Credit Valley Conservation
inspired by nature

WILDLIFE HABITAT CANADA HABITAT FAUNIQUE

Wetland Wonders: Classroom Activities

Prepared by: Credit Valley Conservation

Overview
In the following activities, students will learn about why wetlands are important, what kinds of wildlife they support, what threats they are facing, and their importance for people historically and today.
Grade: 3-6
Duration: 1-2 class periods

Introduction and background information about wetlands:
Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. There are two common wetland types in southern Ontario:

Swamps – a treed wetland that typically has standing water in the spring that dries up by late in the summer season. They are found scattered throughout Southern Ontario often with patches of open water and bulrushes.

Marshes – open wetland with bulrushes, cattails or reeds as the dominant vegetation, with usually fairly deep standing or moving water, such as on pond, lake or river shorelines.

Wetlands provide special benefits to plants, animals, humans, and the whole environment.

Because of the abundance of food, vegetative cover, and water found there, most wetlands are rich with diverse wildlife species. Wetlands provide breeding, resting and wintering habitats for thousands of migratory birds—including ducks, geese, swans, herons, and other wading birds, and shorebirds.

Many reptiles, amphibians, insects, and mammals also breed and live in wetlands. Often referred to as "nurseries," wetlands provide critical breeding and rearing habitat for countless numbers and kinds of wildlife.

Wetlands also have the ability to purify the environment. They act as natural filtering systems. Of great importance to humans is the flood control ability of wetlands. When runoff from rain and spring thaw is high, wetlands absorb extra water until it gradually drains away down streams and rivers and through the soil.

As remarkable and resilient as wetlands are, they do have limits. Their destruction and/or abuse can have devastating effects on wildlife, humans, and environmental quality. We need a better understanding of wetlands and their importance as wildlife habitat and ecosystems that benefit us.

Activity 1: Watch "A Ducktacular Journey" and have the students answer the following questions about the video:

1 - What kind of ducks star in our video? *(Wood Ducks)*
2 - What does Migration mean? *(Migration is the trip that birds and other animals take every year between their winter homes (wintering grounds) and summer homes (nesting grounds))*
3 - What kind of problems did the ducks run into on their journey? *(Habitat loss due to construction and development, pollution, algae overgrowth in the water)*
4 - What can you do to help Wood Ducks? *(Don't litter, pick up litter, restore habitat, build duck nest boxes)*

video:https://youtu.be/ujbM2czoksc

Activity 2: Wetland Metaphors (requires advance setup)

Materials:

- large pillowcase
- bag, or box
- small pillows
- sponge
- egg beater or mixer
- small doll cradle
- sieve
- wild rice

Directions:

Prepare a "Metaphor Container" (pillowcase, bag, or box) filled with the other objects. The container should have an opening large enough for a hand to reach in and retrieve an object.

1. Introduce wetlands to the class through a word wall.

2. Ask students:
   - Have you ever been to a wetland or seen any wetlands?
   - What words they think of when they hear Wetland?
   - What animals they would expect to find in a wetland?
   - Do you think wetlands are important? Discuss their answers.

3. Share details from the introduction to wetlands.

4. Explain that you are going to make a list of reasons wetlands are important using metaphors. A metaphor is a term or phrase that is used to make a comparison between two things that aren't alike but have something in common. A metaphor can be helpful for kids who are learning the meaning of specific words because they provide a more visual description of the word or thought.

The metaphors in this activity are common objects that represent benefits of wetlands.

Object	Metaphoric Function
Sponge	Absorbs excess water caused by runoff; retains moisture for a time even if standing water dries up.
Pillow	Provides a resting place for migratory birds
Egg beater	Mixes nutrients and oxygen into the water
Cradle	Provides a nursery that shelters, protects, and feeds young wildlife.
Wild rice	Provides food for wildlife and humans

5. Have students form small groups. Go around the group and have them choose an object out of the pillow case filled with metaphors. Give each group a few minutes to determine why their object is like a wetland.

