

Kingfisher Lagoon & Kensington Nature Center • The Wonder of Wildflowers

What Happened Here?

Why is Kingfisher Lagoon getting smaller?

Answer and Discussion: Kingfisher Lagoon, a shallow pond, is being filled in over time. This is due to sediment being deposited by erosion, dead and decaying plants building up over time, and the shore line advancing into the lake. This process is called eutrophication. Kingfisher Lagoon is a highly eutrophic lake. The opposite would be Lake Superior, which is oligotrophic, meaning it has a hard, sandy bottom. We will not see much, if any, changes in Lake Superior over our life time.

Who Lives Here? Look at the animals on the sign. Which do you see? Hear?

Answer and Discussion: Some of the common animals that students will name include. Ducks (Mallard and Wood), Swans, Canada Geese and Great Blue Herons. Mammals such as muskrats and even mink can be seen. Northern Water Snakes, Snapping Turtles, and Painted Turtles are often encountered. Various species of frogs can be heard calling shortly after the ice melts, going all the way into June. This habitat is called a Cattail Marsh. If you are covering food chains, Cattail is the producer, while the muskrat is the consumer (herbivore). The secondary consumer (predator) could be the mink.

There is usually something blooming around the Nature Center May-September, even into October. What pollinators can you find? Can you find something that might eat a pollinator? What are some of the things animals use plants for besides food?

Answer and Discussion: Bees and butterflies are two common pollinators found in our garden. More observant students may notice that there are different types of bees and butterflies, and even spot some mimics- flies that look like bees. Common predators would include spiders, Praying Mantises, and even some birds. Animals use plants for shelter as well as food.

• Meet Ranger, the Red-tailed Hawk

Why does Ranger stay with us at Kensington Nature Center? What do you think he eats?

Answer and Discussion: Ranger was injured in an accident. After the rehabilitation process, the veterinarian realized that Ranger had a head injury, and probably would not be able to catch his own food. Ranger is fed a diet of mice, which we purchase frozen, then thaw out.

Sign post 1, head towards 16

Making use of Marshes

What are some uses of sedges? What animals do you think you might find hidden in the sedges?

DEER RUN TRAIL **SCAVENGER** HUNT

TEACHER EDITION

For our tour today, we are going to explore Deer Run Trail around the Kensington Nature Center and the Boardwalk on Wildwing Lake. Through the Scavenger Hunt students will observe how plants and animals survive in their environments, and how they interact with each other. This is a great time for students to take a field trip with their families. It is also a valuable add-on or introduction to our virtual school programming.

Please keep in mind that we do not allow dogs on the trails, and if you bring bird seed, only feed it to the small birds that can land in your hand. Turkeys, Sandhill Cranes, and mammals such as squirrels and chipmunks should never be given food. A Metropark's Vehicle pass is all that is needed to participate.

The trails described here are crushed limestone, or boardwalk. Portions of Deer Run Trail can be muddy, icy, or snow covered depending on seasonal conditions. Boardwalks and wooden bridges can be slippery when wet. Not all boardwalks and bridges have edge protection 3" high. There are a few short but steep inclines on Deer Run Trail.

Which ones did you see?

Answer and Discussion: Sedges are food and shelter for animals. It is very easy for small mammals, amphibians and birds to hide from predators in the tall thick grass. Some predators such as mink and snakes are very good at moving through the sedges to find food. Others, like the red fox and red-tailed hawks would have trouble finding and catching food there.

Sign post 16, head towards 15

The birds are tame along this section. Did any examine you up close? What did it look like? What did it say?

Answer and Discussion: Three species of birds "patrol" the forest here. Chickadees, Tufted Titmice, and Nuthatches will beg for sunflower seeds. They are easily identified by their calls. Chickadees are what we call name sayers; Chickadee-dee-dee. Titmice, call Peter-peter-peter. And Nuthatches seem to think everything is funny, ha-ha-ha-ha-ha. Winter is the best time to experience this; these tiny birds need to eat a lot of food every day, just to make it through the cold night.

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DEER RUN TRAIL SCAVENGER HUNT CONTINUED

TEACHER EDITION

Sign post 15, head towards 14

• Toppled Trees

Look at the trees on your left that seem to be standing in the water. Why do they fall over so easily? What color are they? Do they still have their needles?

Answer and Discussion: Tamarack trees grow in damp soils. They do not need to go deep to get water, so they have shallow roots. This leaves the trees vulnerable to high winds that push them over. Although Tamaracks are what most students would call an evergreen tree, they shed their needles annually just like a broad leaf tree. In the fall the needles turn a golden yellow.

• A pyramid built on Water

Try to spot a plant or animal, then figure out where it would be on the pyramid. Where are you on the food pyramid?

