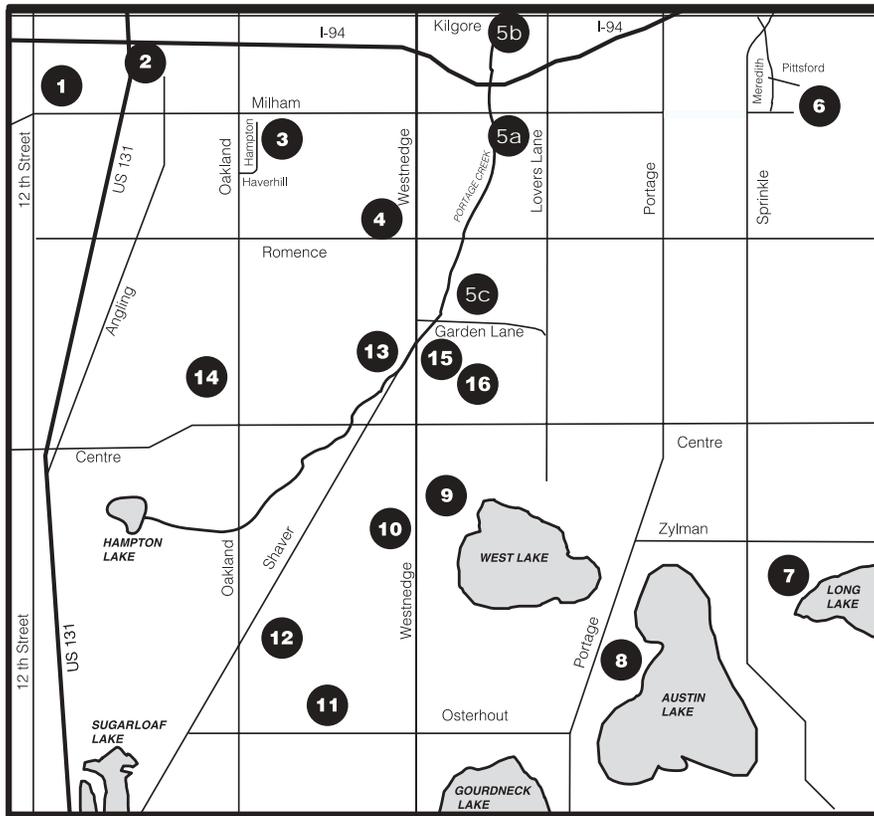


# City of Portage Park System



- |                                       |                              |
|---------------------------------------|------------------------------|
| 1. Westfield Park                     | 7. Ramona Park               |
| 2. Harbors West Park                  | 8. Lakeview Park             |
| 3. Haverhill Park                     | 9. West Lake Nature Preserve |
| 4. Millennium Park                    | 10. South Westnedge Park     |
| 5. Portage Creek<br>Bicentennial Park | 11. Schrier Park             |
| a. Milham Entrance                    | 12. Bishop's Bog Preserve    |
| b. North Trailhead                    | 13. Central Park             |
| c. Celery Flats                       | 14. Oakland Drive Park       |
| 6. Lexington Green Park               | 15. STEP Park                |
|                                       | 16. Veterans Memorial Park   |

*This booklet was produced with the  
assistance of the Kalamazoo Nature Center.*



## Wander the Wetlands— A Self-Guided Tour of West Lake Nature Preserve



## City of Portage

7900 South Westnedge Avenue • Portage, Michigan 49002

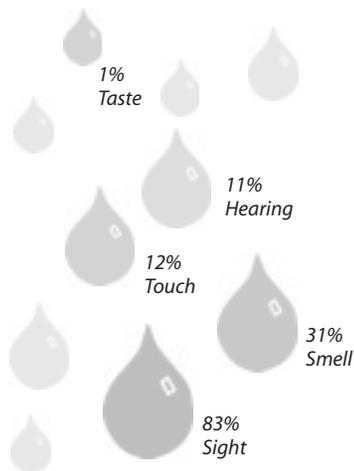
[www.portagemi.gov](http://www.portagemi.gov)

# West Lake Wetland Walk

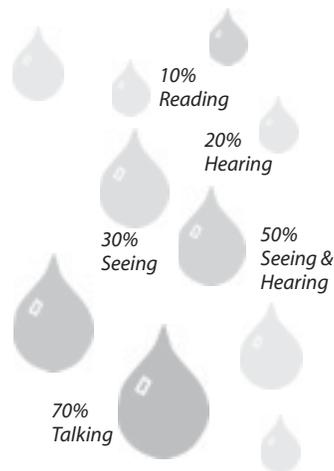
Welcome to the West Lake Nature Preserve managed by the City of Portage Parks and Recreation Department. 110 acres of unique plants and animals have been set aside as a sanctuary for your walking pleasure. Wading, swimming, fishing, and collecting or picking plants is prohibited. There is a designated playground and picnic area next to the parking lot. The grounds are open year-round from 8 a.m. to sunset. Please come and enjoy, but "take only pictures and leave only footprints."

