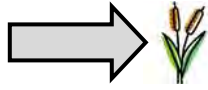
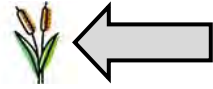


Week Seven



Lesson 16: Millbrook Marsh Field Trip



Summary

These lessons are based on the field trip your class will take to Millbrook Marsh. You may need to adjust the timing of these lessons based on the timing of your field trip. We suggest that you try to complete Enviroscope Lesson 14 prior to your trip to the marsh.

Background Information

Wetlands are found all over the world in all different types of regions. Although wetlands can look different, they all have some commonalities.

- Wetlands link bodies of water and land. Wetlands are found in the space between where the land ends and the water begins.
- The plants found in a wetland are specially adapted to grow in water. These plants can also adapt to living in alternating wet and dry conditions.
- The animals that live in a wetland can adapt to alternating wet and dry conditions.
- Wetland soils hold water longer than other types of soil.
- Water is found on the surface or in the root zone of a wetland. This is what causes the flood-like, spongy conditions found in a wetland.
- The living things found in a wetland all interact and influence each other. The physical characteristics that make up a specific wetland are what determine the nature of that particular wetland.

Millbrook Marsh is considered to be an inland wetland. More specifically it is a peatland. The soils in a peatland are composed of decomposing plants. Bogs and fens are typical of peatlands. Millbrook Marsh is a calcareous fen, which means the internal flow of ground water is rich in calcium and magnesium bicarbonates and/or sulfates. These are considered to be the least common of the wetland communities.

As the water passes through each part of the wetland, the plants and soil act as filters by absorbing chemicals, nutrients and other impurities from the water as it passes through.

Taken from: <http://www.ducks.ca/resource/general/wetland/work1.html#top>

Communities benefit from wetlands because the wetlands:

- absorb and hold water
- slow speed of flooding
- replenish surface and groundwater supplies
- intercept runoff
- remove and process nutrients
- filter pollutants
- bind soil to wetland plant roots
- provide food and habitat for a variety of animals

Materials

Team Wet Notebook- pages 17-18/21-22

Digital Cameras- optional

Millbrook Marsh Field Guides - 1 per student pair (housed in schools)

Preparation

Unit chair should locate the Millbrook Marsh Field Guides that are stored in your building. There are an adequate number of copies for each pair of students to share a guide at the Marsh. Your CST will share specific information at unit planning in regard to available field trip dates and other pertinent information in order for you to schedule your field trip.



Before the trip:

1. Explain to your students that they will be acting as Team WET scientists during the tour of the marsh. As such, they should be paying close attention to the characteristics of the marsh and the living and non-living things they observe.

2. Students may take their Team WET Notebooks with them on the trip. As they take the tour, they can be given opportunities to sketch and note the things they observe.

During the trip:

1. Ask the guide to give students an opportunity to sketch or note items of interest in the marsh. Students can record what they see in the marsh on pages 17-18/21-22 in their Team WET Notebook.
2. Help your students make connections to the topics you have been covering in class—bodies of water, living vs. non-living, habitats, enviroscape experiences, etc....
3. If applicable, allow each child to take a picture using a digital camera of something found at the marsh. Photos of each student can also be taken while at the marsh. These can be used in a follow-up activity.
4. Use the field guides to help the students identify the different plants found at the marsh.

After the Trip:

1. Allow students to share some of the observations made while visiting. These can be charted as students share.
2. Create a list of the living and non-living things that the student saw at the marsh. Additional items should be added to the class frieze. This would also be a good time for students to identify any items that should be removed from the class frieze.
3. Possible follow-up projects:
 - Create a slide show using the digital photos taken while at the marsh. As students view the slide show, they can try and guess where the photo was taken.
 - Students can draw a picture of themselves in the marsh, making sure to include the living and non-living things. If photos of each

student were taken, these could be placed in the picture created by the student.

- Photos of students could be imported into Kid Pix or Comic Life. Students could create a picture of themselves at the marsh using Kid Pix or Comic Life.
- A triorama model of a wetland could be created.
- Students can write thank you letters expressing specific knowledge or experiences from their marsh visit. Thank you letters may be addressed to their guide and sent to:

Millbrook Marsh Nature Center
c/o Centre Region Parks & Recreation
2643 Gateway Drive #1
State College, PA 16801