Kindergarten & Nursery



Objective:

To introduce students to wetlands by having them become familiar with some of the animals that live in this habitat.







Once Upon a Wetland...



Specific Learning Outcomes

K-2-01: Use appropriate vocabulary related to their investigations of colours.
K-2-03: Compare and contrast colours using appropriate terms.
K-2-07: Explore to identify and describe colours found in their environment.

General Learning Outcomes

K-0-1a: Ask questions that demonstrate a curiosity about living things, objects, and events in the immediate environment. **K-0-1b:** Make predictions as to what might happen during explorations.

K-0-2b: Compare gathered ideas and information to personal knowledge.

K-0-4e: Participate in cooperative group learning experiences.

K-0-4f: Verbalize questions during classroom learning experiences.

Vocabulary

wetland, water, plants, soil, sun, animals, story

Summary

Students are introduced to wetlands through a storybook. The story and accompanying images allow students to become familiar with wetland scenes, plants and animals in which they may encounter while at Oak Hammock Marsh.

Materials

 Storybook that includes some wetland animals (purchase, borrow, or project one of the free story options we've provided)

Procedure

Warm Up

Ask students to sit together in a circle. Have students close their eyes. Ask to students to think about the word 'wetland' and what pictures come to mind when they think of that word – what kind of animals might live in a wetland? What colors do you imagine you would see? Have students open their eyes, and discuss what everyone imagined.

The Activity

Present the book you wish to read to the class, explaining that the book takes place in a wetland. State that the class will be learning about what a wetland is and some of the animals that live there in preparation for the upcoming field trip to Oak Hammock Marsh Interpretive Centre.

Read the storybook, asking students to take note of the different animals they see, and the different scenes on each page. As you are reading, have students identify animals from the book, identify some characteristics of these animals and what they appear to be doing. Then describe the place where the animals appear to be (there are lots of green plants, water is near by, etc.).

After finishing the book, have students stand up and mimic the animals you talked about, making sounds and movements like the animals from the book (quack like the duck, swim like the beaver, etc.).

Extension: Choose two animals from the book to focus on as a class. Identify the similarities and differences between these two animals, while also comparing where each animals is found and the actions they appear to be doing (swimming, eating, sleeping, flying, etc.).

Wrap Up

Have students once again close their eyes and think about what they think a wetland looks like now that the story has been read to them. Then have students open their eyes, and discuss what everyone imagined, noting if there are any changes to their idea of what a wetland may look like.

Conclude by explaining that as a class they will be exploring Oak Hammock Marsh on a field trip. Oak Hammock Marsh is a place much like the places seen in the story. Through various activities, students will be exposed to many different animals that call wetlands home.

Suggested Book Themes

- Swamp, pond, marsh
- Cattails, bulrushes
- Beavers, muskrats
- Birds such as herons, ducks, geese, pelicans, shorebirds
- Dragonflies, damselflies, water bugs
- Frogs, salamanders, turtles
- Freshwater fish

Suggested Titles

Over and Under the Pond written by Kate Messner, Illustrated by Christopher Silas Neal

Near One Cattail written by Anthony D. Fredericks, Illustrated by Jennifer DiRabbio

Jo MacDonald Saw a Pond written by Mary Quattlebaum, Illustrated by Laura J. Bryant

If books of this nature are unavailable to you, we have PDF/eBooks copies of age-appropriate storybooks which you can access to use for this activity, including:

Close Encounters written by the Wildfowl and Wetlands Trust

Water for You and Me! Written by Lola Schaefer, Illustrated by Peter Grosshouser

What is a Wetland?



Specific Learning Outcomes

K-2-01: Use appropriate vocabulary related to their investigations of colours.
K-2-03: Compare and contrast colours using appropriate terms.
K-2-07: Explore to identify and describe colours found in their environment.

General Learning Outcomes

K-0-1a: Ask questions that demonstrate a curiosity about living things, objects, and events in the immediate environment. **K-0-2b**: Compare gathered ideas and information to personal knowledge.

K-0-4e: Participate in cooperative group learning experiences.

K-0-4f: Verbalize questions during classroom learning experiences.