Before beginning your journey, consider the following information. How will you retain the information you learn?

## How we PERCEIVE information



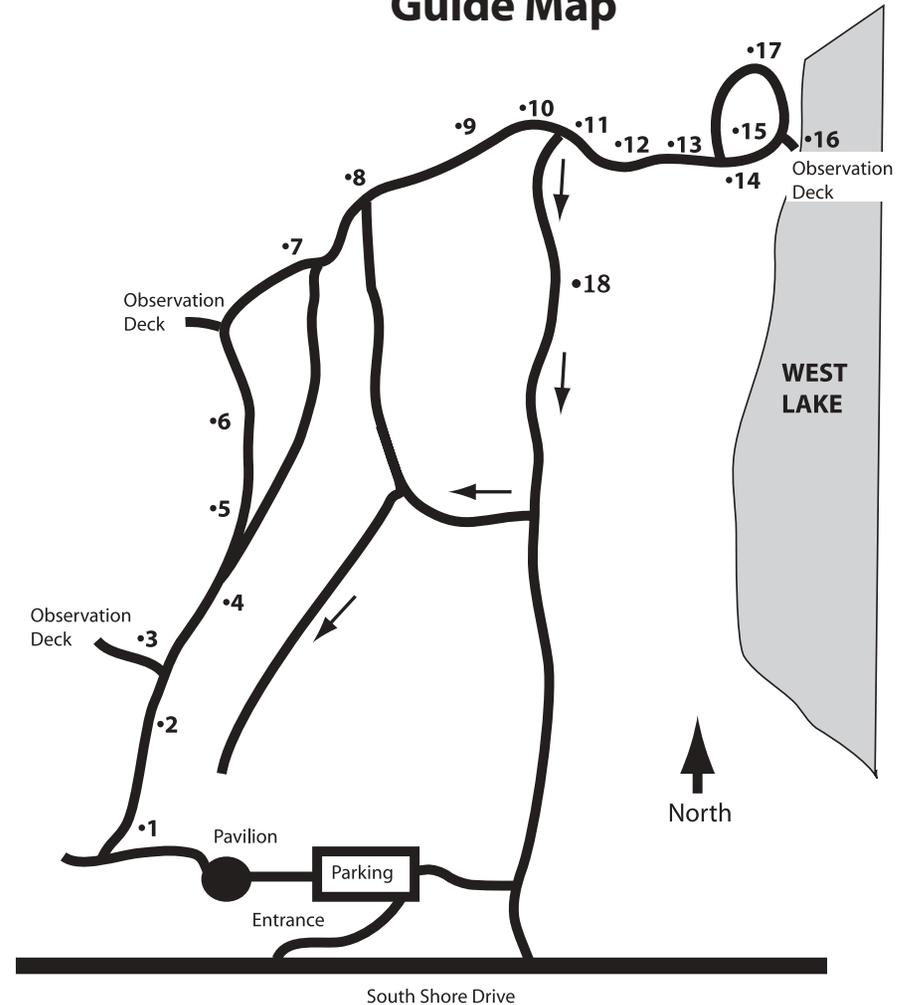
## How we RETAIN information



—taken from "Skills with People," by Leslie T. Gibling

To retain this information, you and others will benefit by talking about what you discover along the walk! To help you not only "see" nature today, but also to discover and retain much of what you "sense," this brochure guides you on a "Wetland Wander."

# West Lake Wetland Walk Guide Map



16. **Walk** out to where the bog meets the lake. Do you feel a difference in the wind from the beginning of the boardwalk? Look back and see if you can identify the different areas you have traveled through. Do you see any influences man has made on this unique fragile area?



- Wetlands provide man with recreational areas to fish, boat, and swim. Plants living by the shore also provide natural shoreline erosion control.