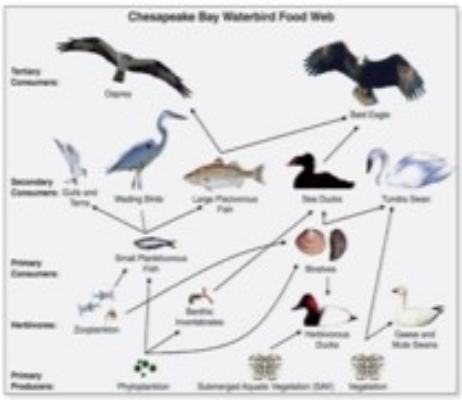
6. Have each group report back to the class and discuss each idea and invite other groups to add to those ideas. At the end, ask the class to summarize the major roles that wetlands perform and add these concepts to your word wall.

(Adapted from: WOW!: The Wonders of Wetlands, Environmental Concern Inc., 1991, p. 20.)

Activity 3: The Web of Life

Materials:

- A ball of string
- Plant and animal name tags
  (or the students can simply choose a role)



Directions:

1. Prepare a variety of name tags (or picture cards) with each depicting one component of a wetland ecosystem (e.g., sun, soil, water, air, grass, cattails, duckweed, dragonfly, mosquito, turtle, muskrat, beaver, rabbit, hawk, duck, fox, raccoon, fish, human, snail, frog, earthworm, bacteria, algae, etc.) Each person picks a name tag and becomes that component.

2. Everyone sits in a circle to symbolize the ecosystem. Begin with a few simple food chains. For example, the sun person holds the end of the string and you ask who needs the sun? Algae; so the ball is thrown/rolled to the algae person. Who eats algae? Snail; so the ball gets passed to the snail and so on until the chain is complete. Try a few different chains. Include humans in the chain – people used wetlands for food historically and still use wetlands to hunt ducks and other animals.

3. Now form a web. Starting with any one component, use the ball of string to connect the component to another related component. The relationship may be that the second component eats the first (e.g., plant connected to rabbit.) Or, the relationship may be that the first component needs the second to survive (e.g., plant connected to soil).

4. Connect the second component to a third (e.g., rabbit eaten by fox, or rabbit needs water). Continue in this way until everyone is connected to several people in several ways. As you go along, discuss what each connection or relationship is. Also, discuss interdependence.

5. Once everyone is connected, remove one component of the web (e.g., there is no water because it was drained). The water person shakes his or her strings. All members who feel the shake then shake their strings as well. This continues until it's demonstrated that every component is affected. Discuss how the various components are affected when one component of the web is removed.

6. What would happen if a chemical spill destroyed all the plants (plants tug their strings)? The plant eaters would starve, which would cause the meat eaters to starve. The web would be destroyed -- at least temporarily.

7. Let the students come up with various scenarios that can affect wetlands. Examples: What would happen if the water became badly polluted? What would happen if the wetland was drained? What would happen if a highway was built between the area where the wetland was located and where the animals who need access to it are living?

(Adapted from https://www.uaex.edu/environment-nature/wildlife/youth-education/TR%20Wetlands%20activities%20DU.pdf)

Thank you for participating in the Wetland Wonders Program and we look forward to seeing you at Terra Cotta Conservation Area!

Special thanks to our sponsor:

WILDLIFE HABITAT CANADA HABITAT FAUNIQUE

Since 1985, Wildlife Habitat Canada, a national, non-profit, charitable conservation organization, has invested over $50 million supporting more than 1,500 conservation projects across Canada, through its granting program. Funds invested to support grants come from the purchase of the Canadian Wildlife Habitat Conservation Stamp. The Stamp is purchased primarily by waterfowl hunters to validate their Migratory Game Bird Hunting Permits. Wildlife Habitat Canada works through partnerships with communities, landowners, governments, non-government organizations, and industry to conserve, enhance, and restore wildlife habitat. To learn more about the projects that Wildlife Habitat Canada has funded, please visit www.whc.org.

Without habitat...there is no wildlife. It's that simple!

Looking to take your class outside? Learn about our K- Gr 8 outdoor education programs at Terra Cotta Conservation area.