K-0-9c: Express enjoyment of science-related classroom activities.

Vocabulary

wetland, sun, light, soil, plant, water, colour

Summary

Students are introduced to wetlands by engaging their imaginations and exploring the main ingredients that make up a wetland.

Materials

- Paper for each student
- · Colouring utensils
- Bowl of water (blue bowl if possible)
- Potted plant
- Draw a sun on the board OR use a desk lamp (switched on)
- Accompanying pictures (print image or project onto a screen)
- 2 metre sticks (optional)

Procedure

Warm Up

Give each student a piece of paper and distribute colouring utensils. Ask students what do they think of when they hear the word 'wetland.' You can break down the word and have the students brainstorm what a wetland could look like and include (could there be water, or land in a wetland?). Have them draw what they think a wetland looks like, then have students hold up their pictures to show the group.

The Activity

Ask students to sit together in a circle. Show students the bowl of water, the potted plant and the sun drawn on the board OR the lamp (which is turned on); have students identify each (water, plant, sun/light), describing the colours that make up each object.

Explain that the water, the soil, the plant, and the light are all special ingredients that make up a special place called a wetland.

A wetland is an area of land that holds shallow water, with a maximum depth of two metres. The water makes the soil very moist, so plants who need moist soils will grow in and around the water; this is why a wetland can not be deeper then two metres, because otherwise these kinds of plants drown and do not receive enough sunlight. The water moves slowly across because there are so many plants that slow the water down, absorbing some of the water like a sponge and filtering it as it moves through.

Extension: Show a picture of a wetland, and ask students to describe what they see, and what colors are in the picture. Ask the students if the colors that are in the picture are similar to the colors they see when looking at the bowl of water, potted plant, and light/sun.

Wrap Up

Conclude by explaining that as a class you will be exploring a wetland on your field trip to Oak Hammock Marsh. Oak Hammock Marsh is a place much like the places seen in the story. Through various activities, students will be exposed to many different animals that call wetlands home.

Extension: Prior to your conclusion, have students go back to their drawings of what they thought a wetland was, and ask if there is water, plants, soil, and a sun in their picture. Encourage students to add these ingredients to their picture if they were not yet included.

Animal Highlight — the Mallard

On the cover of this section, and in the insets, you will see pictures of Mallards. The Mallard is a very popular type of duck, which is a kind of bird. Mallards live in many parts of the world, including wetlands around southern Canada (including Manitoba).

The male Mallard has a bright green head, with a white ring around its neck, and a brown chest. The female Mallard has a mix of brown and white feathers. Both have a yellow bill and orange webbed feet. Mallards have two wings, which have a bright blue stripe on the middle of the wings, known as the speculum.

Mallards are great swimmers, moving forward by paddling their webbed feet. Occasionally, Mallards will walk on land, but they prefer swimming or flying. Mallards eat by skimming their beaks along the surface of the water while swimming, which is known as dabbling. This helps them gather up small floating plants and other tiny water creatures for food.

To learn more about the mallard and other birds, visit **Cornell Lab's All About Birds** website at **www.allaboutbirds.org/guide/Mallard/id.**

Draw What We Saw



Specific Learning Outcomes

K-3-07: Use the design process to construct a paper product for a particular use.

General Learning Outcomes

K-0-1a: Ask questions that demonstrate a curiosity about living things, objects, and events in the immediate environment.

K-0-3c: Select materials to be

K-0-4a: Manipulate materials purposefully.

K-0-4b: Construct an object to solve a problem or meet a need.

K-0-4f: Verbalize questions during classroom learning experiences.

K-0-7a: Recognize connections between new experiences and prior knowledge.

K-0-9c: Express enjoyment of science-related classroom activities.

Vocabulary

wetland, animal, colour, sun, soil, plants, water

Summary

Students continue their exploration of wetlands by creating artwork reflecting what they saw during their field trip to Oak Hammock Marsh.

Materials

 Gather enough paper, crayons, pencils etc. for students to each create a drawing

Procedure

Warm Up

Begin by reminding students about their visit to Oak Hammock Marsh, briefly reviewing the day's activities. Revisit the word 'wetland' and what they think it means now that they have visited one.

