

## 24# Marsh Basics

Marshes are wetlands permanently or frequently covered by water. They are defined by the presence of plants like cattails that are rooted underwater but emerge above the water's surface.

Remnants of another type of wetland—sedge meadows—occur around the Class of 1918 Marsh. The name comes from the knee-high, grass-like plants that live there. They are only seasonally covered with water and tend to be dryer.

Cattail marshes and sedge meadows do have something in common: unique soils saturated with water. If you ever soak your toes down deep into marsh muck, you know something is different about the soil. The earth isn't crumbly. Stir up a pond bottom. Does it smell? How does it feel?

Wetland soils develop in watery environments where little or no oxygen is available. Decomposition is slow or halted; dead wetland plant material accumulates. The result is peat: a carbon-rich mixture of partially decomposed plants. Bacteria that don't need oxygen to do their work, release the unpleasant "rotten egg" odors.

Don't let that stinky smell mislead you. Marshes are important. Wetlands are biologically productive, store carbon, provide habitat for migrating birds, are spawning and nursery areas for fish, and are home for many aquatic animals and plants.

They also help keep the surrounding lakes healthy. Marsh sediments and plants trap excess nutrients, like phosphorous, before runoff waters reach the lake. They act as giant sponges that stabilize stream flow, slow and store floodwaters, and recharge groundwaters.