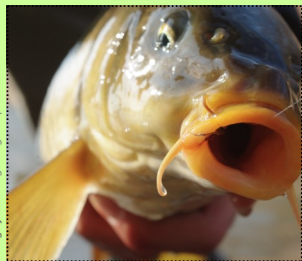


# Common Carp Trivia!



## General Learning Outcomes

**GLOB:** Science, Technology, Society and the Environment

**GLOC:** Scientific and technological skills and attitudes.

**GLOD:** Explore, understand, and use scientific knowledge in a variety of contexts.

## Specific Learning Outcomes

**SLO B1:** Identify and explore a current STSE issue.

**SLO B2:** Recognize that decisions reflect values and consider their own values and those of others when making a decision.

**SLO C1:** Identify questions to investigate that arise from practical problems and issues.

**SLO D1:** Integrate knowledge, as necessary, from various science specialties in order to address an issue, engage in problem solving or conduct scientific inquiries.

## Summary

Students are introduced to wetlands, invasive species, common carp and Delta Marsh through a trivia game. Through a series of questions, they will become familiar with these topics.

## Materials

- Projector and computer to present slideshow
- Writing utensils

## Procedure

### *Warm Up*

Begin with the provided slideshow presentation, which is a trivia game that discusses the concepts of a wetlands, invasive species, common carp and Delta Marsh.

### *Activity*

There are three rounds of trivia (10 questions each). The answers are on a slide at the end of the round. How you play the Trivia game is up to you.

There is supplemental information within the notes of the slideshow that you will help you explore each question (sometimes it is a website link with more information).

### *Wrap Up*

At the end of the three rounds of trivia, students should be familiar with many terms and concepts in the topic areas.

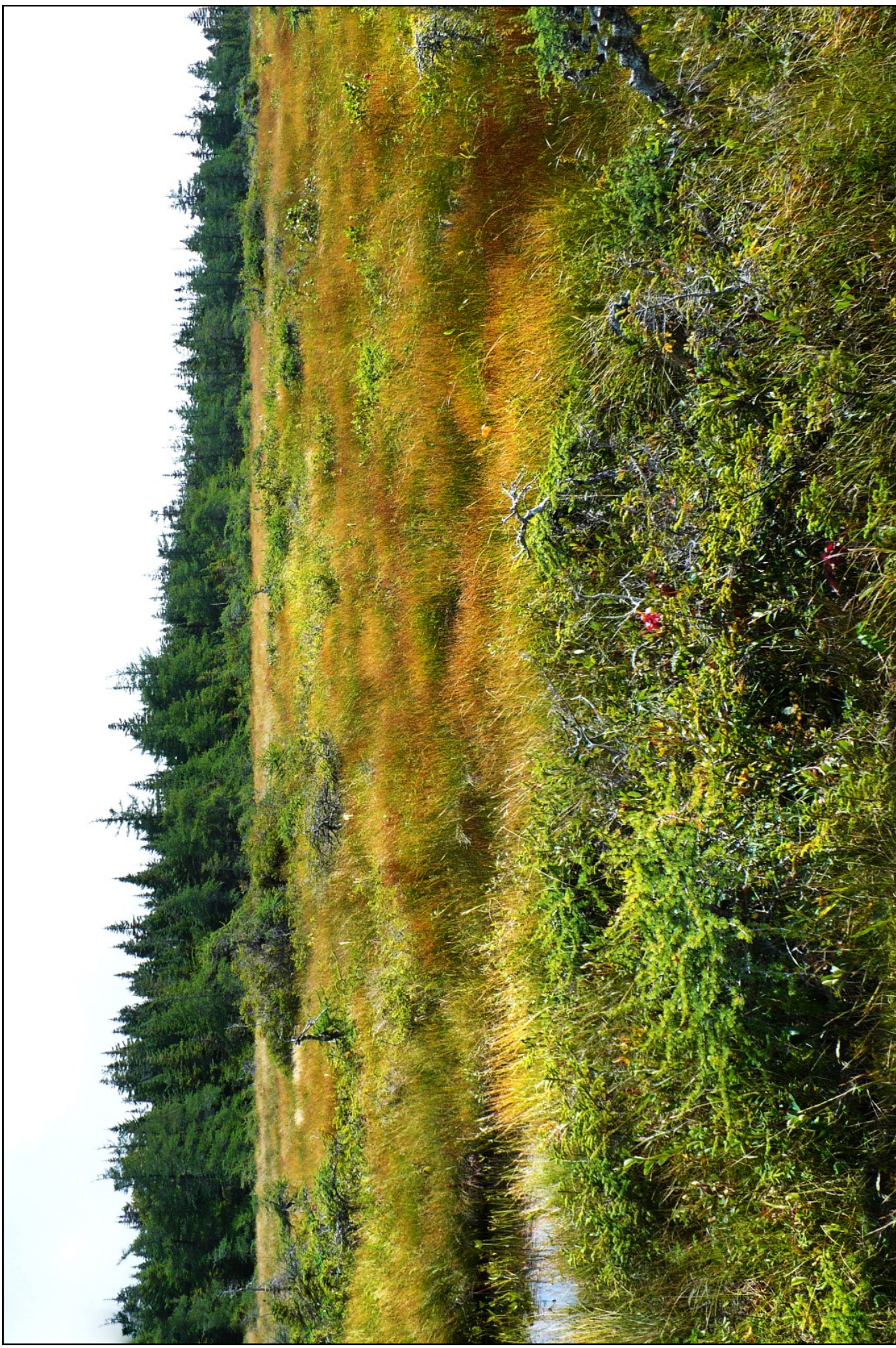
Conclude by explaining that as a class you will be visiting Oak Hammock Marsh Interpretive Centre, which is in a wetland, where you will be learning more about wetlands and invasive species.