The Activity

After this brief brainstorm, explain that the students will be creating a wetland picture based on their experience at Oak Hammock Marsh, so they can remember their visit to a wetland. Facilitate the "building" of the wetland with your class, drawing each "ingredient" together as you discuss it. These "ingredients" include water, plants (like cattails), soil, and the sun. Ask questions that will guide students to the wetland "ingredients," then associating it with an appropriate colour, having students then draw that "ingredient" with that colour.

Optional: Decide whether you wish for students to focus on using realistic colours in their drawings, or if you wish your students to have creative freedom with the colour, and instead focus more on the ingredient being drawn (the water may be pink, but you focus on the fact that there is water in wetlands).

Extension: Have students identify some animals that live at Oak Hammock Marsh, or that they had learned about during their activities at the Centre. Then have students draw one of the animals discussed in their drawing.

Wrap Up

Conclude by reiterating the four main ingredients of what makes up a wetland and some of the animals that call wetlands home.

Optional: display the pictures around the classroom and have a mini

Do You Live Here?



Specific Learning Outcomes

K-1-01: Use appropriate vocabulary related to their investigation of trees.

K-2-01: Use appropriate vocabulary related to their investigations of colours.

K-2-03: Compare and contrast colours using appropriate terms.

General Learning Outcomes

K-0-1a: Ask questions that demonstrate a curiosity about living things, objects, and events in the immediate environment.

K-0-2b: Compare gathered ideas and information to personal knowledge.

K-0-3c: Select materials to be used

K-0-4e: Participate in cooperative group learning experiences

K-0-4f: Verbalize questions during classroom learning experiences.

Vocabulary

wetland, animal, colour

Summary

Students continue their exploration of wetlands by sorting animals into their proper home and discovering which animal lives in a wetland and which do not.

Materials

Print or project accompanying pictures

Procedure

Warm Up

Begin by reminding students about their visit to Oak Hammock Marsh, briefly reviewing the day's activities. Remind students of the word 'wetland,' and have them describe what a wetland looks like now that have they visited one.

The Activity

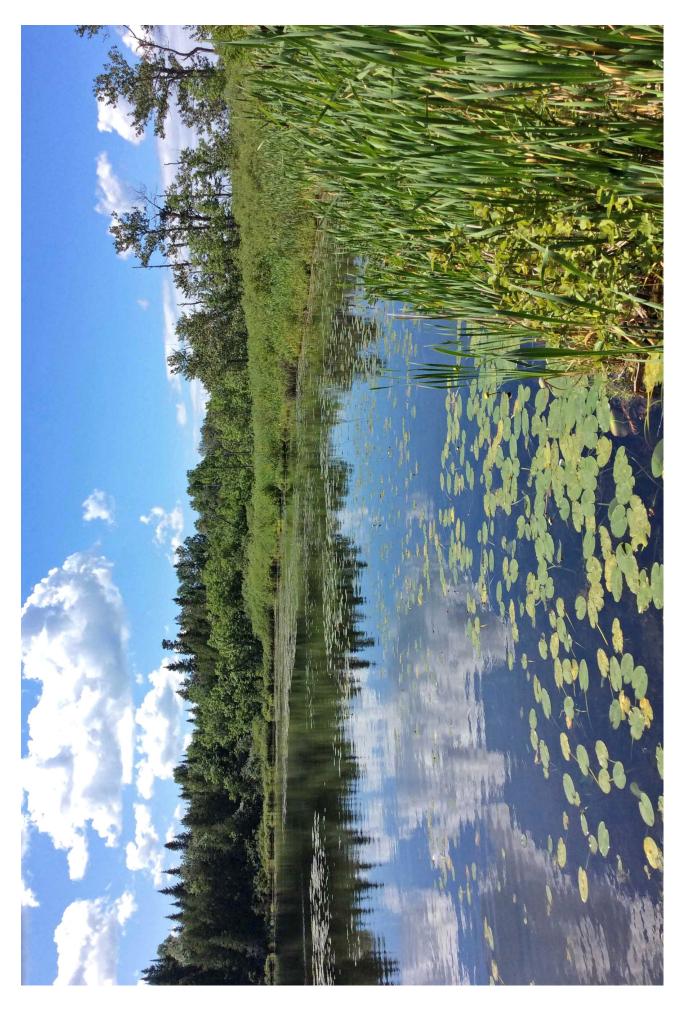
Explain to students that not all animals live in the same place. Different animals require different things (like specific types of food, different amounts of space, etc.), so the animals need to live where they can access the water, food, shelter and space they need. There are many places animals live, including wetlands.

