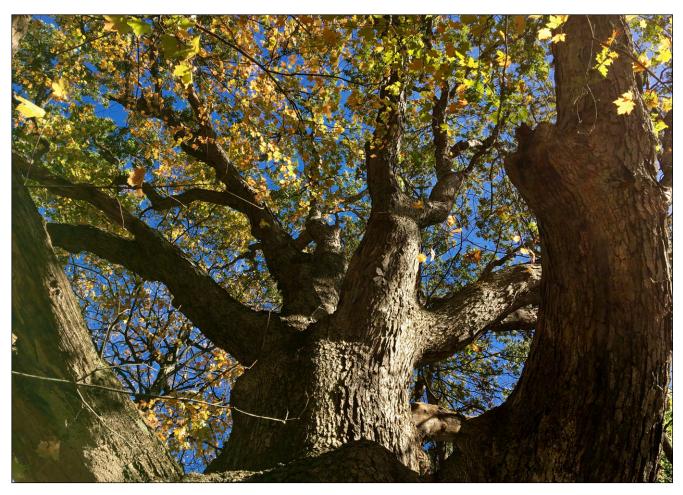
Lorain County's Great White Oak Tree

A Review of Lorain County's Great White Oak Tree

Col. Matthew W. Nahorn - 2017



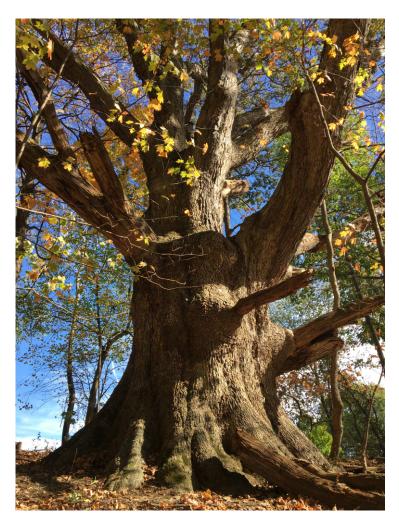
An upward look through the enormous crown of Lorain County's Great White Oak (Quercus alba) as it extends over the Swift Hollow prehistoric and historic region of the Vermilion River Watershed.

Introduction

Standing in the presence of something that has lived for one hundred years is inspiring. Now multiply that by five. Trees are some of the most interesting living beings on Earth partly because they have the ability to live for great amounts of time. They also are anchored in one spot, living out their life in that very spot, having numerous alterations occur all around, while they remain a stoic observer of history and events that take place surrounding them. In Lorain County, not far from a few ancient Native American Indian village or camp sites, stands an ancient, towering, and broad white oak tree that has witnessed much. Hundreds of years ago, Native Americans traveling through this area and camping here passed by this tree, early in its life and at the time, being much smaller. Lorain County's great white oak tree grows quietly on the edge of a tributary bank of the Vermilion River near the Swift Region and is a living witness to this area's pre-history.

Location

The white oak tree is located near the edge of a ravine (on a sloped area) within the Vermilion River Watershed. The Vermilion River Watershed is known as one of the cleanest and most conserved in the area. More specifically, the tree is above the historic Swift Hollow region. The soil here is MnB (Mentor silt loam) and is well-drained (via United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed October 2017). The soil is classified as "prime farmland." The landform setting of this soil is characterized as "terraces." This fits well with the surrounding area, as the tree is not far from, and generally



overlooks a dramatic, steep, impressive gorge with steep sides and cobblestone/shale substrate. It is a well-drained beautiful spot.

Several hardwood tree types occupy this area. Poplars are also popular here. The land was previously farmed and has been allowed to revert back to a secondary succession forested area. Remnants of metal fencing are evident near and around portions of the site.

Within the last few years, a housing development has sprouted near the old oak, and one residential backyard is now contiguous to the tree (see maps). The tree, as close as we can verify, is located on property owned by the Lorain County Metro Parks District. It is across from a peninsula of land, overlooking the Vermilion River Floodplain, the peninsula (bordered on the north and west edges by Gore Orphanage Road) which was a Native American Indian campsite, documented as the Swift Prehistoric Site and has shown evidence to have been home to at least the Archaic, Woodland, and late prehistoric (Erie) peoples.



Specifics

The tree at the center of this report, a common white oak (*Quercus alba*), is an example of a dominant genus found both throughout the ancient remnant and emergent forested patches throughout Northern Ohio, particularly on the high, well-drained landscapes.

This specific specimen measures approximately 24' 2" in circumference at 4' 6" from the ground (measurement taken December 4, 2017). The center of the tree exhibits severe rot, and an entry hole allows a small person to actually enter this void in the heartwood area,

where plenty of room to move about exists. It is interesting to note that the tree seems to have matured in an open-field environment, as is evidenced by the large, mature low branches that grew in this position. As a result of this likely open environment in which it spent most of its life, it grew a stout, short trunk. With its proximity to documented Native American Indian sites, it is possible the area around which the tree still grows, had been previously cleared, and the tree may have been used or planned to be used as a type of "council tree" by the later Native peoples of this area. Similar trees, under which Native peoples would gather have been documented, such as the well-known Logan Elm tree also in Ohio, but now deceased. Areas around and under these



enormous trees were important gathering spots where speeches, meetings, and treaties were



made and decided.