17. **Follow the boardwalk** to your right. This will bring you back to the main trail by the Tamarack trees. As you walk, notice in the distance the trees with white bark. They are White Birch, which like to live in damp areas of the woods and are more common in the north.



white birch trees

18. **As you leave** this area, think of all the ways wetlands are important to our environment. Can you name at least three ways?

- We have named six ways in this booklet.

## Welcome to the Wetland Wander!

This loop trail stretches over flat terrain through one of nature's most needed yet misunderstood resources—Wetlands. You will explore the unique wetland communities, wander through lowland forest, and feel the breeze off West Lake as you look upon it. Enjoy your adventure exploring YOUR wetlands!! The trail is approximately one mile.



**The numbers on the map in this brochure correspond with each stop you will make.**

1. **Stop! Listen!** Let the sounds of the city fade away. What sounds replace it? Look at the tree cover overhead. Look for a tree whose leaves are in three different shapes (a spoon, a fork, and a mitten). In winter look for reddish brown branches or small shoots of shiny green twigs. The sassafras tree is a predominant one in this area, as it grows new shoots from the mature trees. Can you find any young shoots which will someday be the size of the larger ones overhead?



sassafras leaves

2. **As you begin** on the trail, remember what the parking lot area was like or imagine it on a hot summer day, heat rising in visible waves from the black pavement. Now walk into the shade cast by the trees and notice the marsh area to your left. Is it cooler here? What do you think helps to cool the area? It is the shelter from the sunlight and evaporation from the leaves and open water that creates this cool feeling.

- Wetlands alter the local climate.

3. **Adventure out** onto the dock to view the marshy area. Sit quietly on the dock and wait for the creatures to come alive around you. Look for cattails with the brown bushy seed heads, listen for the Red-Winged Blackbird's "Okareeeee..." (in the winter, they are absent from the marsh and will return in early March).



Red-Winged Blackbird

Look into the water for any insects or fish moving about. In winter look for the nest the Red-Wing left behind made of cattail leaves. Look for signs of animals using the area for cover. Two common animal tracks:



rabbit tracks



pheasant tracks

- Wetlands provide a prime habitat of food, water, shelter and space for many plants & animals. A freshwater marsh is as productive as a tropical rain forest. A tropical rain forest is the most productive natural system on earth.

4. **Look up** along the hillside on the right. You will see boxes placed high up on the trees. Who might use the area to roost in during the day? Hint: They are our only flying mammal, work the night shift and consume almost 30,000 mosquitoes in the summer months.

Yes, BATS are our friends too!

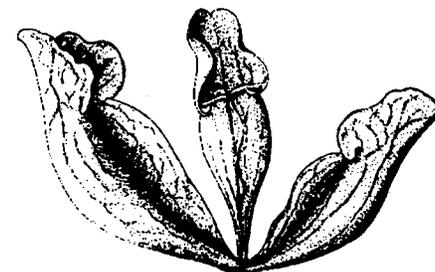
- Wetlands are important in providing nurseries for many animals; insects, fish, muskrat, and birds also need wetlands for food.

- The leatherleaf, like many of the bog plants, has these types of leaves because the conditions of high acidity and low oxygen prevent the normal absorption of water by plants, thus creating an almost desert-like condition for the plants living on top of the mat. The roots may still be frozen a few inches into the mat even in July because the mat is such a good insulator.



leatherleaf

15. **Keep looking** at the mat below your feet for a very special plant—a plant which looks like a pitcher holding water (see illustration). Kneel down and look inside the pitcher plant and see the hairs on the inside edge. Notice the red veins running down the plant. The red veins and fragrance of the plant attracts insects and the hairs trap them inside the pitcher of water. This plant then breaks down enzymes found in the plant and the nutrients are absorbed through the cells of the plant. This is an endangered plant and illegal to pick!



pitcher plant

- The bog community has many insectivorous plants which supplement their nutrient-poor diets.

