

17 You have visited, or will be visiting, two of Michigan's habitats which have unique opportunities for wildlife watching. We hope each time you visit you will see more and more of Nature's fascinating creatures.



WHERE TO FIND OUT MORE ABOUT WATCHABLE WILDLIFE:

1. Tracking and the Art of Seeing: How to Read Animals Tracks and Signs, Paul Rezendes, Camden House Publishing.
2. Watchable Wildlife Viewing Guide, Phil T. Seng, Michigan State University Press.
3. Peterson Field Guides: Ecology of Eastern Forests, John C. Kricher & Gordon Morrison, Houghton Mifflin Company.
4. The Field Guide to Wildlife Habitats of the Eastern United States, Janine Benyus, Simon & Schuster.

Naturalist-guided interpretive walks at Bishop's Bog are available to groups who make advance reservations by calling the Kalamazoo Nature Center at 381-1574.

The Bishop's Bog Watching for Wildlife is part of a continuing series of trail guides published by the Kalamazoo Nature Center. Bishop's Bog Preserve is one of many parks managed by the City of Portage. Walk the nature trails at other Portage Parks--such as West Lake Nature Preserve, Celery Flats Interpretive Center, and the Portage Creek Bicentennial Park. For more information, call the Parks Department at 329-4522.



Watching for Wildlife at Bishop's Bog Preserve



15

Sit down and listen a moment for sounds of wildlife. Compare this with the sounds one might hear in a bog habitat. Are there different bird or insect sounds? In each habitat there will be indicator animals. These include birds, mammals and other animals. In this area, mammals commonly seen are deer



Black-capped chickadee



Downy woodpecker



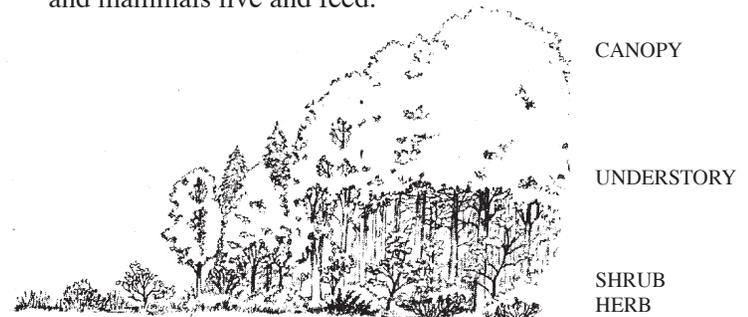
Cedar waxwing

and squirrels. Birds commonly seen in this area would be blackcapped chickadee, northern junco, hermit thrush, cedar waxwing and many of the woodpeckers.

** Each habitat will have a unique group of animals that can be found there.*

16

You are now standing in an upland deciduous forest. Within forests, the green leaves are arranged in a vertical pattern. This is referred to as stratification. Stratification forms distinct layers in the forest. Within each of the layers, specific birds and mammals live and feed.



In spring, the herb layer is most pronounced, when wildflowers are in bloom. In an older forest, one will see these layers very distinctly. They are not as evident in a younger forest. Can you find each layer? Can you find evidence of wildlife?

** Each layer of this community is occupied by plants and animals that are specifically suited to find food or cover at a given level.*

White Pine and Tamaracks provide food for many animals. The Larch sawfly larva provides food for woodpeckers, American robin, blue jays and cedar waxwings. The seeds are eaten by shrews, whitefooted mice and red squirrels.

* *Many plants provide food for wildlife. Can you find any other sources?*

12

As you walk this stretch of the trail you will notice an abundance of birch trees, with their stark, white bark, and the dominant shrub, the blueberry. Both of these plants were used extensively by the early Native Americans. The birch tree provided sugar from the sap, bark for canoes, roots for dye and medicine for upset stomachs. The blueberries, when dried and rolled into a paste, became a staple food for Native Americans.



* *Many plants found here were, and still are, important to people as food.*

13

You are now crossing over the Austin Lake Outlet Extension Drain, which drains from Sugar Loaf Lake aquifer through West Lake, and ends in Long Lake. This channel assists in maintaining lake levels. Today, it also provides a habitat for a number of wetland creatures who can find food and shelter here. Can you find any of these animals in the channel?



