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Connecticut's Freshwater Wetlands

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Wetlands cover approximately five percent of the earth's land surfaces, and they are among the most productive of the earth's ecosystems. Saltwater and freshwater wetlands consist of salt marshes, tidal flats, freshwater aquatic beds, emergent freshwater wetlands, scrub-shrub wetlands, marshes, forested swamps, bogs and floodplains. This unit focuses on the ecology of Connecticut's freshwater wetlands. The unit is intended for high school biology courses, and portions of the unit can be adapted for use in elementary and middle school science education.

The unit includes a current definition of wetlands and brief reviews of wetland hydrology, biogeochemistry, adaptations of organisms to wetland environments, and values of wetlands. Six of Connecticut's wetland habitats are already described. They are: 1) a vernal pool at West Rock Ridge, Hamden; 2) a red maple swamp at Durham; 3) a silver maple floodplain forest at Rocky Hill; 4) a black spruce bog at Cornwall; 5) a calcareous red maple-black ash swamp at South Canaan; and 6) an Atlantic white cedar swamp in New London County.

Suggested classroom activities include a slide set for inquiry about the wetland types described, instructions for collecting and identifying wetland plants, and the study of vernal pool invertebrates. Extensive bibliographies and reading lists are given.

(Recommended for General Biology, College Biology, Advanced Biology and Environmental Science for high school grade levels; adaptable to middle school and elementary grade levels)