Answer and Discussion: Plants are at the base of the food pyramid. Herbivores are the next level, with predators on top. Predators take up a smaller part of the pyramid, as there are fewer of them. For example, for one red fox in its territory, there are about 800-1200 prey animals, almost all of them are herbivores. Humans are often at the very top of the food chain; we are called apex predators. The exception would be people that live around polar bears or tigers!

Sign post 14, head towards 12

Notice how the trees got bigger here. Look for some signs of animals that live here:
Woodpecker holes, places where turkeys have scratched the leaves aside, acorn and hickory seed hulls left behind by chipmunks.

Answer and Discussion: As the habitat changes, so do the animals that live there. While in the marsh/wetland, students were seeing muskrats, ducks, and great blue herons. In the forest they are going to find squirrels and woodpeckers. Some animals, like white-tailed deer and turkeys, can live in several types of habitat based on what food is available and how much cover they need.

Sign post 12, head towards 11

Sit quietly in the shelter. Can you hear anything? This is a good spot to listen for woodpeckers. Can you hear the heavy thump of the pileated woodpecker?

Answer and Discussion: By sitting quietly, students will overcome an animal's ability to avoid predators! As kids move through the nature trail, they drag their feet and make a lot of other commotion.

Animals will run and hide or often just hold still and rely on camouflage. A stationary observer will be more attuned to the animals when they start moving. After being still for a few minutes the animals forget why they stopped moving and go about their business.

Sign post 11, head towards 10

A lot of trees have fallen here. Can you see the smaller trees taking the place of those that fell?

Do the new trees look like the same species as those that fell?

Answer and Discussion: In a forest there are often several layers of trees. There are crown species that grow tall and shade the others. Oak, maple, and beech are these kinds of trees. Growing under those tall trees are species like hop-hornbeam and blue beech, slow growing, they never seem to get very big, but they grow well in the shade. The bottom layer is the seedlings of the crown species. When a large tree falls, it opens a space for the seedlings to grow tall in the sun. This is called forest succession.

• Persistence pays off

What is the first flower to bloom in Kensington? Why might hungry deer avoid eating this plant?

Answer and Discussion: The flower is Skunk Cabbage. By flowering late in the winter there is no competition from other plants for scarce pollinators. To break through ice and snow this plant creates its own heat and can reach temperatures of 70 degrees Fahrenheit even in winter. The flower gives off a foul odor that attracts carrion flies and beetles that provide pollination. Due to the horrible taste, deer and other grazers avoid this plant. Plants can't flee from animals trying to eat them, so they often resort to poison, thorns, or bad taste to avoid being eaten.

Sign post 10 head towards 9; from sign post 9, head towards 7

Did you find the small fenced in area on the left? What is it used for? Can you see a difference in the plants inside the fence compared to outside the fence? (Any difference is most obvious during May)

Answer and Discussion: The fenced in area is called an exclosure. Deer are not able to enter and eat the plants that are inside the fence. This lets us see the impact deer have on plant growth in the forest. When we have too many deer flowers such as trillium, and tree seedlings like sugar maple are hard to find in the unfenced areas. This

over-browsing causes a lack of diversity and can even set back forest succession.

Signpost 7, head towards 8; from sign post 8, head towards 1

Unstable Ground

What is hidden under the trees, moss and other plants?

Answer and Discussion: Water! What looks like land is a floating mat of decaying vegetation. Ice Age mammals have been found while excavating for roads and buildings. They would sometimes fall through and be trapped, then found thousands of years later.

Boardwalk on Wildwing Lake

Seasonal Extremes of a Shallow Lake

Why and when might you find dead fish on Wildwing Lake? Did you see any fish (live or dead!) on your visit?

Answer and Discussion: Dead fish are found on Wildwing Lake in the spring, shortly after the ice melts. During the winter freeze oxygen can no longer get mixed into the water and decaying plants use up some of the oxygen. Under the ice in winter, the fish can suffocate! The longer there is ice cover on the lake, the more likely we are to see a fish kill.

A Nest Neighborhood

Can you find the Great Blue Heron nests? Carefully look through the cattails. Can you see or hear any birds? Muskrats? Frogs? Turtles?

Answer and Discussion: The Great Blue Heron nests are up in the trees on the island near the boardwalk. They are most noticeable in the spring and early summer when they are occupied. Joining the herons in the rookery are Great Egrets and sometimes Cormorants. In addition to the animals that students may find at the Kingfisher Lagoon, Red-winged Blackbirds can be seen along the boardwalk.

We hope that your students all get the chance to participate in the scavenger hunt. To bring more Metroparks fun into your classroom, check out our virtual programming at metroparks.com/virtual

