

## Activity 2

# Oxygen-poor Soils

### Materials needed:

Soil testing tool or small hand trowel.

This type of simple test is how to determine where a wetlands area begins or ends.

1. Take your soil testing tool (hollow pipe-like tool with a handle) or a simple gardening trowel and dig up a few samples of soil in your yard.
2. Note the color.
3. Now find a nearby wetlands, or possibly a pond or lake.

4. Take several samples as you get nearer the wetlands and note changes in color of soil. Eventually you will take samples in the wetlands (or lake/pond) itself.

You should notice that the soil in the wetlands is much darker than the soil in more upland areas, like your backyard. Upland areas tend to have more oxygen getting into the soil, thus the color is reddish or orange because the soil contains iron which "rusts" or "oxidizes" when in the presence of oxygen. In areas of low oxygen the iron remains a dark green to almost black color.



Soil Test Observations