- **12. SHINGLE OAK** (*Quercus imbricaria*), unlike all other oaks at the Arboretum, shingle oak has leaves that are not lobed. These leaves turn dark red or brown in fall, but remain on the tree through winter
- 13. WILD BLACK CHERRY (Prunus serotina) can be identified by the blackish "potato chip" appearance of the bark. Birds distribute the seeds that germinate and grow easily in disturbed soil. The wood of Wild Black Cherry is very valuable for furniture, but the tree has messy fruit, poor form, and is vulnerable to tent caterpillars. It therefore does not make a good landscape tree.
- 14. & 15. SHAGBARK HICKORY (Carya ovata) develops light gray bark that peels off in long strips, giving the trunk a shaggy look. Hickories often associate with oaks on soils that tend to be well-drained or dry. The strong wood of hickory is valuable for tool handles. Native Americans processed oil from the nuts.

- **16. EASTERN COTTONWOOD** (*Populus deltoides*) grows along streams and along Lake Michigan. The leaves are large and triangular shaped, and the buds are sticky and resinous. The prolific cottony seeds make "snow" in June and spread the plant to any disturbed wet area. Because the tree is large and weak-wooded, it is not good for the urban landscape.
- 17. QUAKING ASPEN (Populus tremuloides) has leaf stems (petioles) that are very flat and shake in the slightest breeze. This causes the leaves to "tremble", which creates the rustling sound we hear wherever aspens grow. The leaves are round with many fine teeth along the leaf margin, and the buds are shiny.
- **18. PAW PAW** (*Asimina triloba*) is a small tree with dark green, drooping leaves that turn yellow in autumn. Fruit is banana-like and edible. Two genetically different trees are needed for successful pollination to produce fruit.
- **19. IRONWOOD** (*Ostrya virginiana*), also known as Hop Hornbeam, is a medium-size native understory tree with pleasant yellow fall color. Ironwood is finding its way more and more into urban landscapes. It is limited only by its current lack of availability at local plant nurseries.
- **20. BIG-TOOTHED ASPEN** (*Populus grandidentata*) is named for the coarse teeth along the leaf margin. Both the young leaves and buds have wooly hairs that give the tree a fuzzy look in the spring.
- **21. REDBUD** (*Cercis canadensis*) is a small native tree with a beautiful display of pink flowers in the spring before the leaves emerge. The heart-shaped leaves turn yellow in fall. Redbud is native to Indiana's river-bottom areas, which tells you it prefers protected, moist sites.
- **22. EASTERN RED CEDAR** (*Juniperus virginiana*) is an evergreen tree with both flat, scale-like needles and prickly ones. It can grow to 40' tall and 20' wide and thrives on poor soils. The wood is aromatic. Over 50 species of birds eat the blue berries.
- **23. AMERICAN ELM** (*Ulmus americana*) is a native to much of the eastern United States. Was impacted heavily by Dutch Elm disease which affected the Chicago area by the 1960's. Great strides have been made to develop resistant varieties such as this "Princeton Elm". This is a wonderful shade tree for any yard. This tree was planted on Arbor Day 2017.

Welcome to Gabis Arboretum

This tree guide will help you locate and identify many of the tree species that grow at Gabis Arboretum.

- ♦ Your trail begins to the west of the parking lot along the paved drive that leads to the Joseph E. Mever Memorial Pavilion. The first two trees are located in the landscape beds of the Welcome Garden.
- From here, follow the Heron Trail to the left around the Heron Pond to the junction of the Owl Trail.
- The tree guide follows an out-and-back walk along the Owl Trail through the Heron Pond Woodlands.
- The walk ends around the Joseph E. Meyer Memorial

Enjoy your walk!



About Heron Pond Woodlands



The woodlands adjacent to the Heron Pond are representative of a contemporary midwestern Oak-Hickory woodland. Along with many species of oak and hickory; hawthorn, black cherry, viburnum, and hazelnut are among the other woody plant species growing here. The forest canopy is closed and fallen trees cover its floor, providing habitat for numerous plants and animals while understory trees and shrubs create a sense of closeness and variety. Another feature of this area is the Buttonbush Swamp. Fringed by willows, this wet opening in the forest is a unique ecosystem home to many wetland species. The Heron Pond Woodlands receives its name from the Green Herons that can be seen feeding along the shoreline of the Heron Pond.

Advice From A Tree

(Author unknown)

Stand Tall and Proud Sink your Roots into the Earth **Be Content with your Natural Beauty** Go out on a Limb **Drink plenty of Water Remember your Roots Enjoy the View**

Trees Improve Our Quality of Life

- ❖ Trees Create Habitat for Plants and Animals
- Trees Improve Air Quality
- Trees Reduce Stormwater Runoff and Erosion
- Trees Temper Local Climate
- Trees Conserve Energy
- Trees are Good For the Economy
- Trees Improve Health
- Trees Serve as Screens and Buffers
- Trees Promote Community

Identifying Trees

Trees are identified by:

- Leaves
- Bark
- Buds
- Twigs
- Flowers
- Fruit
- Structure

These are analyzed by:

- Shape
- Size
- Color
- * Texture
- ❖ Smell



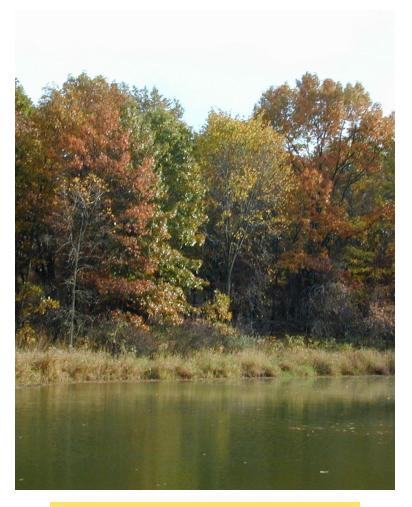




Heron Pond Woodland Tree Walk

Gabis Arboretum

at PURDUE NORTHWEST,



A Natural Inspiration

Explore, learn and delight in the unique natural sanctuary of Gabis Arboretum at Purdue Northwest located in Porter County, Indiana.

Tree Quiz













5. Hawthorn 6. Black Cherry 7. White Pine 1. Bur Oak 2. Shagbark Hickory 3. Shingle Oak 4. Hill's Oak