To reach the Oxbow West parking area, go left on US Hwy 50 from the I-275 #16 exit. In about 200 yards, turn left east between the Circle K and Wafflehouse and go over the levee until the road T's with a fence directly in front of you. Turn right and go to the Oxbow entrance sign. Turn left into the Oxbow. The West parking area is immediately on the right. You can go to Google Maps and enter "Oxbow Nature Conservancy" for turn by turn directions to the wetlands.

Starting at our parking area walk back to the entrance sign to read our rules and check out the map. You will pass the wetlands sign (referenced in bullet #2 below) between the entrance and the parking area.

#1 Entrance:

- Hardintown To get to our entrance you drove off of U.S. Highway 50, over the levee and in to Hardintown. This area was once the city of Hardinsburgh and is in the jurisdiction of Dearborn County. Hardinsburgh was laid out in 1815. It was named for Henry Hardin, the original owner of the town site. A post office was established at Hardinsburgh in 1820 and remained in operation until it was discontinued in 1836. The Great Miami River used to flow at the edge of town but a flood in 1847 moved the channel of the Great Miami 1.5 miles to the opposite side of the valley and effectively caused the town to "die".
- Vernal Ponds (see the "Wetlands" sign for information). This small vernal pond is synthetic and was created here for demonstration and educational purposes. A large pond lies about 40 yards beyond this pond nearer the edge of the glacial embankment that the parking area sits on.
- Glacial Valley (see woodland sign). The parking area sits on an older glacial valley rise and is 10-20 feet higher than the current valley bottom that is the result of the last glacier to visit the valley. The higher ground is less often flooded and is home to a more diverse forest type.

Descend the hill to the "Y" in the road. You will be following the road on the right. The road on the left is short and leads to a locked gate about 100 yards down the causeway. You may drive or walk down the causeway to explore, there is room to turn around. The body of water on the right of the causeway is called Juno Pond.

#2 Juno Pond:

- Is a borrow Pit In construction and civil engineering a borrow pit is an area where material (usually soil, gravel or sand) has been dug for use at another location. Borrow pits can be found close to many major construction projects.
- Fish nursery The deeper water of the borrow pit provides varied habitats for fish and other aquatic species. Why do fish need wetlands? When an inland floodplain is inundated (flooded), many species of native fish colonize these nutrient-rich freshwater wetlands to feed and spawn. These areas then provide nursery habitats for juvenile fish. Nursery grounds are habitats that enhance the growth and survival of juvenile fish and are particularly suitable for young fish and other organisms to grow and live in.
- Swamp habitat (Eastern Shore of Juno Pond which is really the old riverbed)- A swamp is an area of land that is always saturated with water and has various trees and plants growing throughout. Because of a swamp's wet, soggy condition, it is not the type of land that can be used to grow crops. However, swamps play an important ecological role in our environment and provide a variety of resources that we depend on. Swamps and other wetlands are used as a tool in flood management. In circumstances of flooding, swamps absorb and use the excess water within the wetland, slowing its movement and protecting surrounding areas from disruption. Dense vegetation within the swamp also provides structure to the land, holding sediment in place and preventing erosion and land loss. Swamps are critically important to

providing fresh water and oxygen to all life, and they are often breeding grounds for a wide variety of species. Floodplain swamps are extremely important in fish production. Two-thirds of global fish and shellfish are commercially harvested and dependent on wetlands.

You can walk past the causeway cable but the roadbed is used only by farm equipment and other similar vehicles. The causeway will dead end in a farm field and you will not be able to proceed without putting growing crops at risk during the growing season.