It is important to understand that by about 1654, the Iroquois Native American group, which had controlled land to the east of what is today Ohio, had defeated the Erie group, which called the southern shores of Lake Erie home. It is possible that the Eries were preparing and training this tree for use as described above. With the surrounding area having been the location of several later village sites of the Eries and also earlier peoples, it is very

possible this spot and tree were chosen as a meeting or sacred spot. With the estimated age of the tree and proximity to a few Erie village sites, it would have been undoubtedly chosen and land around it cleared, then likely abandoned possibly in the 1650s when disputes over control of land between the Erie and Iroquois groups erupted in war.

The tree's crown is generally globoid, having wide, spreading lower branches and soaring upper branches. Its crown seems to be quite full as is evidenced during the growing season, and it still produces a good crop of acorns every so often. Two years ago we collected several acorns, and three seedlings now are growing on the grounds of the Historic Shupe Homestead Wildlife Preserve in Amherst.

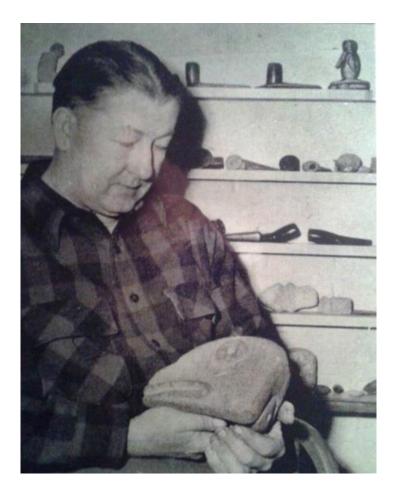
Using the figures and data collected, feeding this information into formulas developed by the International Society of Arboriculture, we can determine an estimated age of the tree: diameter = circumference (measured at 4' 6" above the ground) in inches/3.14. Therefore: 290''/3.14 = 92.36. Then, age = diameter x growth factor (of a white oak tree). Therefore: $92.36 \times 5 = 461.8$ years old, putting it at least growing by 1556. Taking into account the ancient specimen's circumference and overall size, along with a white oak's typical growth rate patterns, and finally its changing environment (from open field-like area to currently a more light-restricted emergent woodlot) regarding specifically competition within the stand, we estimate the tree to actually be closer to 500 years old. Very likely the tree was allowed to grow to this excessive age because of its location on the edge of a ravine (the area chosen not to be farmed). Furthermore, it likely was spared during logging operations in the area because of its broad crown and lack of tall, straight main-stem that rather features an abrupt interruption in the straight trunk by lower-growing mature branches, which is not favored in

logging Relatively these branches as a result shaded out increased for canopy Natural the tree is occurring lower



choices. recently, lowest have died of being and competition light. healing of now at these branches. It was decided to expound further on information regarding "council tree" background history, as noted on page 4. Historian and archaeologist Col. Raymond C. Vietzen (1907-1995) of the Indian Ridge Museum (1930-1995) in Elyria, Ohio, maintained an important stone prehistoric artifact at his Museum. Below is a photo of Col. Vietzen with a giant "fish head" pipe, which was found near Birmingham, Ohio, not far from the Vermilion River vicinity. It was unearthed when excavators were removing a giant white oak tree stump. The age of the tree and unusually large size of the prehistoric artifact (the pipe) offered credibility to the thought that this may have been a ceremonial pipe used at gatherings. Possibly in late prehistoric times, the tree was an important meeting spot. This oak may have acted as a council tree, as previously described.

Below, note the unusually large pipe, fashioned of sandstone and likely made to resemble the head of a fish. Col. Vietzen is seen here, amongst his impressive prehistoric Native American Indian smoking pipe collection. It was housed in his home and comprised his "private collection," which was not a part of his Museum displays for public viewing. (*Historic photo, courtesy New Indian Ridge Museum collection*.)



Maintenance

Whenever a tree of this calibre is encountered, several maintenance projects could be made in an effort to prolong the life of a giant such as this while maintaining a more ideal growing environment. One point that is suggested, includes trimming back dead limbs, thereby reducing overall strain on the crown and also allowing nutrients to be used in a more



efficient manner throughout the tree. One issue that often leads to the demise of a tree of such enormous size is the fact that its crown becomes top-heavy, as the base is simultaneously destabilized with the advent of advancing stages of rot in its base. Ultimately, the tree often will then topple because of these occurrences. Furthermore, a circumference around the tree ought to be established and ultimately cleared to just low shrubbery or tall grass height, reducing competition for light and nutrients for the tree by others sprouting in the immediate area. Many of the lower branches have been shaded out significantly within the last thirty or so years.

Going Forward

Time moves forward whether the tree is maintained or not. There is no doubt it will continue to grow for some time. And some may argue that natural growth around the tree ought to be left alone, and as the tree has made it this many years, it will be fine. This is certainly a valid argument, and likely this is the route that will be followed because of its location and property owners. However, if aspects under the "Maintenance" portion of this report are heeded, it is most certainly believed that the tree's life would be prolonged. It is a privilege and honor to stand in the presence of something that has lived for so many years and witnessed numerous changes around it. Even with little or no maintenance, and viewing its evident stages of current decline, we believe the tree will still remain healthy for a measurable number of future years. Further studies and observations will thus be conducted on the offspring that we propagate from Lorain County's Great White Oak Tree.



Special photography that appears in this work is courtesy of Col. M. W. Nahorn and files of the New Indian Ridge Museum. Some maps courtesy New Indian Ridge Museum files and library collections.

For future reference and or information, contact Col. Matthew W. Nahorn of the New Indian

Ridge Museum at the 1811 Historic Shupe Homestead Wildlife Preserve in Amherst, Ohio.

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