* *Some structures created by man will provide homes and food for wildlife.*

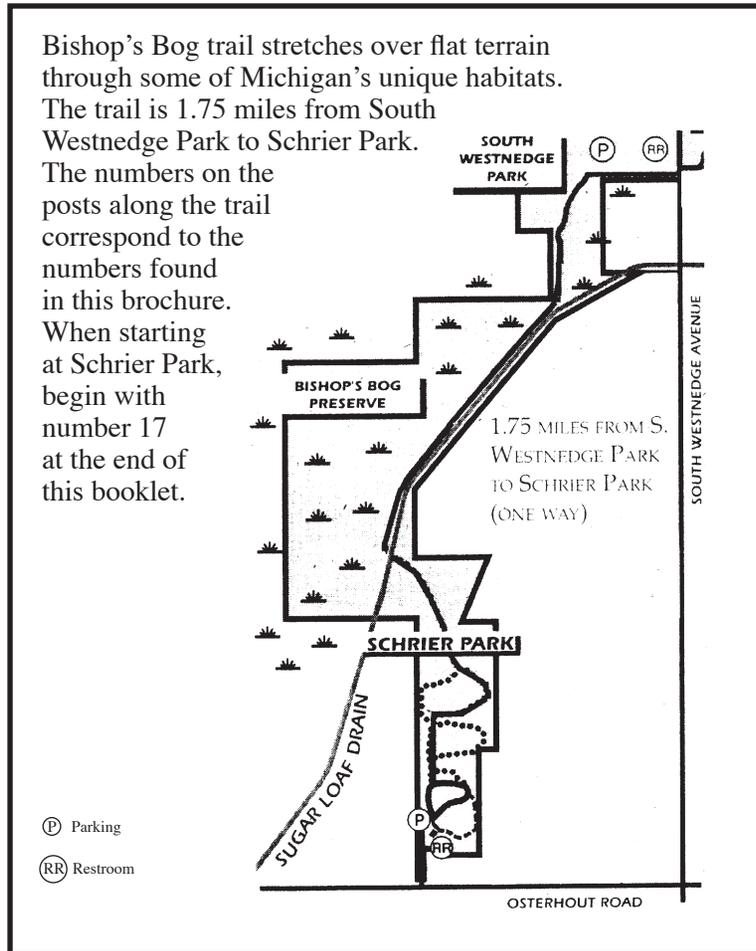
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This area has a diversity of plants growing in it which provide food for many of the animals which live here. Many animals survive on the fruits, bark, and twigs of these plants. The more diversity in plants, the more diverse wildlife is found. See if you can find any of the plants which provide for these animals. As you walk quietly through this area, begin looking for movement of wildlife.

* *A biodiverse area of plants will provide for a diverse set of wildlife.*

Bishop's Bog Preserve

Welcome to the Bishop's Bog Preserve Trail, managed by the City of Portage Parks and Recreation Department. The 145 acres provide unique habitat for plants and animals, and constitute the largest remaining relic bog in southern Michigan. It has been set aside as a sanctuary for your walking pleasure. Wading, swimming, fishing, and collecting or picking plants is prohibited. The grounds are open year round from sunrise to sunset. Please come and enjoy, but "take only pictures and leave only footprints."





Welcome Wildlife Watchers!