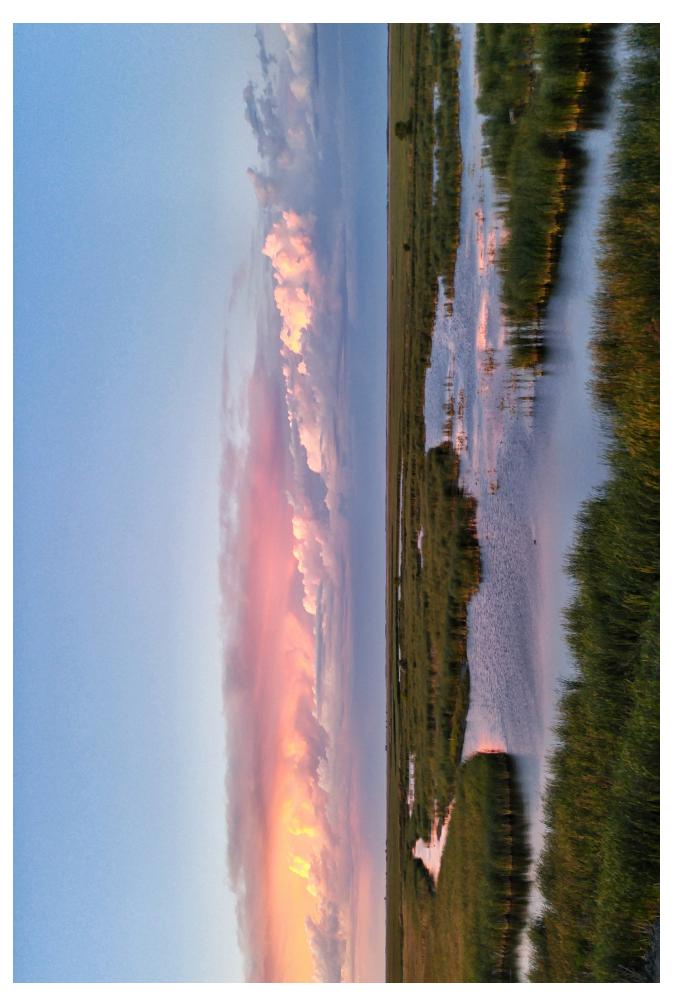
Explain they will be sorting animals and decide if they live in a wetland or not. There are four animals to sort: duck, beaver, cat and camel. Each animal comes with a picture, brief description and three true statements about the animal that the teacher will tell students. After looking at the picture and hearing the statements, students will decide whether the animal lives in a wetland or not. After students guess, the teacher can then read the description of the animal.

