

# What Do You Need?



## Specific Learning Outcomes

- 3-1-01:** Use appropriate vocabulary related of their investigations of growth and changes in plants.
- 3-1-12:** Identify needs common to plants and animals, and contrast how they meet those needs.
- 3-1-13:** Describe ways that plants and animals depend on each other.
- 3-4-09:** Identify animals found in soil and explain their importance to soil quality.

## General Learning Outcomes

- 3-0-1a:** Ask questions that lead to investigations of living things, objects, and events in the local environment.
- 3-0-4e:** Respond respectfully to the ideas and actions of others, and recognize their ideas and contributions.
- 3-0-4g:** Verbalize questions, ideas, and intentions during classroom-learning experiences.
- 3-0-5a:** Make observations that are relevant to a specific question.
- 3-0-9b:** Express enjoyment when sharing and discussing science-related experiences from daily life.

## Vocabulary

wetland, plant, animal, soil, needs, nutrients, food, water, shelter, space, reproduction, scat, pollinate, decompose, filtration, flooding

## Summary

Students continue their exploration of wetlands by investigating the common needs of plants and animals, how they meet those needs within a wetland setting, while also exploring how plants and animals depend on each other.

## Materials

- Print 1 ‘Plants & Animals Venn Diagram’ for each student  
**OR** create a large version of the Venn diagram on an easel pad, chalk, white or Smart board so students can work as a class
- Print 1 ‘Plants & Animals’ t-chart and 1 ‘Plants & Animals Action Statements’ page per student (note: must be printed one-sided, for the ‘Action Statements’ page will be cut out by students)  
**OR** create a large version of the t-chart on an easel pad, chalk, white or Smart board so students can work as a class
- Writing supplies for students
- Glue sticks for students
- Scissors for students

## Procedure

### Warm Up

Begin by reminding students about their visit to Oak Hammock Marsh Interpretive Centre, briefly reviewing the day’s activities. Remind students of the word ‘wetland’ and ask them what they think it means now that they visited a wetland.

### The Activity

Explain that the class will be learning more about the common needs of plants and animals, how plants and animals depend on each other to help fulfill those needs, and how they meet their needs within a wetland.

Create a Venn Diagram on a board or easel pad **OR** give each student their own Venn Diagram. First have students identify some of the plants and animals they saw or learned about while at Oak Hammock Marsh, writing down the names of the plants and animals around the outside of the diagram. Have students then brainstorm some of the needs of these plants and animals.

Explain that both plants and animals need food, water, shelter, and space while also needing to reproduce, but plants and animals fulfill their needs in different ways.

As a class, brainstorm together how plants meet their needs, comparing it with how animals meet their needs. Write down the similarities in the middle circle, and the differences in the outside circles of the Venn Diagram.

Next, hand out the t-table and the accompanying action statement page to each student **OR** recreate the t-chart on an easel pad or chalk, white, or Smart board, doing the activity as a class.

If students are doing the activity individually, instruct students to cut out each statement on the action statement page, read each action statement, and then decide whether the action is something a plant would do or an animal, placing the cut out action statement on either the plant or animal side of the t-chart. Have students write in the space provided an example for each statement. For example, I help pollinate: Sunflower.

If the class is doing the activity together, simply read out each statement and have students decide where it should go on the t-chart. Create examples together as a class.

### *Wrap Up*

Have a brief class discussion about where students put each statement on their t-chart and the examples they thought of, having students explain their thought-process. Explain how plants and animals help each other survive (see teacher key). After the discussion, students can glue down their answers (if students did this activity individually).

Conclude by stating that many different kinds of plants and animals depend on wetlands to help them fulfill their needs of food, water, shelter, and space, while wetlands are also an important place for young plants and animals to grow and develop. Wetlands are a place where plants and animals help each other survive, working like a community.

