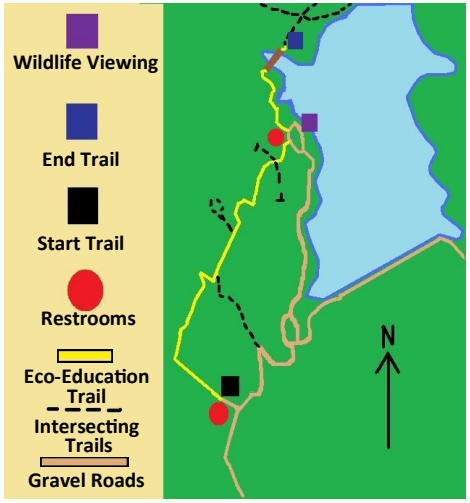
Eco-Education Trail

summer-fall edition

The Eco-Education Trail is designed to provide a self-guided tour to help hikers identify and learn about a few of the plants (flora) and animals (fauna) that Moorehead Park has to offer.

Map



The trail is 1.3 miles long one way, and 2.6 miles round trip.

At the end of the trail just before the wildlife viewing area, there is a good spot to stop and have a picnic or just rest and enjoy the beautiful lake view.

Remember as you walk through this public park that it belongs not only to you, but to all of us. Treat it just as you would want someone to treat your backyard. Please respect the park's amenities, trails, resources, and plant and animal life. Thank you for not littering, trampling the plants, or disturbing the wildlife.

By Joshua Dutler

1. Greenbrier

Greenbrier, a vine, has spines along the entire stalk, increasing in number as you go down. It has round leaves up to five inches across, and small green flowers that turn into dark blue to black berries in the fall. It uses tendrils (long, curly, green stems) designed to grasp nearby objects such as a tree trunk to climb up and support itself. It's a deciduous plant, meaning like Elms and Hackberries, it sheds it leaves in the fall and regrows them in the spring .

2. Burr Oak

Burr Oaks have thicker bark than other trees. This adaptation helped them to survive prairie fires. They were one of the only types of trees originally found on the open prairie. Their leaves are five to twelve inches long. They are alternately attached, meaning a single leaf is attached to the stem on the opposite side as the next leaf.

3. Meadows

Notice how as the trees thin, more light is allowed onto the ground. In these meadows the flora begins to change. The edges have bushes and on the open ground tall flowering plants flourish, competing with the grasses.

4. The Meadows Edge

As you walk around the edge of the meadow, you may notice some of the different types of bushes in Moorehead Park. Such as:

Prickly Ash

Honeysuckle

Wild Rose

5.Meadow Flowers

You may have noticed some of Moorehead's taller flowers in well lit clearings on dry ground. Such as:

Motherwort

This plant, like other members of the mint family, has a square stem. It has three lobed leaves at the bottom that turn into three pointed leaves at the top.

Common Milkweed

This plant is named for the thick white sap that comes out of the plant when cut.

Common Mullein

This plant was imported from Europe. Native Americans used the soft, fuzzy leaves of this plant in their moccasins for padding.

6. Tracks

Can you identify the signs of animals in the area?

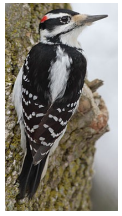
When animals move through an area they often leave signs behind such as the imprints of their feet on the ground, called tracks.

Deer **Raccoon** **Rabbit**

7. Monarchs

Monarch caterpillars can be found on Milkweed plants, one of the few plants they can eat. The toxins in the milkweed plant are absorbed into the Monarch making them toxic as well. This strategy deters most predators.

8. Woodpeckers



As you move along the trail listen for a loud repeating sound, like the striking of a hammer against a block of wood. The Hairy Woodpecker (left) is one of several similar species that live in Iowa. This is the sound wood peckers make as they drill through rotten wood in dead trees to find bugs to eat. As you walk, look for round holes about the size of a dime left from previous feedings. (right)

9. Hackberry


Hackberry trees have a unique bark. It is relatively smooth with bumpy ridges running vertically along the trunk. Their leaves are two to four inches long with a long tapering tip. It grows small green flowers (1/8 inch) in the spring that ripen into dark purple berries, which are edible. These berries usually don't last long because they are a favorite food for wild birds, though they will hang on the tree into winter if left.