#3 Back fields – Foot traffic ONLY – no trails or roads:

- Causeway to back fields A causeway is a track, road or railway on the upper point of an embankment across "a low, or wet place, or piece of water". It can be constructed of earth, masonry, wood, or concrete. Our causeway allows our farmers to reach the back fields for farming.
- Mercer Pond Another deeper borrow pit named for founder and long-time member Morris Mercer lies out on the edge of I-275. This borrow pit is similar but deeper and as such has other types of fish that breed in the pond.
- Corning Easement Bill Corning, founder and early member of Oxbow, Inc., was descended from the Hayes family who were original colonial owners in the Great Miami River bottoms. Land in this area of Ohio and Indiana was used to pay officers in the Revolutionary war for their service. Mr. Corning was intensely proud that the land he owned in the oxbow was still in the family. It was with great pride that Bill became one of the first to establish a conservation easement with Oxbow, Inc. About 30 acres of land under the Corning easement is adjacent to the south end of Oxbow Lake and sits abreast I-275. Many years ago, a large portion of this easement was planted in trees and shrubs and today is one of the few places in the Oxbow where bald cypress are found growing at the northern most edge of their range.
- You will be able to see more of the back fields from the Oxbow Lake Overlook #6

Continue driving down the west side of Juno Pond with pond on the left and the agricultural fields on the right. Notice the views of Juno Pond through the trees that give way to views of Oxbow Lake. On the right side, Osprey Lake will come into view.

#4 Osprey Lake:

Up until 1996 this lake was a corn/soybean field on a 45-acre farm. A decision was made to convert an abandoned elevated railroad track along the east side of U.S. Highway 50 into a levee that would protect the highway and the developing business park to the west of the highway. The city of Greendale purchased the farm to use as the source of soil to build the levee which now runs along the west side of the lake. Oxbow, Inc. approached the city with an offer to buy the property when Greendale was finished building the levee. With a sale firmly established that would reimburse the taxpayers of Greendale, Greendale agreed to some slight modifications of normal borrow pit practices. They agreed to dig the pit in an irregular shape which increased the length of the shoreline of the eventual lake. They agreed to leave breeding islands in the middle of the lake. And finally, they agreed to dig one end deep and leave the other end relatively shallow to increase diversity of underwater habitats. The subsequent 22.5-acre lake filled with flood water and due to the compaction of the silt subsoils by the construction equipment, has never dried out. The remaining 22.5 acres of the farm was planted in a native prairie seed mix obtained from locally derived plants. Over the years some of the plants not tolerant to frequent flooding have died out while others of the seed mix have flourished.

In the summer of 2020, we decided to incorporate our mowed firebreaks into part of a mowed nature trail around Osprey Lake. While "fairly flat" the trail has freshly cut stumps of some of the smaller trees

encountered during maintenance. Proceed slowly with some caution to avoid tripping over the stumps. If it has rained recently this trail may be too muddy to explore.

Turn around to the left and you will have a more complete view of Oxbow Lake. An even better view will be available at the next stop (#6).

#5 Oxbow Lake:

The Great Miami River issues from Indian Lake, Logan county, west-central Ohio and flows southsouthwest through Dayton, Middletown, and Hamilton to enter the Ohio River west of Cincinnati after a course of 170 miles (274 km). The river is named for the Miami, an Algonquian-speaking Native American people who lived in the region during the early days of European settlement. They were forced to relocate to the west to escape European-American settlement pressure. Its chief tributaries are the Stillwater, Mad, and Whitewater rivers. After severe flooding in 1913 the Miami Conservancy District was established (1915) and an extensive system of levees and retaining basins was built in the river valley.

The Oxbow Lake was formed slowly over time as the river reached flatter land, swinging from side to side forming winding bends called meanders. The water flows faster around the outside of the bend and slower on the inside. The river removes soil on the outside of the loop and deposits sediment on the inner bank. This means the meanders grow bigger and bigger over time. Eventually the river might take a shortcut, cutting across the neck of the loop and sealing off the meander, leaving a U-shaped lake. That lake is an oxbow. Oxbow Lake formed in this manner in 1847.

The Lake itself is shallow after more than 150 years of gradually silting-in which makes portions of it ideal for fish eating birds and mammals. Over 290 species of birds have been reported in the floodplain, of which Oxbow Lake is the primary feature. This number exceeds that of many of our country's protected National Wildlife Refuges. Formed in 1985, the Save the Oxbow Society, subsequently Oxbow, Inc., has worked with its primary partner, Great Parks of Hamilton County, to protect and preserve the floodplain. Lands protected by both organizations in and around the floodplain (including Shawnee Lookout County Park) comprise 7.8 continuous square miles of protected conservation area. The floodplain is properly named and is flooded several times each year often to a level of 20 feet or more above the standing normal summer level of the lake. If you were standing on the shore of the lake during such a flood there would be 15 feet of water above your head. Vegetation in the floodplain is special in that it must be able to survive and flourish even with this frequent and often prolonged inundation.