**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 water-loving plants will grow in and around the wetland; this is why a wetland can not be deeper than two metres, because otherwise these kinds of plants drown and do not receive enough sunlight. The water moves slowly because there are so many plants that slow the flow, absorbing some of the water like a sponge and filtering it as it moves through.

**Common Carp** is a large, robust, deep-bodied fish recognised by its small eyes, thick lips with two barbels at each corner of the mouth, large scales and strongly serrated spines on its fins.



# Wetland—Bog



*Image from Wikipedia.*

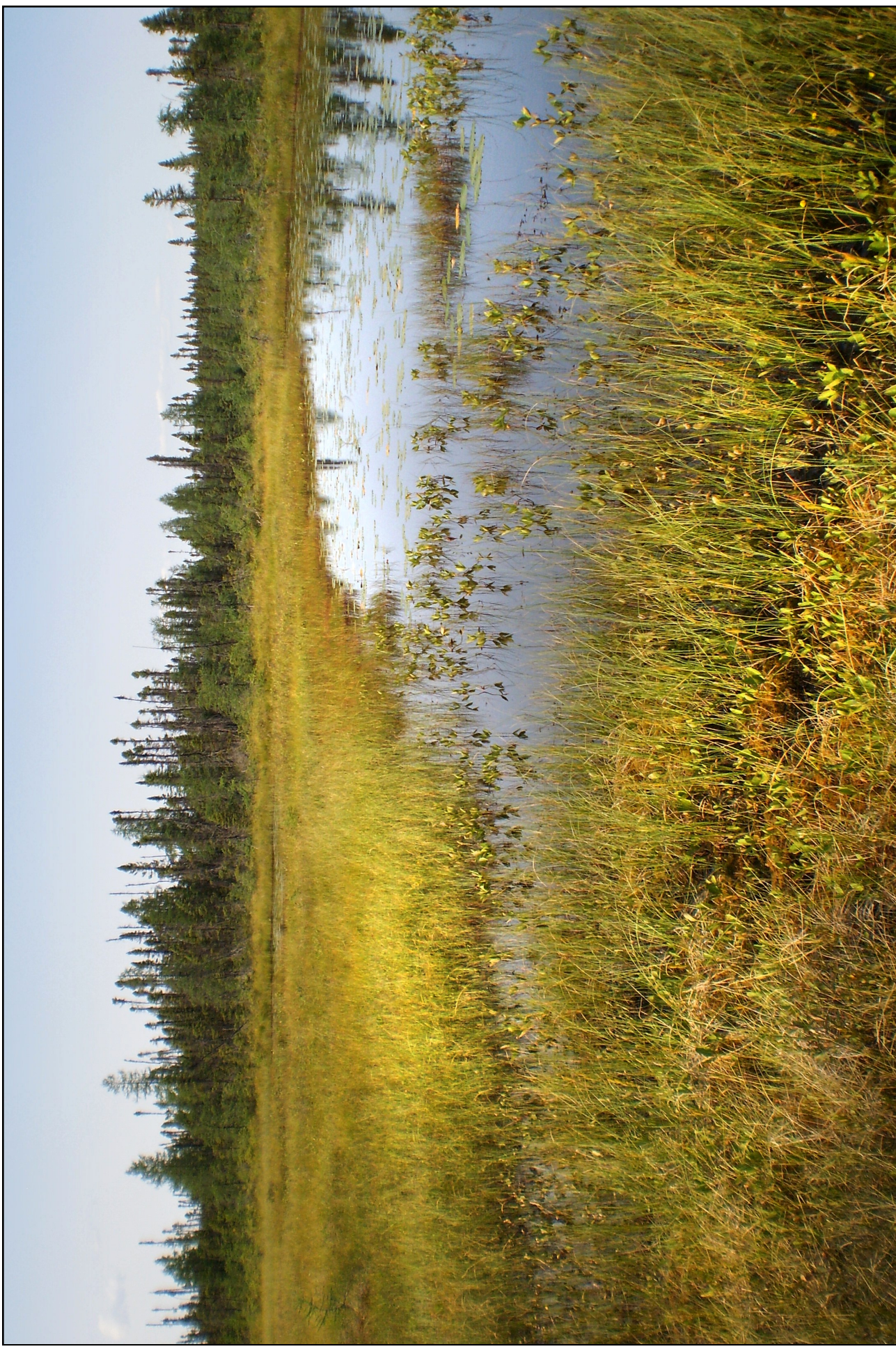


### **Key Characteristics of Bogs:**

- Peat-covered (peat is a brown, soil-like substance made of decaying *Sphagnum* mosses )
- Isolated from ground water
- Rain-fed
- Low nutrients in the water and acidic
- Dominated by *Sphagnum* mosses with tree, shrub or treeless vegetation cover



# Wetland—Fen



*Image from Ducks Unlimited Canada.*



### **Key Characteristics of Fens:**

- Peat-covered (peat is a brown, soil-like substance made of decaying *Sphagnum* mosses )
- Exposed to ground water; water at surface is moving
- Fed by rain, streams and groundwater
- More nutrients in the water than bogs and is less acidic
- Greater variety of plants than bogs: grass meadows, shrubs, and trees