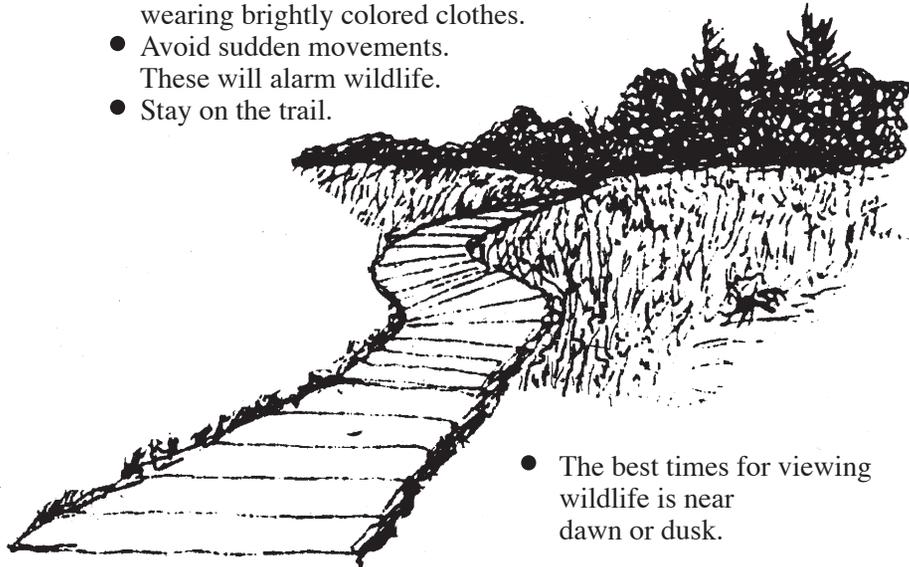
Wildlife and unique plants abound in Bishop's Bog! Wildlife is the world's best wildlife watchers....using all of their peaked senses for survival. We as humans do not rely on our senses as much so we may need to "train" ourselves in ways to look, listen and sense what is around us as we walk.

During this walk you will be introduced to techniques one can use to teach yourself to see "invisible" wildlife. You will learn along the way some important interactions which occur between wildlife and plants. These interactions with wildlife signs may help you to become a better wildlife watcher all season long.

1 We are entering a great ecological laboratory....Remember we are the guests to this area.

Hints for increasing your chances of seeing wildlife:

- Keep your noise level to a minimum.
- Leave your pets at home. Wild animals pick up their presence very easily.
- Try to blend into the landscape. Avoid wearing brightly colored clothes.
- Avoid sudden movements. These will alarm wildlife.
- Stay on the trail.

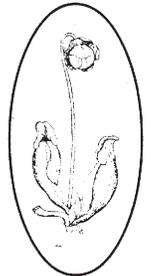


- The best times for viewing wildlife is near dawn or dusk.

10 Many plants have adaptations which attract wildlife, ensuring the plants survival. Look beneath you onto the bog floor. Can you find these plants which thrive here in this acid environment?



Pink Lady-Slipper Orchid: In spring, early summer look for their prominent pink pouch, fall look for their two large leaves. Lady-Slippers depend on insects for pollination. They lure their pollinators by color and odor. Bees are the main pollinators.



Pitcher Plants: Look for the pitcher-shaped leaves year round and their unusual flowers in summer. Insects, mainly flies and ants, crawl into the pitcher leaves and get caught by the tiny hairs inside. They fall into the water and the plant digests them with its enzymes.



Cranberries: Look for this tiny vine-like plant on the ground. In the summer, see if you can find the tiny pink flowers. Late summer to fall look for the red cranberry fruit.

11 Can you find the Michigan state tree? The White Pine, our state tree, has evergreen needles which are 3 inches long and in clusters of five.



Now can you find the other pine which likes to grow in the bog area? The Tamarack is a unique member of the pine family which loses its needles in the fall. Look for the warty twigs in the winter and the feathery clusters of needles in the spring and summer.



7 As you walk to the next stop, see if you find any of these wildlife signs:

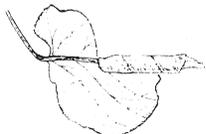
Spider web



Bark beetle markings on a dead tree



A rolled leaf

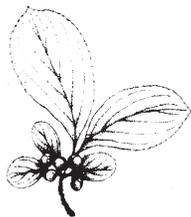


A leaf eaten by an insect



* When searching for wildlife remember to look on all levels and think about the different sizes of wildlife.