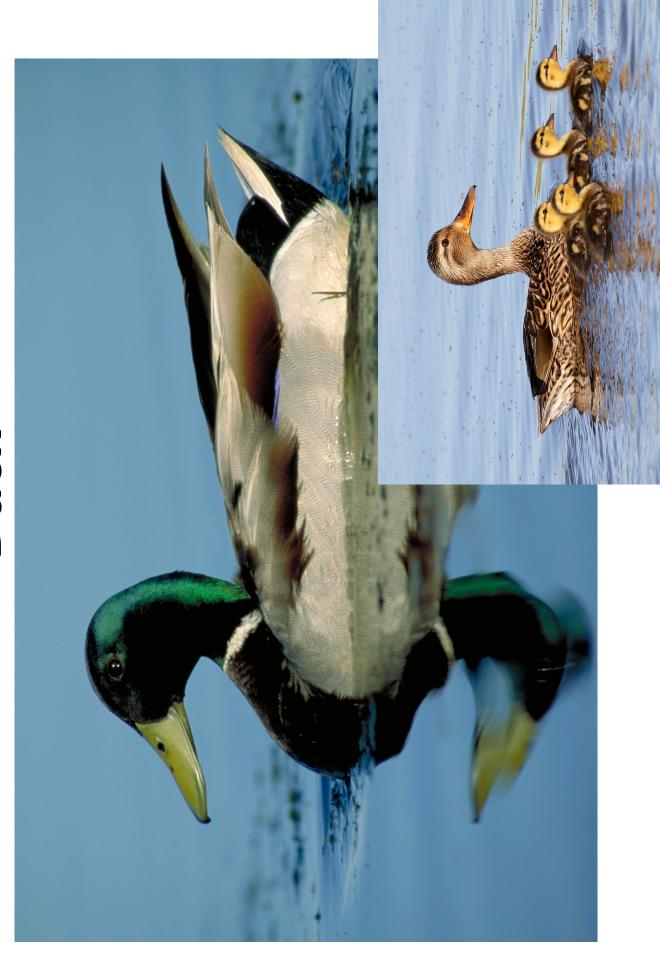
Alternative: For a more physically active activity, divide your class into four groups, designating each group as one of the animals. Have each group try to act like their designated animal. Assign a side of the room for animals who live in wetlands and a side for animals who do not. Read out to students the three true statements to help them decide which side of the room they should move to. After students have chosen their side, read the descriptions for each animal, asking students if they should change sides or not.

Wrap Up

Conclude by summarizing the results of the activity.







Duck (Mallard)

True Statements about the Duck:

- . I need wide open spaces to fly.
- . I find shelter in plants that grow near the water.
- I eat little water bugs and water plants.

Description:

The duck needs enough space to fly and swim in order to find enough food, which is usually found in or near the water. The duck also needs plants, like those that wetlands, that provide enough food, water, shelter and space for it to survive. grow near the water, to use as shelter from the weather or to hide from those animals that might be hunting it. Wetlands are perfect homes for the duck. The duck can be found in wetlands all over the world, living in places, like

Beaver





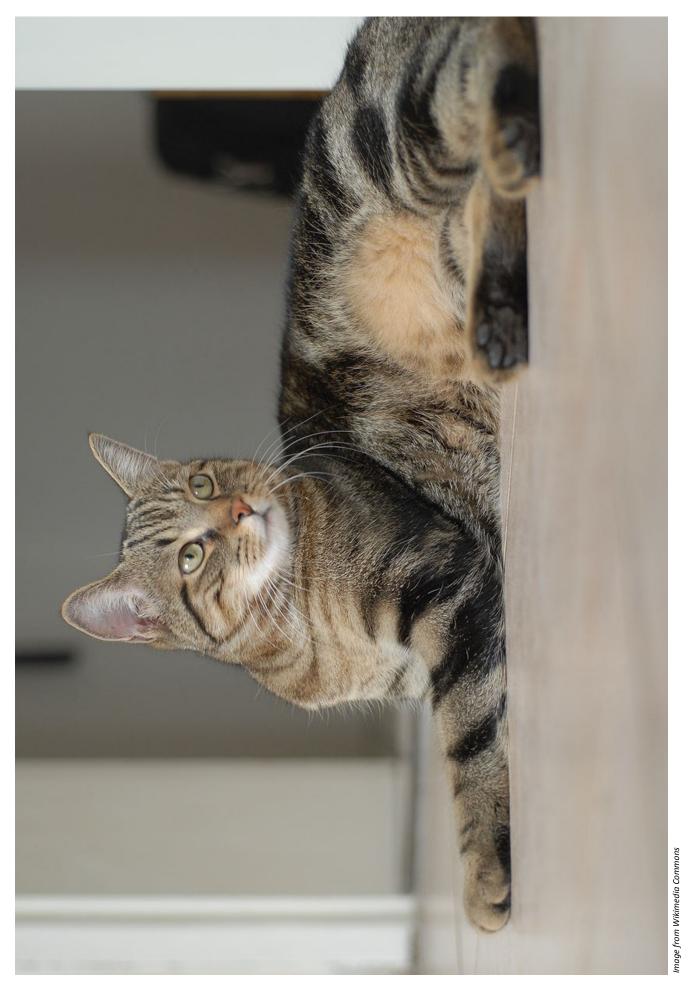
Beaver

True Statements about the Beaver:

- I need lots of trees for my food and shelter.
- I need a place which has deep enough water for me to swim, so I can hide from animals that hunt me.
- 3. I help create wetlands.