Continue past Osprey Lake and look for a parking area on the left side of the road. Pull in and get out to enjoy the view.

#6 Overlook

The overlook stands at approximately the halfway point of the curve of Oxbow Lake allowing viewing of the entire length of the lake. This former riverbed is narrow and shallow providing excellent habitat for fishing birds. To the north the lake becomes very shallow, often above the water level in late summer, before the termination of the lake in the deeper borrow pit we call Juno Pond. To the south the lake terminates in a woodland area, through which it drains toward the Great Miami River to the east. On the opposite shore you can see the back agricultural fields accessed via the causeway (#3). Directly across Oxbow Lake to the east, a hill rises out of the lowlands that is the location of Shawnee Lookout County Park in Hamilton County, Ohio. This park and the lowlands of the floodplain are steeped in the history of the native peoples. Sit on the benches provided by Eagle Scouts and watch nature pass by. Many bird species transverse the lake and its'

edges, turtles sun themselves on fallen tree trunks, cormorants, egrets and herons hunt and rest in season, and mammals and reptiles/amphibians walk, hop, slither or swim by. Pay attention to the insects and the variety of flowering plants.

It is a fairly long drive to the next stop mostly through agricultural fields. On the right side the agricultural field will give way to a wooded area which will give way to a prairie. Drive toward a copse of trees at the right edge of the road and you will be able to see Jackpot Pond behind the prairie area.

#7 Jackpot Pond

Jackpot Pond to the west of the road lies in the 60-acre mitigation area established when the building of the nearby casino destroyed natural wetland areas along the Ohio River. This mitigation area is owned by the Lawrenceburg Conservancy District and is part of the levee system. Water from the low-lying business park west of U.S. Highway 50 is collected and pumped into the mitigation area and drained to the Ohio River. This is another area where fishing birds and hunting birds can often be seen in the trees, on the water, or over the prairie area. Along this road are several acres of agricultural fields owned by Oxbow, Inc. and leased to local farmers. Income from these leases helps support the work of Oxbow, Inc. and farmers are obligated by the lease to leave a small portion of the planted crop unharvested in order to provide winter food for the wintering residents of the Oxbow floodplain. In these fields are also two active archaeological sites. One a native people's village dating to the Hopewell cultural period from about 800 AD to 1500 AD. The other a native people's village dating to the Hopewell cultural period from about 500 BC to 800 AD. These are just two of the many pre-historical native people's sites located in the floodplain and in the hills above the floodplain. These sites occur with high frequency along the Great Miami River which in the pre-historical period (before written history) served as a major highway of travel, communication and trade for the native peoples.

Almost done. Drive to the intersection of this road with the road that parallels the railroad tracks and turn right. The next stop will be on the right where you can view the slough.

#8 Drainage Slough

The slough functions as the drain for the business park located on the west side of U.S. Highway 50. Large pumps located near the fairgrounds collect ground and surface water from the business park and push it back over the levee into the slough where it can drain toward the Ohio River. A large culvert at this end of the slough allows the water to pass under the road and the railroad track and down a gentle slope of small holding ponds to the Ohio River. The slough is home to large numbers of Wood Duck that breed here during the Spring. Fishing birds and turtles are especially attached to the area, as are dabbling ducks and geese. It might be surprising to learn that this area once functioned as the Dearborn County Fairground until it was relocated to the business park.

Drive ahead and up the hill keeping to the right out of the Oxbow to the stop sign – it is possible vehicles will be coming up the hill. You'll cross the levee and come down on the service road for the casino. Bear right and follow the road (stay right) back out to U.S. Highway 50.

Thanks for visiting the Oxbow Conservancy Area. We would love to have you join as members to support the work we do here. You can join via our website at <u>www.oxbowinc.org</u> or on Facebook at Oxbow, Inc.

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