8 You will notice, as you walk, a grove of small trunked trees. In winter they have a smooth gray speckled bark. In summer, they will also have glossy leaves. This is a grove of European Buckthorn, this non-native plant that has replaced less abundant native species thus decreasing diversity. Do you see its black fruits on the tree or ground? Birds like cedar waxwings, will eat these small circular fruits. This is one explanation for the widespread distribution of Buckthorn.



* Wildlife plays a role in the distribution of plants.

9 Take a seat on the bench. Cup your hands behind your ears and turn your head slowly back and forth. By doing this you can channel the sound waves better into your ears. How many different sounds do you hear?



Your ears would be this big if they were the same size as a deer's.

The next time you see a mouse or a deer observe the size of the ears in proportion to their head. They are much larger than human ears would be. Larger ears provide many animals with an excellent tool to hear predators.

2

Look off the trail towards the woods. Can you find the dead trees? Many of us would think we should cut those down, but they play an important role for many animals. Do you see any openings or holes in them? Many animals use these for nesting areas.



It may start with the insects infesting the dead tree.



The woodpecker then seeks out the insects and eventually may make a nesting cavity and raise its young.



The next year a chickadee could occupy if for its nest. Chickadees cannot make their own holes; they rely on other animals to provide them.

* *Each season, different wildlife might be present. Make sure to frequent an area throughout the year.*

3

Find the large blade-like grass with a fuzzy brown head on top. These are cattails, the “supermarket” of the wetlands. Cattails are one of the most important wetland plants due to the abundance and provisions for wildlife. The diversity of wildlife which benefits from cattails is amazing.

Over the years, humans have used the cattail for many things:

- burlap, caulking (root fibers)
- adhesive (found in the stem)
- insulation (down spikes)
- rayon (from cattail pulp)
- oil (found in the seeds)



Can you find evidence of any of the following creatures that utilize cattails?



Red-winged blackbird: Uses cattails to make nests



Painted turtle: Eats the seeds and stems.



Clubiona spider: Folds over the tip of the cattail leaf to form a triangular nest. Female lays her eggs inside, dies, and the young spiders eat her for their first meal.



Goldfinch: Uses the downy cattail seed as nest lining.

Look for evidence of insects boring the flower and seed spikes - Snout beetles, bill bugs and burrowing water beetles are just a few who take advantage of this food source.



* Everything is connected to everything, which is connected to everything...

4 Take a moment to look for patterns or signs made by creatures who live here. Some signs to look for are animal tracks, trails made by continual use, digging spider webs, and signs of animals chewing on the plants. Remember to put yourself at the level of the animal's height.



Can you see the many trails created by the largest animal found here (the white-tailed deer)?

Can you think of any other animals who might use these trails?

* Often animal signs will be the only evidence of who lives here.



5

Imagine you are a small animal being chased by a predator. Where would you hide? The area in which you are standing is more protected. Do you think more animals would be found here?

Look for wildlife where: water meets land
forest meets field
lowlands meet shrubs

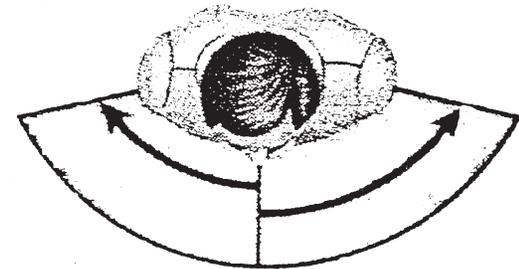
* Think edges when looking for wildlife.



6

Take a seat on the bench before you and sit quietly for a few moments.

Try a viewing technique which will enable you to detect the movement that occurs around you. This technique is called "splatter vision." This will get you to unfocus your eyes so that they take on a panoramic view.



Keeping your head still, looking forward, and only moving your eyes, take your arms and spread them out wide on either side of your head so you cannot see your hands. Begin moving your fingers and slowly bring your hands forward in front of your face until you notice them. Now raise your hands over your head and look for your hands as you bring them down in front of you. Splatter vision gives you 180 degree radius to pick up movement. Practice this as you sit here looking for swaying grass, birds flying or movement in the leaves.

* Using splatter vision will increase your chances of seeing wildlife signs. Animals often feel threatened by head-on stares.