

# Create a Plant Superhero!



Image from bp.blogspot.com.

## Specific Learning Outcomes

**3-1-01:** Use appropriate vocabulary related of their investigations of growth and changes in plants.

**3-1-03:** Show respect for plants as living things.

**3-1-14:** Describe ways plants are important to the environment.

## 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, food, water, shelter, filtration, flooding

## Summary

Students continue their exploration of wetlands by creating a wetland plant superhero while describing the many ways plants are important for the environment.

## Materials

- Drawing materials for each student
- Paper for each student (large paper for groups or 11x7 for individuals)
- *Optional: wetland plant reference books to help students develop their superhero*

## 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,' having them describe what a wetland looks like now that they have visited one. Discuss some of the benefits of wetlands (i.e. flood prevention, water filtration, habitat, resting stop for migrating animals, provides nutrients, cleans the water, nursery for many young animals, etc.)? Create a list of the wetland plants you had talked about during your field trip, and brainstorm as a class what the roles of those plants have within a wetland?

### The Activity

Explain to the class that today you will be demonstrating the amazing qualities of plants and their importance to the environment by creating a plant superhero character! Either assign or let students choose from either the Narrow-leaved Cattail, the Wood's Rose, or the Common Bladderwort. The plant chosen will be the basis for the superheroes, where they can do some research and learn more about the plant's abilities, incorporating those abilities within their superhero drawing.

**Optional:** *This activity could also work as a group assignment, in which case it is recommended that each group is assigned a different wetland plant in order to show diversity of wetland plants abilities and contributions.*

This activity could be done within a few classes, first beginning with researching their plants in the library, followed by designing their

It must be emphasised that although creativity is highly encouraged the end result must include: the true name of the plant (even if its just in brackets); five “superpowers” that this particular plant species does in fact have; write at least one sentence per superpower explaining why each superpower makes the plant important to the environment and to wetlands (see example). The sentences do not have to be on the drawing but it must be clear which superpower goes with which sentence.

### *Wrap Up*

Once finished their creations, students can then present to the class, introducing their Plant Superhero and explaining all of their superpowers and abilities which make them so important to the planet, and to wetlands in particular.

Conclude by emphasising each plant has amazing abilities and are all superheroes in their own right. We must shown great respect and appreciation for each plant and for what plants do for us and our world.

### **Animal Highlight—the Muskrat**

*On the cover of this section, and in the insets, you will see pictures of muskrats or structures made by muskrats. Muskrats are a type of animal known as a rodent, meaning they have teeth that are continuously growing and coated with enamel, which creates that telltale orange hue. Muskrats are categorized in the animal kingdom as a mammal, for muskrats are born alive, drink milk from their mother when they are young, and have hair on their bodies. A muskrat looks like its larger cousin the Beaver, but is smaller, has short brown fur all over its body, with a skinny, leathery rat-like tail.*

*Like the Beaver, Muskrats also build lodges for themselves, but instead of using logs and branches, they use plant materials, predominately the cattail (a green stem, with green ribbon-like leaves, and what looks like a hot-on-a-stick on the end of the stem). Muskrats both eat and use cattails to construct their homes in wetlands.*

*Muskrats are considered helpful creatures in a wetland, for they eat away aquatic plants which clears waterways for ducks and other birds to swim. The lodges built by Muskrats are also used as homes by other animals, such as birds who may nest right on top of the lodge. If you want to learn more about Muskrats, check out: <http://www.hww.ca/en/wildlife/mammals/muskrat.html?referrer=https://www.google.ca/>*



# Cattail Superhero!

Plants, like the Cattail, create **oxygen** which we and other animals need to breath!

Plants provide **shelter** for animals to hide from predators or from harsh weather.

Plants, like the Cattail, take the sun's energy and turn it into usable **energy**, meaning that plants are the producers of all our food energy which travels through the food chain (and eventually to us)!

Plants, like the Cattail, provide **food** for animals (including you & me)!

Cattails help reduce flooding by soaking up the water like a **sponge** and slowly releasing it. Some other plants can do this as well.

Cattails provide **homes** and **protection** for many different animals, including the Mallard, and Muskrat!

Cattails help **clean** the water by filtering out pollutants!

Plants, like the Cattail, help keep **soil** from eroding (blowing or flowing away). If soil erodes, plants will no longer be able to grow, which means no more food!

