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WETLANDS DEMYSTIFIED
Wetlands Defined, Part II
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In my last article I discussed wetlands as defined by the Fish and Wildlife Service and the U.S. Army Corps of Engineers. By their definition wetland soils are soils that are inundated or frequently saturated by surface or ground water and that support hydrophilic vegetation. In addition, for it to be a hydrophilic soil there must be sufficient ground water saturation to stress plants and animals at some point during the growing season. For example, The U.S. Army Corps of Engineers defines special wetlands as bogs, fens, swamps and vernal pools. The term fen is not used officially in Connecticut to describe a wetland or water body. Fens are peat-accumulating marshes, which are usually associated with standing water, and thus would not technically be a wetland in Connecticut, but rather a watercourse. You will remember that under Connecticut law wetlands are defined by soil type, and there are different wetland soil types. Only soils that are poorly drained, very poorly drained, and alluvial or floodplain as determined in the field or as designated by the official NRCS Soil Survey of Connecticut are considered wetlands in this State. We should all know from personal experience that these soils might appear very dry during certain times of the year. Dry or wet, there are various types of wetlands or wetland communities in our part of Connecticut. One of these communities usually includes watercourses along with various wetlands soil types that abut these water bodies. One of these rather well defined areas is called palustrine wetlands. The term palustrine is used to describe freshwater wetland habitats dominated by trees, shrubs, and emergent vegetation communities. Other forms of wildlife are also associated with these communities. Thus, we have palustrine forested, palustrine shrub-shrub or shrubland and palustrine emergent communities. Other wetland communities found in our area are referred to as lacustrine habitats, which include lakes and reservoirs. Another wetland community is the riverine habitat, which refers to wetlands and deepwater areas such as streams, rivers, and streamside wetlands and aquatic beds. In this article I will briefly discuss the nature of the palustrine habitat.

Palustrine forested areas, of which there are still many in Pomfret, are usually considered wooded swamps. It is important to understand that a swamp is a watercourse and not a wetland under Connecticut's definition, but there are in most cases wetlands soils associated with swamps. Trees such as red maple, white cedar, hemlock, spruce and fir trees dominate this kind of wetland. Other trees found in these wet areas are white pine, yellow and black birch and ash. In addition to trees, one often finds understory shrubs that also thrive in wet areas, such as high bush blueberry, sweet pepper bush, spicebush and various dogwoods. Herbaceous plants typical of a palustrine wetland often include ferns that thrive under wet, shady conditions, are skunk cabbage, jewelweed, and

sphagnum moss. Vernal pools, which in Connecticut are defined as watercourses, are usually found in palustrine forested wetlands.

Palustrine shrubland wetlands are communities that frequently flood in the spring or contain pockets of standing water. Thus, it can be seen that these wetlands are associated with watercourses like the forested communities. The palustrine shrubland wetlands support various wet soil plant species in the sapling and shrub stage of growth. These wetland soil plant species may include winterberry, which is a delight this time of year with its bright red berries, willow, alder, dogwood and common elder. Jewelweed, various sedges and rushes are also frequently associated with this wetland habitat. Palustrine emergent wetlands include areas associated with marshes and wet meadows. These wetlands, which contain watercourses as well, are usually dominated by herbaceous or non-woody vegetation. These areas may contain saturated soils that persist year round. Wet meadows and associated swampy areas usually host a variety of plant species. Cattails, various sedges, rushes, jewelweed, joe-pye-weed and goldenrod are just a few of the species found in this community. The common factor with this vegetation is that they are all moisture-loving plants.

Unfortunately, space, and the promise to shorten these articles, does not allow me to discuss other wildlife associated with these important wetland habitats. Needless-to-say, the protection of these wetland communities becomes vital if the wildlife, which so many of us take for granted, is to survive. The teaching point I would like to make here is that wetlands and watercourses in Connecticut share a kind of common symbiosis or ecological integrity and inter relationship, which is often overlooked. In general, there will be wetland soils adjacent to any natural watercourse in this part of Connecticut. A qualified Soil Scientist is needed to delineate the extent of these wetland soils. The official NRCS Soil Survey of Connecticut may also be used as a guide to delineate these areas. Note that these soils may appear dry, but by soil classification are truly wetlands soils as defined in Connecticut's Wetland Act.

In my next article I will discuss the typical lacustrine and riverine habitat, which includes lakes and flowing watercourses and their associated alluvial and floodplain soils. As always, your comments, questions and suggestions for future articles are welcome.