# Wetland—Swamp



*Image from Ducks Unlimited Canada.*

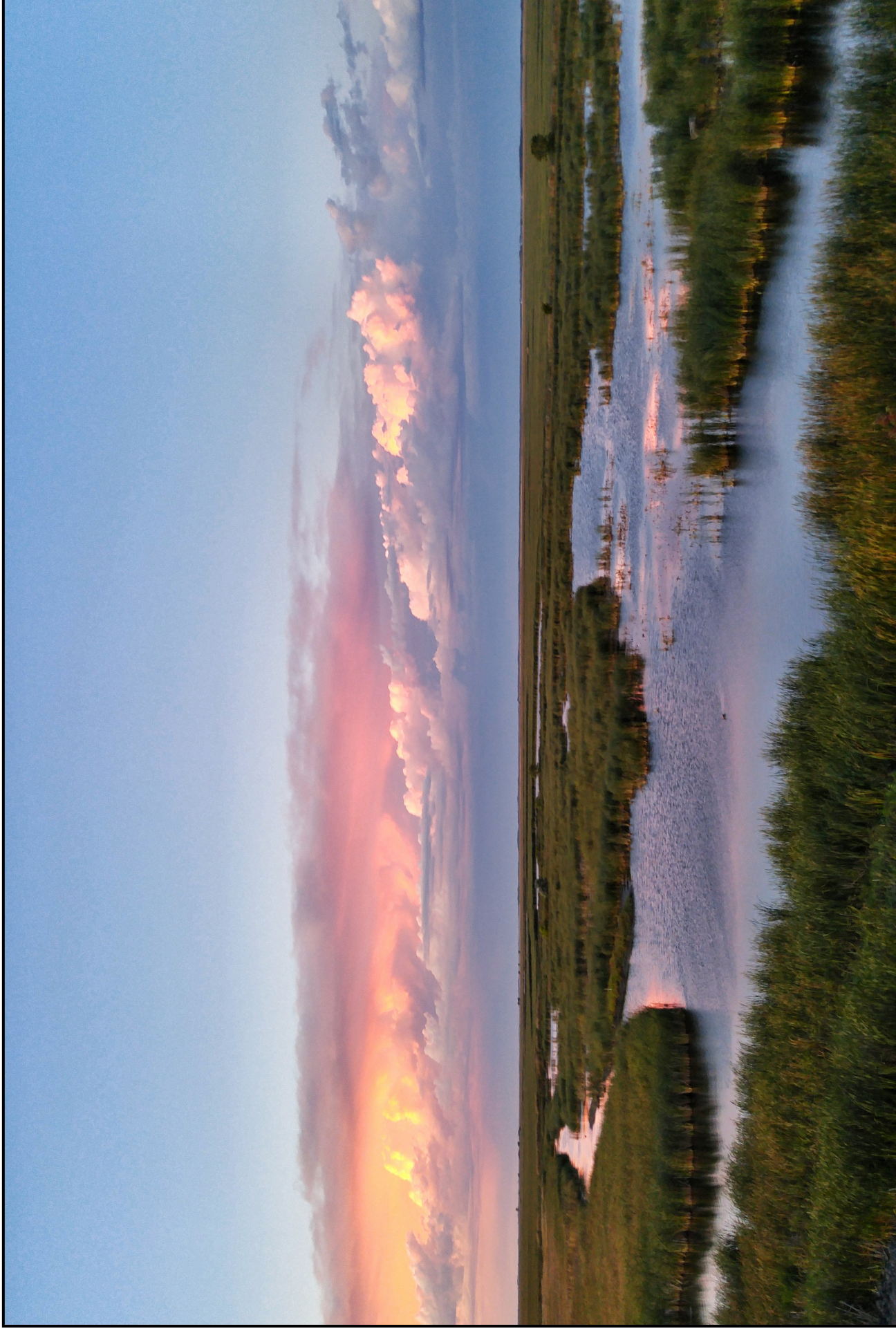


### **Key Characteristics of Swamps:**

- Non-peat forming wetland
- Has flowing water; flooded for the majority of the growing season
- Waterlogged soil, often standing water
- Vegetation is dense, and can include coniferous or deciduous trees, or tall shrub thickets



