

Supplemental Map Information (User Report)

Project ID: R05Y10P03_CT_update_20120710

Project Title or Area: Connecticut Wetland Update

Photo-interpretation: Conservation Management Institute (Contractor)

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Source Imagery (type, scale and date):

4-Band True Color, 1 meter, 2010 National Agriculture Imagery Program (NAIP)

Collected from the Connecticut Department of Energy & Environmental Protection (CTDEP): <http://www.ct.gov/dep>

Date Started: 05/01/2010

Date Completed: 07/10/2012

Number of 24k quads: 126

Collateral Data (include any digital data used as collateral): NRCS Digital Raster Graphic (DRG), USGS National Elevation Dataset (NED) 10 meter, Light Detection and Ranging (LiDAR) contours and most recent CIR imagery where available.

NED (10m) from the USGS: <http://datagateway.nrcs.usda.gov/>

All other collateral data from the CTDEP: <http://www.ct.gov/dep>

Inventory Method (original mapping, map update, techniques used): The NWI update for Connecticut was created with the 2010 NAIP imagery. Polygons were created using heads-up digitization. Wetlands were identified at a maximum zoom scale of 1:12,000 and delineated at approximately 1:8,000. Older NWI datasets were used to identify additional wetland locations. We used the ancillary datasets SSURGO hydric soils, NED (10m), DRG contours, and LiDAR contours. Special modifiers were added to describe disturbed and altered wetlands and deepwater habitats: ditching, impoundment, spoil deposition, excavation, artificial water control.

Classification (Cowardin wetlands, riparian, uplands, hydrogeomorphic, etc.): We used the Cowardin *et al.* (1979) system for wetlands and deepwater habitats.

Data Limitations: None

General description of the Project Area: Appalachian Plateaus, New England lowlands, mid-Atlantic coastal plain, Piedmont Plateau, 104,500 mi² (270,700 km²)

Land-surface form.--This province includes topography of diverse nature and origin. The northern part has been glaciated. West of the Appalachian Mountains are the Appalachian Plateaus. The sedimentary formations there are nearly horizontal, a typical plateau structure, but they are so elevated and dissected that the landforms are mostly hilly and mountainous. Altitudes range from about 1,000 ft (300 m) along their western edge to somewhat more than 3,000 ft (900 m) on the eastern edge. East of the mountains is the Piedmont Plateau and coastal plain, where altitudes range from sea level to about 1,000 ft (300 m).

Climate.--The continental climatic regime here ensures a strong annual temperature cycle, with cold winters and warm summers. Average annual temperatures range from 40 to 60F (4 to 15C). There is year-round precipitation, averaging from 35 to 60 in (890 to 1,530 mm) per year. Precipitation is markedly greater in the summer months, when evapotranspiration is great and moisture demands are high. Only a small water deficit is incurred in summer, whereas a large surplus normally develops in spring.

Vegetation.--This province is characterized by a winter deciduous forest (sometimes called temperate deciduous forest) dominated by tall broadleaf trees that provide a dense, continuous canopy in summer and shed their leaves completely in winter. Lower layers of small trees and shrubs develop weakly. In spring, a luxuriant ground cover of herbs quickly develops, but is greatly reduced after trees reach full foliage and shade the ground. Forest vegetation is divided into three major associations: mixed mesophytic, Appalachian oak, and pine-oak.

Mixed mesophytic vegetation, the deciduous forest with the greatest diversity, occupies moist, well-drained sites in the Appalachian Plateaus. Widespread dominants include American beech, tuliptree (also called yellow-poplar), several basswoods, sugar maple, sweet buckeye, red oak, white oak, and eastern hemlock, in addition to 20-25 other species. The best indicators of this association are buckeye and basswood.

The Appalachian oak association occurs east of the mountains. The dominant species are white oak and northern red oak. Chestnut formerly was abundant, but a blight has destroyed most of this species.

Pine-oak forest--sometimes called "Pine Barrens"--occupies dry sandy soils that are frequently exposed to naturally occurring fires along the northern Coastal Plain. There is a thick shrub layer beneath the pines. Atlantic white-cedar swamps occur on mesic sites.

Soils.--The pedogenic process associated with deciduous forest is podzolization, moderated by warm wet winters. As a result, soils are characteristically Alfisols. Toward lower latitudes, the tendency to laterization becomes stronger and Ultisols are encountered. Inceptisols are found on the plateaus. In the deciduous forests, a thick layer of leaves covers the ground and humus is abundant.

Fauna.--Important mammals include the whitetail deer, black bear, bobcat, gray fox, raccoon, gray squirrel, fox squirrel, eastern chipmunk, white-footed mouse, pine vole, shorttail shrew, and cotton mouse.

Bird populations are large. The turkey, ruffed grouse, bobwhite, and mourning dove are game birds in various parts of the province. The most abundant breeding birds include the cardinal, tufted titmouse, wood thrush, summer tanager, red-eyed vireo, blue-gray gnatcatcher, and Carolina wren.

Characteristic reptiles include the box turtle, common garter snake, and timber rattlesnake.

Description of wetland habitats:

Organize by Cowardin classification type:

Wetland classification codes and corresponding community type(s):

Description of other habitats:

Riparian:

Uplands:

List of wetland plant species with indicator status:

Regional specialized conventions:

Comments:

Other discussion of mapping issues (image quality, water conditions, etc.):

References:

Cowardin, L.M., V. Carter, F.C. Goulet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Office of Biological Services, Fish and Wildlife Service, US Department of the Interior, Washington D.C.

US Forest Service Website, Ecosystem Provinces -

http://www.fs.fed.us/land/ecosysmgmt/colorimagemap/ecoreg1_provinces.html (viewed 07/10/12)