

Walking Brochure for Goll Woods

Welcome to Goll Woods. By pointing out some of the many interesting features along the Cottonwood Trail, this guide will serve as your nature interpreter. Simply match the numbers on the posts with the corresponding numbered paragraphs in this guide. Here, as in all other nature preserves, plants must be left undisturbed.

1. **Of Ages Gone By:** This 80 acre wood lot is a fine example of what the primeval Great Black Swamp of Northwestern Ohio looked like. Only since 1916, when lumber was in great demand for World War I, have any trees been removed from Goll Woods and then only on a limited basis. Many of the magnificent trees seen along this trail were quite large even at the time of the pilgrims' landing at Plymouth Rock.

2. **Forest Transition:** Different types of plants have different requirements for growth. Soil, light, and moisture are just some of the factors that establish what grows where. Within Goll Woods, moisture conditions, soil types and available sunlight vary to such an extent that at least three basic forest types are represented. These are (1) Elm-Ash-Maple swamp forest, (2) Mixed Mesophytic, and (3) Beech-Maple forest. Goll Woods historically had more water in it at one time. Extensive drainage in the surrounding area has decreased the amount of water present today resulting in a change of the composition of the woods. The dominant trees have gone from elm, ash, and swamp white oak to the start of American beech and sugar maple. This forest area represents a transitional community between a wet site covered by elm and ash and a well drained site in which conditions favor beech and sugar maple.

3. **Wildflowers:** Beneath this stately forest canopy we find an abundance of wildflowers. Spring is a particularly good season to enjoy them, for they are at their peak. It is remarkable that these delicate spring wildflowers have adapted to sprouting forth, flowering and going to seed all in just a few short weeks of early spring. It is all before the trees are into full leaf depriving the forest floor of precious light. Please do not pick or trample them.

4. **Bur Oak:** One of the most outstanding features of this woodlot is the abundance of giant bur oaks. Notice how their thick, deeply furrowed bark and stiff gnarled limbs present a rather distinctive appearance. Although often associated with the tall grass prairies of the Midwest, the bur oak is surprisingly adaptive and may be found on dry uplands as well as moist soil. This tree did not leaf out in 2006. At over 450 years old, it could be presumed that it died of old age. At death, it had a DBH (diameter at breast height) of 56 inches and stood 112 feet tall.

5. **Storm Damage:** During a thunderstorm in August of 1970, this bur oak was struck by lightning. For hundred of years as this tree grew, events of the past were recorded and preserved in its annual growth rings. The alternating light and dark bands are caused by differences in cells produced during different periods of growth. When growth is rapid, usually spring, the cells are larger in diameter and have thinner walls than in the summer. Therefore the spring growth appears lighter. During periods of drought or strict competition the bands may be indistinguishable from one another.

6. **Hetuck:** Here is an Ohio Buckeye, our official state tree. It is believed by some people that the name buckeye came from the Indian word "hetuck" meaning the eye of a buck deer, which the nut resembles. The Indians used to grind up buckeye seeds and dump them into small fishing ponds. The chemical properties of the buckeye would stun the fish causing them to rise to the surface where they were quickly retrieved.

7. **Pawpaw:** These small trees are called pawpaws. They belong to the custard-apple family. Notice the very large oblong drooping leaves. By late summer, short, stubby, greenish-yellow fruits develop. After the first frost, these banana like fruits ripen and provide a tasty treat for he who gets to them before the raccoons and opossums.

8. **Elder of the Woods:** This 122-foot "elder" of Goll Woods has proudly stood here for the last 450-500 years. If only it could tell of the centuries gone by when the land was wild with elk, bear, mountain lion, and bison, which were once plentiful.....or of the French Fur trader Chevalier Robert de la Salle who was the first white man to explore the Maumee River Valley. This tree was felled by a tornado in May of 1999.

9. **Look but Don't Touch:** At first glance one might mistake this vine growing up this tree as grape. A closer look will reveal that tendrils are lacking and numerous hairs are growing on the stem. This is poison ivy. Contact with any part of the plant during any season may produce an annoying rash. Poison ivy is however very beneficial to wintering birds as its berries are one of the few food sources available during our rough winters.