# Wetland—Freshwater Marsh



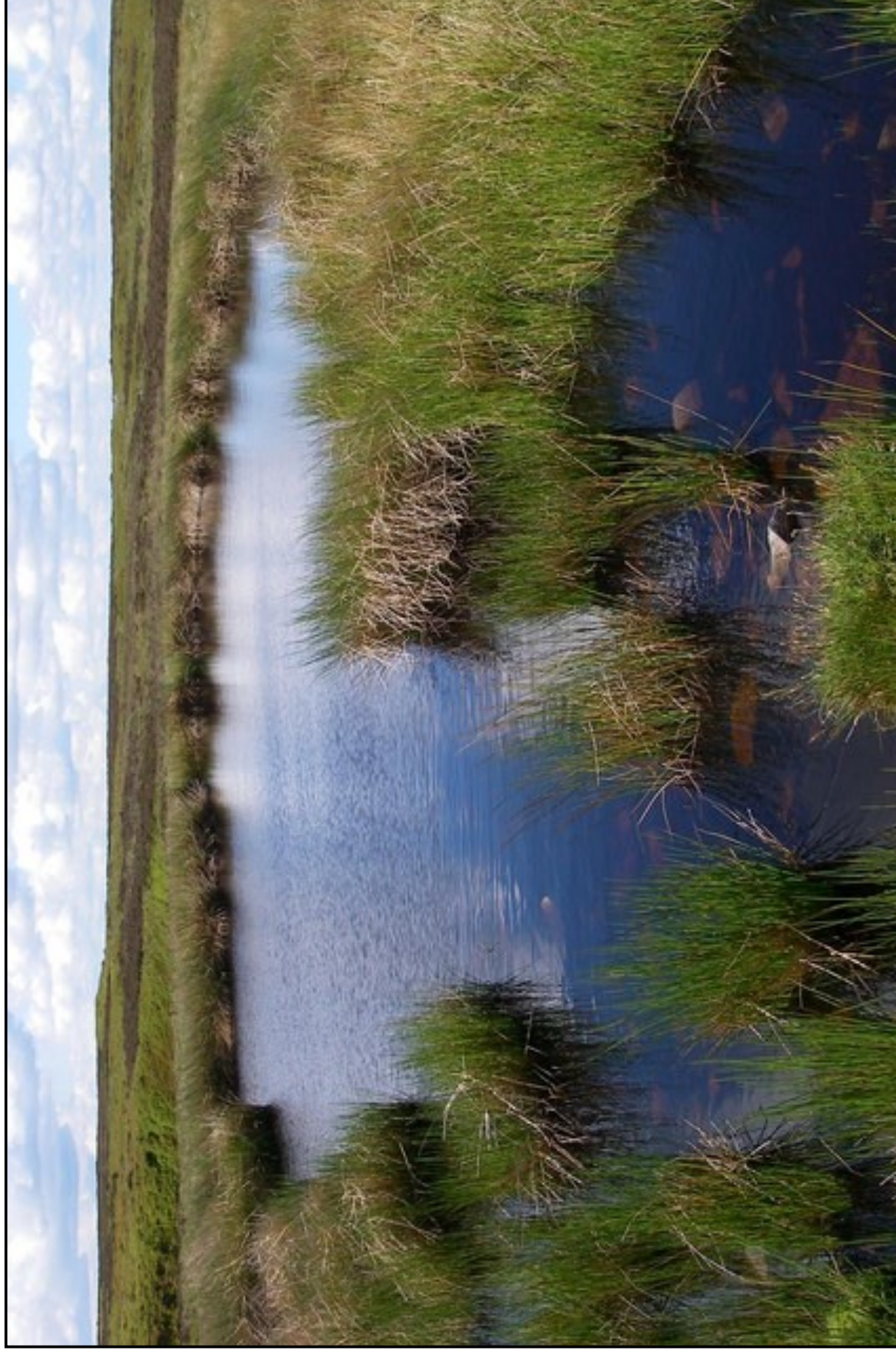
*Image from Ducks Unlimited Canada.*

### **Key Characteristics of Freshwater Marshes:**

- Non-peat forming wetland
- Frequently or continually flooded with shallow, slow moving water
- Waterlogged soil that is oxygenated, which allows for plants to form roots
- Nutrient rich water offers greater plant diversity, such as cattails, reeds, rushes, or sedges
- No trees



# Shallow Open Water



### **Key Characteristics of Shallow Open Water Wetlands:**

- Locally known as ponds, sloughs and marshes
- Non-peat forming wetland
- Standing water, often a transition between lake and marsh
- Fewer emergent plants, but submersed plants may be present