10. Virginia Creeper

Virginia Creeper is often confused with Poison Ivy. A key difference between them is that Virginia Creeper has five leaflets originating from a single point and Poison Ivy has three. Virginia Creeper's leaves will turn dark red in the fall.

11. Poison Ivy

Poison Ivy, as most of us know, should not be touched because of Urushiol, the skin irritating oil found in the plants sap. You can even get a rash from Poison Ivy in the winter if you brush up against the bark or indirectly from sap that got onto your clothes from an earlier hike in the woods.

12. American Elm

American Elms have dark gray bark with flat ridges, and sometimes a scaly appearance. Their leaves are three to six inches long. Like Hackberries, American Elms have leaves that are asymmetrical, meaning that the leaf base, the place where the leaf attaches to the leaf stalk is bigger on one side than the other.

13. Northern Bedstraw

Northern Bedstraw grows 7 to 30 inches tall. It has Velcro like properties, if you look closely you will see tiny hooks covering it. This plant was extremely useful to early pioneers in many ways. A couple of which were: To stuff their mattresses. The Velcro like properties caused it to stick together, so the mattress wouldn't just flatten out. They also used it to make cheese by squeezing the juice out of it into milk, causing it to curdle.

14. Mosquito

Mosquitoes are not just blood thirsty insects. They actually drink nectar. Only the female needs to drink blood to get essential proteins and iron to produce eggs.

Ever wonder why some people get bit worse than others? Mosquitoes like some people better than others because minor chemical differences in sweat cause some people to smell better than others to mosquitoes.

15. Surface Water

As you walk down the trail, stop and look out ahead of you. Notice the ground slopes down into a big valley. Moorehead Lake is made by the earthen dam (the south side of the lake) put across the stream that flows in from the north. Where does the water come from that fills the lake and flows through the stream? When we get rain, the rain soaks through the ground until it hits a layer of earth that it cant pass through, like clay. When this happens the water pools up under ground into what is called an aquifer. When the ground water in the top of an aquifer (the water table) reaches a place where the ground surface dips below it, it becomes surface water. In the case of streams, they drain a watershed (a region of land that drains into a particular body of water) where surface water comes out of the ground and flows down hill toward a lower elevation. The man made dam forms a barrier that the water can't penetrate causing a lake to form as water backs up to the height of the water table, or until it finds a way to flow out.

16. Snails

Look around at the forest floor, on trunks, and under logs to see if you can find any of them. Snails like moist environments. Some bigger species of terrestrial (land) snails can range from one to three centimeters.

17.Grass or Sedge

Look down at the path ahead. You may see grass along it, but is it really grass? Feel a stem. If its round it is a grass. If it is triangular then it is a sedge, a grass like plant found in wetter areas. Like the square stemmed members of the mint family that I mentioned earlier, members of the grass family and members of the sedge family can often be identified by the common trait of stem shape.

18. Swans

If you are quiet you might get a close up look at some swans from the wildlife viewing blind. They have a nest just out from it on the lake. Remember to shut the covers on the viewing station before you leave.

Swans are in the same family as geese. They eat mainly roots, tubers, stems, and leaves of aquatic vegetation. They mate for life, and aggressively defend their young.

19.Shhhhh

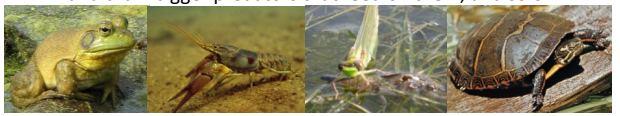
As you approach the viewing blind or the bridge remember these tips to improve your viewing experience.

Wildlife viewing tips:

- ☆ Be quiet, animals are scared by loud noises.
- ☆ Stop, look, and listen. Wait for wildlife to come to you.
- ☆ Move slowly, fast jerky movements give away your position.
- ☆ Look closely at objects around you for signs that an animal might have been there, or may be hiding.

20. The Bridge

As you walk over the bridge look out across the water. Shallow bays have lots of plant cover making them a great ecosystem (network of life forms and the resources they use) to start a food chain in. Small creatures come to live and feed in the plant cover, and draw bigger predators that feed on them, and so on.



Many kinds of creatures such as frogs, dragonflies, turtles, crawdads, and panfish can be found here. Many land based animals also come to quiet areas like this to drink during the hot dry summer.