Description:

trees so it can use them for its food (the tree bark) and for its shelter (the lodge it which stops water from flowing, making a big pool of water on one side which is The beaver can be found in wetlands all over Canada. The beaver needs enough actually can create wetlands by creating a dam (a wall made of logs and twigs) makes from logs and mud). What is very special about the beaver is that is deep enough for the beaver to swim and dive in.



Cat

True Statements about the Cat:

- 1. I find shelter in many places.
- I eat meat and sometimes plants, but I will also eat pet food.
- I can live outside, but I can also live inside a house with someone taking care of me. ო

Description:

tamed (domesticated). Wetlands are not the first choice home for a cat, although many people, where it's needs are taking care of. The cat can be a wild animal or shelter and space in many different places. The cat is a popular pet choice for they could survive in a wetland for a time if they are able to find food, water, The cat can be found living all over the world, being able to find water, food, shelter, and space.

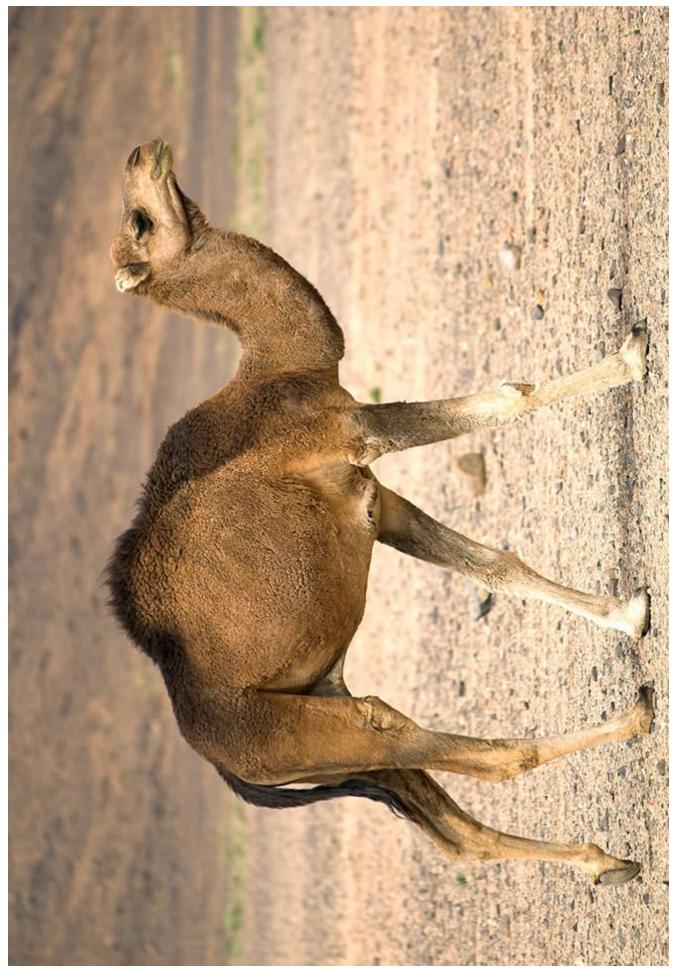


Image from animals.sandiegozoo.org/animals/camel.

Camel

True Statements about the Camel:

- 1. I eat plants, and, when I can find it, fish!
- which stores fat (which helps me survive when I am in a place where food and I can go long periods of time without food or water because of my hump water is scarce). 7
- I have a special eyes that help me see even when there is sand being blown in my eyes. ო

Description:

places, usually deserts in North Africa and the Middle East. The camel has special ways to deal with harsh desert life, such as its big, broad hooves that help it walk The camel is an animal not found in Canada (other then in zoos) and lives in hot on sand. The camel is not a wetland animal.