



WET AND WILD

Scientists describe a wetland as an area that is, at least sometimes, wet! A wetland in your area may be a slough, a marsh or even a small pond. At times it may be stinky or muddy or a mosquito breeding ground. But a wetland is also incredibly important to the wide diversity of life that it supports and to maintaining fresh water supplies, preventing soil erosion and reducing flood damage. The value of a wetland ecosystem is not always immediately clear, but wetlands impact plants, animals, humans and the earth in subtle and not-so-subtle ways. Before you begin this activity, join Tommy and Dr. Faber for the Wetlands Activity at Wonderville.ca.

Your Challenge

Create a model of a wetland to show how it acts as a natural water filtration system.

Materials

- 1 foil roasting pan or other shallow pan
- 2 large sponges or florist foam
- 1 spray bottle or small watering can
- sharp knife to cut sponge (ADULT SUPERVISION REQUIRED)
- clay (enough to cover half the pan)
- potting soil

Building the Model

- Use the clay to build an “upland” in half of the pan. Create a hill that slopes down into the middle of the pan. Be sure that the clay seals the edges along the sides of the pan. If you wish, make streams or meandering rivers in the clay moving towards the empty half of the pan. The clay represents the land, the empty half of the pan represents a lake or other large body of water.
- Place the sponge or florist foam in the pan right next to the clay. The sponge will not cover the remaining length of the pan, but it should fit the full width of the pan. The sponge represents a wetland. The wetland is a “buffer” between the land and the lake.
- Sprinkle some of the potting soil on the clay land.
- The water in the spray bottle or watering can represents rain or other precipitation. Carefully make it rain at the top of your hill.

How long did it take for the water to end up in the lake?

Did all the dirt end up in the lake?

What does the water look like when it reaches the lake?

- Remove the wetland sponge and pour off the water in the lake. Without the sponge, make it rain at the top of the hill again and answer the questions above. Were there any differences with and without the wetland sponge?

Without the wetland, how might the water in the lake affect fish, birds and other wildlife?

Would people be affected in any way?

Think of all of the consequences possible if wetlands are drained or paved over.

