

Target Grade: 4
Science Standard: 5: Students will understand the physical characteristics of Utah's wetlands, forests, and deserts and identify common organisms for each environment.

Objectives: **Students will:**

1. Describe a type of wetland.
2. Identify wetland inhabitants.
3. Assess their knowledge of wetland habitats.

So What Is A Wetland?

Background Information:

Wetlands are basically *wet lands*. The most common type of wetlands are swamps, bogs and marshes. Even though swamps, bogs, and marshes are different types of wetlands, they have three common characteristics which make them all wetlands: *water*, *special soil*, and *special plants* called *hydrophytes* (water loving). The distinct type of wetland depends on the interactions of these three characteristics.

Wetland Facts:

- Water is present at or near the ground surface all or part of the time.
- The depth, duration, and frequency of flooding varies from wetland to wetland depending on many local and climatic factors.
- Wetlands can be as little as just a few hundred square feet or up to an area that covers several hundred square miles.
- Wetlands are found on every continent with the exception of Antarctica. Wetlands also grow in every climatic zone. Climate zones include tropical, coastal, and even tundra environments.
- Wetlands provide many benefits including flood control, pollution filtering, wildlife habitat, and food (rice & cranberries).

References:

McElrone, A. and T.A. Messmer, editors. 2001. Connections: A Comprehensive Wetlands Education Master Plan for the Greater Great Salt Lake Ecosystem. Publication #20, Jack H. Berryman Institute, Utah State University, Logan, Utah.
Project WET. 1995. The Watercourse and the Council for Environmental Education.
Aquatic Project Wild. 1992. The Western Regional Environmental Council.
WOW! The Wonders of Wetlands. 1995. Environmental Concern Inc. and The Watercourse.

Vocabulary:

wetland, environment, marsh, swamp, bog, hydrophytic plants, hydric soils

Materials: paper and pencils

Lesson Plan:

1. Begin this topic on wetlands by asking what they think wetlands are and how they are different from a forest or a desert. Write down the students' responses on the board.

2. Explain that each student is going to record their knowledge about wetland places.
3. Hand out paper and have the students write down a type of wetland; for example a swamp, bog, or marsh.
4. Have the students write down a type of animal they associate with any type of wetland.
5. Have the students write down an example of a plant that may be found in a wetland area.
6. Now have the students write at least three adjectives to describe a wetland.

An Example: wetland type: Marsh
wetland animal: Great Blue Heron
wetland plant: Cattail
wetland adjectives: muddy, noisy, damp

7. Once your students have finished their descriptions, survey each item. Record their answers on the chalkboard or whiteboard to see how their answers vary. The information you will get from this exercise will help you see if there are misconceptions about wetlands and indicate which areas with further exploration and instruction will be better understood. Often students come up with a variety of animals that live in wetlands, but it is the plants and soils in these wetland areas that scientists look at as indicators of wetlands.
8. To wrap up this introduction to wetlands have the students write a short paragraph about an experience they have had in a wetlands area, or what they imagine will happen on their field trip. After you have studied and visited a wetland you might want to try this activity again and compare the differences from the first writing assignment to the most recent wetland paragraph.