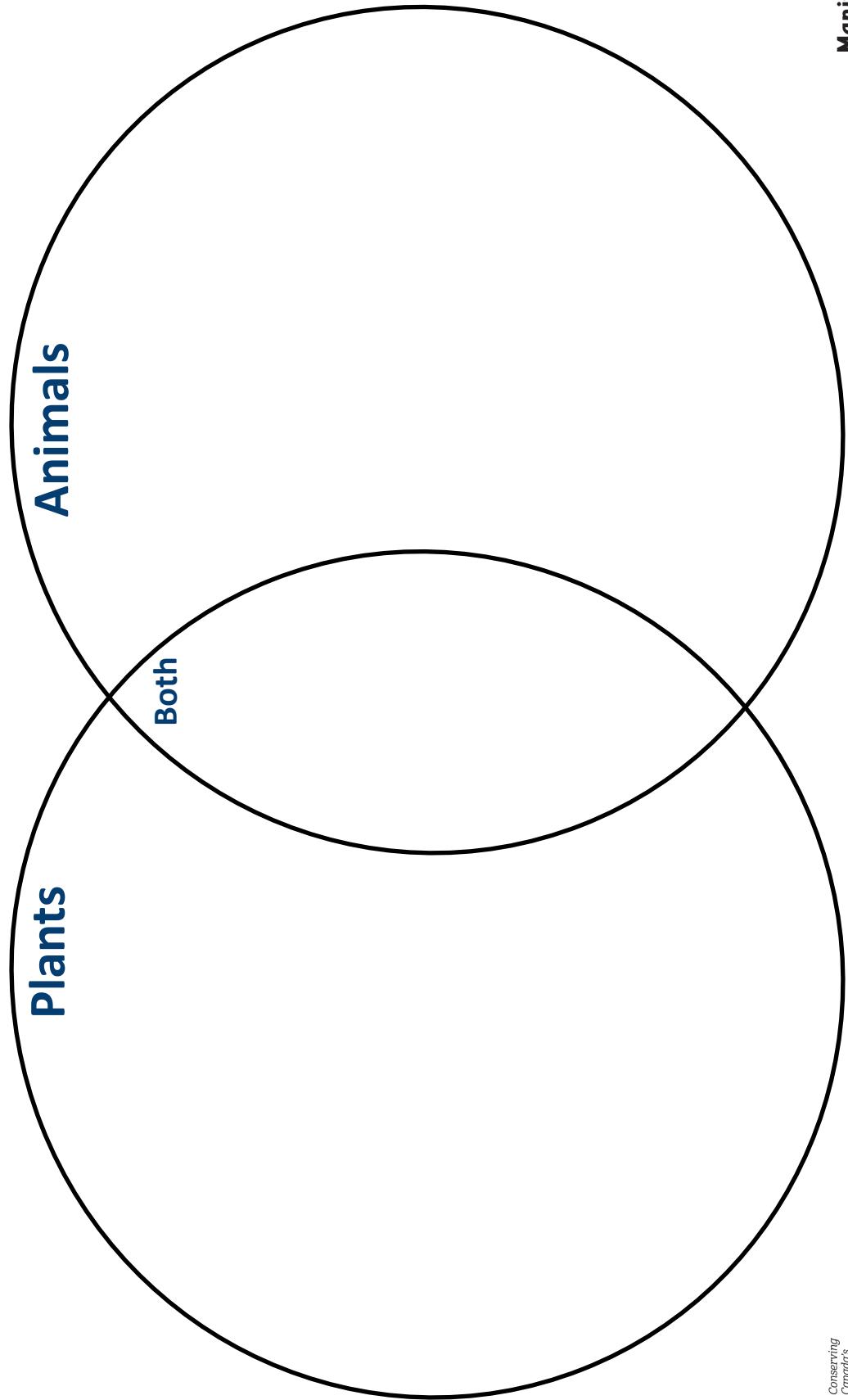
Name: \_\_\_\_\_



# What Do You Need?

## Venn Diagram

*Do plants and animals have common needs? Do they have different ways of fulfilling those needs?*  
Write down what you think are similar and different about how plants and animals fulfill their needs in order to survive, writing what they have in common in the middle space, and what is different in the outside spaces.



# What Do You Need?

## Venn Diagram

### Plants

**Food**— Plants make their own food (using Chlorophyll) through Photosynthesis; they also find other nutrients from the soil through their roots

**Water**— Due to the shape of their leaves water is directed toward the roots and stem and then drawn up through the plant's roots

**Shelter**— Other kinds of plants become the shelter for a plant

**Space**— Plants need enough space for the plant to grow above and below ground

**Reproduction**— Plants reproduce through seeds that are spread through a variety of ways, such as wind, water, animal carriers, and human carriers.

