What’s Shown on the Connecticut Land Cover Map Series

A land cover map depicts, from a bird’s eye view (or an astronaut’s), what can be seen on the earth’s surface. For areas in the northeast, such maps typically include deciduous and coniferous forest, grassed areas, waterbodies, developed land and other categories of generally homogenous areas. Land cover maps, however, should not be confused with land use maps that depict how the land is being or planned to be used. For example, a land cover map would show a forested state park as forest whereas a land use map would show the same area as park, recreation, wildlife management area, open space, or whatever that actual use is.

The Connecticut Land Cover Map Series was produced from satellite imagery with a ground resolution of 30 meters (~ 100 feet). This means that the satellite, rather than “seeing” individual objects such as houses, sees areas that are approximately a quarter of an acre in size. In many cases there is a mixture of landscape features within a quarter acre so what gets mapped is the largest single land cover feature or the predominant group of features. Thus, the land cover maps are generalized interpretations that depict the predominant land cover from location to location.

Eleven land cover categories, described below, are used in the Connecticut Land Cover Map Series. It is important to note that within each land cover class other land cover types may and often do occur. A thorough understanding of the land cover categories will aid interpretation and using the data.

Land Cover Categories

**Developed** - High-density built-up areas typically associated with commercial, industrial and residential activities and transportation routes. These areas contain a significant amount of impervious surfaces, roofs, roads, and other concrete and asphalt surfaces.

**Turf & Grass** - A compound category of undifferentiated maintained grasses associated mostly with developed areas. This class contains cultivated lawns typical of residential neighborhoods, parks, cemeteries, golf courses, turf farms, and other maintained grassy areas. Also includes some agricultural fields due to similar spectral reflectance properties.
The University of Connecticut Center for Land Use Education and Research (CLEAR) provides information, education and assistance to land use decision makers, in support of balancing growth and natural resource protection. CLEAR is a partnership of the Department of Extension and the Natural Resources Management and Engineering Department, College of Agriculture and Natural Resources. CLEAR involves the USDA Land Grant, NOAA Sea Grant and NASA Space Grant university systems. Major funding for CLEAR comes from the State of Connecticut and a number of state and federal sources, including NASA DEVELOP, a program of the NASA Science Mission Directorate Applied Sciences Program. © 2004 University of Connecticut. The University of Connecticut supports all state and federal laws that promote equal opportunity and prohibit discrimination.

- **Other Grasses & Agriculture** - Includes non-maintained grassy areas commonly found along transportation routes and other developed areas and also agricultural fields used for both crop production and pasture.

- **Deciduous Forest** - Includes southern New England mixed hardwood forests. Also includes scrub areas characterized by patches of dense woody vegetation. May include isolated low density residential areas.

- **Coniferous Forest** - Includes southern New England mixed softwood forests. May include isolated low density residential areas.

- **Water** - Open water bodies and watercourses with relatively deep water.

- **Non-forested Wetland** - Includes areas that predominately are wet throughout most of the year and that have a detectable vegetative cover (therefore not open water). Also includes some small water courses due to spectral characteristics of mixed pixels that include both water and vegetation.

- **Forested Wetland** - Includes areas depicted as wetland, but with forested cover. Also includes some small water courses due to spectral characteristics of mixed pixels that include both water and vegetation.

- **Tidal Wetland** - Emergent wetlands, wet throughout most of the year, with distinctive marsh vegetation and located in areas influenced by tidal change.

- **Barren** - Mostly non-agricultural areas free from vegetation, such as sand, sand and gravel operations, bare exposed rock, mines, and quarries. Also includes some urban areas where the composition of construction materials spectrally resembles more natural materials. Also includes some bare soil agricultural fields.

- **Utility** - Includes utility rights-of-way. This category was manually digitized on-screen from rights-of-way visible in the Landsat satellite imagery. The class was digitized within the deciduous and coniferous categories only.