10. **Recycling:** One of the greatest environmental problems facing our world today is solid waste disposal. Each year Americans on the average dispose of 7 million junk cars, 100 million tires, 20 million tons of paper, 28 billion bottles, and 48 billion cans. In nature nothing is wasted. This stump is slowly being decomposed by a variety of plants and animals. The nutrients will be taken up by the next generation of plants completing the cycle. Every year approximately two tons of sticks leaves and seeds falls on one acre of forest floor. You can easily imagine how this would build up if weren't for various fungi and bacteria decomposing it.

11. **White Ash:** Ash trees are related to the olive trees of southern Europe and the near east. Of the 18 species of ash trees native to North America the white ash is the tallest and most valuable. It is used for baseball bats and other wooden sporting goods, tool handles and furniture. Black Ash, Green Ash, Pumpkin Ash and White Ash are found in Goll Woods. In 2007, emerald ash borer was discovered in Goll Woods. Will this mean the end of ash in this woods?

12. **Forest:** A young tree forced to grow in the shade of its neighbors grows very slowly, but when it is released by the removal of such competition, the new growth can be swift. Disease, attacks by insects, tornadoes and logging can open a forest canopy.

13. **Swamp Forest:** We are now in a small swamp forest area that is characteristic of what the great black swamp once was. Here, where the impermeable lacustrine clays hold water at the surface most of the year, American beech would drown. Once American Elms, black ash, and maples (red and silver) were the dominant trees. American elms have died off due to the Dutch elm disease and have been cut but the maples and black ash still remain. The ash will also die do to the presence of emerald ash borer.

14. **Beech-maple:** At first appearance, the old lake bed in northwestern Ohio appears to be level. Closer examination reveals an abundance of low ridges and sand knolls with gentle slopes of but a few feet per mile. These slight differences in topography and the consequent difference in surface drainage are reflected in the distribution of tree species. This section of trail follows a remnant beach ridge created by Lake Whittlesey about 11, 000 years ago. Although only a few feet in height the sand knoll offers enough drainage for the establishment of the beech-maple complex. Notice how all of the dominant trees along here are American beech and sugar maple.

15. **To Serve the Living:** To most, this large cottonwood probably seems of little value especially with the wind and storm damaged. However, it is one of the most important trees in the woods, for it is a den tree. This tree provides shelter for animals such as squirrels, birds, mice, insects and even bats.

16. **Tulip Tree:** The tulip tree or yellow poplar, a member of the magnolia family, is a very ancient tree. Geologists have found fossil leaves of tulip trees in the rocks of Europe and Greenland dating back some 100 million years. Many pioneer cabins in northwestern Ohio were made from tulip trees because the trees have a tendency to self-prune themselves resulting in a long limb-free trunk.

17. **Frog Pond:** Throughout most of the year, this small depression is filled with water. While it may seem to serve only as a “mosquito breeding” place that should be drained, actually, small pools such as this one not only play an extremely important role in the forest community, but also can provide fascination for the intent observer. A whole host of animals breed here including salamanders, chorus frogs, toads, and even dragonflies and damselflies.

18. **Ferns a Plenty:** There are fourteen species of ferns that can be found in Goll Woods. Some species are abundant while others are rare. Look carefully and you will see that the conspicuous part of the fern is the leaf itself. The stem lies horizontally on the ground and is often concealed by the dead leaves. Common species include maidenhair, Goldie’s, Christmas, sensitive and spinulose wood fern. How many ferns can you identify?

19. **Lichens:** If you look closely to the trunk of this oak, you will see greenish-white patches of *Parmelia* lichen. Lichens are remarkable plants, composed of both threads of fungus and green algae cells living harmoniously in one structure. The algae cells produce food for itself and the fungus through photosynthesis. The fungus provides shelter and water for the green algae.

20. **white Oak:** This splendid specimen is a lumberman’s delight, for it contains much valuable lumber. Two white oaks like this one could supply enough wood for one small house. Unfortunately many fine specimens were cut and burned wastefully to clear land for crops.

21. **Oak Openings:** If you can visualize this section of woodlot without any of the small under story trees but with these few, very large specimens of white and bur oaks, you will get a pretty good idea of how parts of this area appeared to the first settlers. Every fall the Indians of the area would burn the woods to facilitate their hunting by keeping the brush and small trees down. When the first settlers came to the area only a few varieties of oaks were present and they were spaced so far apart that one could take a wagon in any direction, thus the name Oak Openings.

22. **Trails End:** Ahead, just a short distance down the trail is the parking lot. We hope that you have enjoyed this walk through the woods and that you will plan to return some day soon.