

WVMN Class Description

Title:	WETLAND HABITATS
Objectives:	Explore the definitions and types of wetlands that are found in West Virginia and discuss their values and needed protection.
Class type:	Core curriculum
Time:	3 hours
Optimal season:	Summer, fall
Materials:	Spade or soil probe, field guides (especially plant).
Expected outcomes:	The student will gain a basic understanding of the general types of wetlands found in West Virginia. <ol style="list-style-type: none">1. the value of wetlands to humans and wildlife.2. the three criteria of soil, hydrology, and plants as determinants of jurisdictional wetlands.3. legal protections for wetlands.

WVMN Class Outline

1. What is a wetland?
 - a. US Fish and Wildlife Service National Wetlands Inventory
 - b. Army Corps of Engineers
 - c. Popular concepts of wetlands
 - d. Natural or ecological community approach
2. Three parameters for jurisdictional (legal) definition
 - a. Wetland (hydric) soils
 - b. Wetland hydrology
 - c. Wetland (hydrophytic) plants
3. Values of wetlands
 - a. Flood control and groundwater recharge
 - b. High productivity (biomass production)
 - c. Habitat diversity
 - d. Filtration of nutrients
 - e. Recreation and esthetics
 - f. Rare species
 - g. Fisheries
4. Types of wetlands in West Virginia: characteristics, flora, and fauna
 - a. Wet meadow, marshes
 - b. Sphagnum bogs and fens
 - c. Shrub swamps
 - d. Forested wetlands
5. Legal protection for wetlands
 - a. Less than 1% of land surface is wetland in West Virginia
 - b. Historical loss nationwide of 50%, statewide loss 25%
 - c. Clean Water Act (regulates the polluting and filling of the nations waterways; includes wetlands)
 - d. Corps of Engineers requires permit to fill wetland larger than $\frac{1}{2}$ acre
 - e. Nationwide Permit requirements 1/10th-1/2 acre need permit to fill, notify COE
 - f. State certification of permits
6. Field exercise: Visit 2 or 3 different wetland types
 - a. Identify and discuss some common wetland plants
 - b. Look for aquatic and wetland animals
 - c. Discuss hydrology (where the water comes from)
 - d. Discuss wetland soils and saturated and anaerobic soil conditions