### Animals

**Food**— Animals have to find their food by either foraging, hunting, or both, depending on what food source is needed by the animal

**Water**— Animals have to search for water bodies, such as wetlands, to drink from and receive water from their food sources (such as the water stored in plants)

**Shelter**— Animals have to either build or find shelter to be protected from harsh weather conditions or to hide from predators

**Space**— Animals need enough space to allow them to gather enough food and water without being in too great of competition with other living things

**Reproduction**— Animals reproduce through a variety of ways which result in live young

Name: \_\_\_\_\_

# What Do You Need?



OAK HAMMOCK MARSH  
INTERPRETIVE CENTRE

*Do plants and animals depend on each other to survive? How do plants help animals survive? How do animals help plants survive?*  
Cut out the action statements from the following page. Read each action statement and decide whether the action is something a plant would do or an animal, placing the cut out action statement on the side you have chosen. Write in the space provided an example of each statement.

**How do plants help animals survive?**

**How do animals help plants survive?**



OAK HAMMOCK MARSH  
INTERPRETIVE CENTRE

# What Do You Need?

## Action Statements

My scat helps provide nutrients for seeds: _____.	I absorb water and can help reduce flooding: _____.
I help pollinate: _____.	I help break up soil, allowing air and water to mix with organic matter and minerals, helping to make soil: _____.
I provide a great hiding spot: _____.	I help clean the water through filtration: _____.
I help feed living things: _____.	I provide shelter: _____.
When I die and decompose, I add nutrients to the soil: _____.	I help feed living things: _____.
When I die and decompose, I add nutrients to the soil: _____.	I help spread seeds (through my scat, or fur): _____.



# What Do You Need?

## How do plants help animals survive?

### I provide a great hiding spot.

Plants provide excellent cover which allows animals to hide. Some animals have even developed colours on their bodies that help them camouflage with plants (such as ducks and rabbits).

### I provide shelter.

Plants are used by animals to make shelters, such as the grasses used to make a Mallard's nest or the Cattails used to make a Muskrat's lodge.

### I help clean the water through filtration.

Plants, especially plants that live in moist soils (such as in wetlands), help clean water through filtration. The plants absorb the water, filtering out any nutrients before the water is released.

### I absorb water and can help reduce flooding.

Plants, especially plants that live in moist soils (such as in wetlands), absorb water, then slowly release it. This process allows for water to drain and helps prevent flooding when there is a heavy rainfall or snow melt. Flooding can cause great harm to animals and so its prevention is vital to many animal's survival.

### I help feed living things.

Plants feed many different kinds of animals, particularly animals who are herbivores (eating only plants) and omnivores (eating both plants and meat). However, all animals are dependent on the energy plants provide, for they are the producers of energy at the bottom of the food chain, so even carnivores (only eat meat) feed on animals that need to eat plants.

### When I die and decompose, I add nutrients to the soil.

soil.

## How do animals help plants survive?

### I help spread seeds (through my scat or fur).

When animals ingest seeds or seeds get caught in their fur (such as Burdock seeds), they make excellent forms of transportation for plants, moving the seeds to new possible places to grow.

### My scat helps provide nutrients for seeds.

When animals poop, their scat provides fertilizer for seeds helping them grow. Animal scat is especially helpful when an animal has ingested seeds. Once they poop, the seeds land in the scat, having access to plenty of nutrients that are needed for growth.

### I help pollinate.

Animals like Bees and Butterflies pollinate plants, which allows the plant to then develop fruit/seeds. Without pollinators, plants would not be able to produce fruits and new seeds.

### I help break up soil, allowing air and water to mix with organic matter and minerals, helping to make and maintain healthy soil.

Animals like moles, beetles, ants, and worms all help create and maintain healthy soil. When soil has spaces for air and water, it also allows a plant's roots to spread.

### When I die and decompose, I add nutrients to the soil.

When animals die and decompose, nutrients return back to the soil, and can be drawn up by the roots of plants, helping to provide needed nutrients to plants, which in turn provide nutrients to other living things.

### I help feed living things.