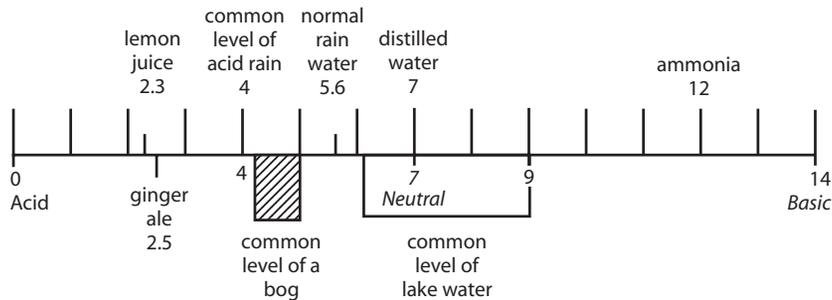
13. **Look** at the trees on the left side that are standing tall. Feel the tree's needles. (In the fall or winter, look for golden needles spread all over the ground.) this is the Tamarack or Larch. It looks very much like an evergreen with its needles; but it loses those needles in a similar way that the leaves fall off deciduous trees.



tamarack trees and needles

■ *Tamaracks and Black Spruce are common trees found in the acidic mat of the bog. The Sphagnum moss absorb mineral bases, making the surrounding waters extremely acidic.*

Compare the pH levels of common household products and the pH level of a bog:



14. **Continue on the boardwalk.** Look for:



blueberries

- Small shrubs with red-tipped stems—there may be small, blue berries on them. What is it? Blueberry bushes.

- On the moss mat, a small vine-like plant with very small leaflets along the stem, small white crane

looking flowers or small red berries. What is it? Cranberries.

The blueberries and cranberries need an acidic environment to grow. Nature's natural harvest!

- Small shrub-like plants with waxy, curled-edged leaves. Reach down and feel these leaves. What is it? Leatherleaf.



cranberries



5. **A marsh** is an area found at the edge of a lake, pond or river. Can you point out some plants that like their feet wet? Does it look like we have had a dry or wet year? Is the water up high on the trail or boardwalk?

■ *Marshes have standing water from less than an inch to several feet deep. The water fluctuates seasonally, or from year to year.*

6. **Follow the boardwalk** out into the marsh. Notice the plants along the sides. Do you see a tree-like shrub with white berries hanging down? **DON'T TOUCH** this one—it's poison sumac! The oils of this shrub when coming into contact with your skin can cause the same chemical reaction as poison ivy. It likes its feet wet, so one only finds it in the wetlands.



poison sumac

■ *Wetland plants are specially adapted to survive in water and assist in controlling floods. They can absorb large amounts of water through their "straw-like" stems.*

7. **As you leave the boardwalk**, you will notice a rotting log. Let's do a little detective work. How tall is the tree? What was the diameter of the tree? What is happening to this log? Is the moss living off of the log or just living on the log?



■ *Mosses are simple green plants which have no roots, stems or leaves. They absorb water and nutrients through all of their plant parts from the log. The mosses play a part in the decomposition of the log.*

8. **Did you notice** the change in temperature and light intensity as you entered the woods? Look up and notice the dense tree canopy overhead.

■ *Trees make up the canopy, with shrubs forming another layer under the canopy.*



*Did you notice a temperature change?*

9. **Look to the left** as you walk down the trail. Is the soil very moist? Reach down and feel it. Is the soil dark or light in color? How does this area look different than the other area out on the boardwalk? Yes, there are larger trees standing in water, thus making this a forested wetland or sometimes called a swamp.

■ *Forested wetlands or swamps are the most abundant type of wetland in the U.S., making up over half of the total wetland acreage. The soils of a swamp are rich in organic or plant matter, giving the soil a dark, rich color.*

10. **Keep following the trail until you reach the bridge.** Now you are entering a very unique, fragile and wonderful community!! Please, please DO NOT PICK ANY PLANTS!

■ *Many of them are rare and/or endangered which makes them illegal to pick.*

11. **Notice** as you cross the bridge, the change in plant life occurring around you. Look down below, at eye level, and ahead of you. Now you can look back to where you came from. What is different about this area?



*red stem dogwood*

■ *You are still in a shrubby swamp area where plants like their feet wet and don't mind the acidic soil found below. A few you might see:*

*Button bush – with large round seeds hanging from them.*



*button bush*

*Red stem dogwood – with its bright red stems.*

12. **As you walk**, you will notice below your feet that you are surrounded by a mat of moss-like material... you are actually walking on a mat of Sphagnum moss. This moss is the predominant plant of the bog, forming on the edge of a closed body of water. As the mat grows and plants die, peat develops (a fibered, spongy soil) sometimes up to 40 feet in depth. Reach down and feel the moss. Can it hold a lot of water? Sphagnum moss can hold 20 times its weight in water!

■ *Bogs are formed in areas where water flow and oxygen are limited. This makes it almost impossible for plants to decompose, creating an abundance of organic material that forms a floating mat.*

