

The Northeast Terrestrial Habitat Map: Updated Fields and Definitions

The Nature Conservancy, Eastern Conservation Science.

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The Northeast Terrestrial Habitat map was revised in October 2013 with several improvements pertaining to floodplains, Alleghany wetlands, Southern Appalachian grass balds, and the distribution of coastal systems. Additionally, a document detailing the methods used to create the map was released (Ferree and Anderson 2013). With help from the state agency staff, photos and descriptions of each habitat were compiled into a **Habitat Guide** (Anderson et al 2013) that provides detail on associated species, condition, securement and on the NatureServe ecological system classification:

<http://nature.ly/NEhabitatguide>

In November 2014, we posted a revised version of the map with an improved and simplified attribute table. Here we explain the changes to the attribute table, and provide a definition for each field. We hope users find this version easier to use.

Field Names and Definitions

VALUE	A unique identifier for each row in the table
COUNT	Total number of 30 m cells
ACRES_TOT	Total acres
CLASS	Basic hydrologic setting: Upland (terrestrial) or Wetland (palustrine)
MACROGROUP	Formerly MACRO_R: Macrogroups are broad groupings of similar habitats. The classification was developed by NatureServe, and is defined as "combinations of moderate sets of diagnostic plant species and diagnostic growth forms that reflect biogeographic differences in composition and sub-continental to regional differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes" (FGDC 2008).
COLOR_CODE	Numeric code for a premade color legend in the layer file named NE Terrestrial Habitat
HABITAT	Formerly SUMGRPNAME: The standard name of the Terrestrial Habitat. The name is usually a combination of a geographic area (such as Laurentian-Acadian) and a descriptive name (Northern Hardwood Forest). Names are based on Gawler (2008), but have changed slightly since the original version (see the field Gawl2008 for the original version). Maps of the geographic regions used to define the name can be found in the Northeast Habitat Guide
PAGE	The page number in the Northeast Habitat Guide where users can find descriptions, ecology, securement status, associated species, and other information about each habitat. The guide can be found at: http://nature.ly/NEhabitatguide
HAB_CODE	Formerly SUMGRPNUM: A unique identifier for each habitat type

ECOSYSTEM	The standard name of the Ecological System as defined by NatureServe. Ecological systems are defined as “recurring groups of biological communities that are found in similar physical environments and are influenced by similar dynamic ecological processes, such as fire or flooding. They are intended to provide a classification unit that is readily mappable and readily identifiable by conservation and resource managers in the field.” (Comer 2010). They are defined based on biogeographic region, landscape scale, dominant cover type, and disturbance regime. ECOSYSTEM is usually synonymous with the HABITAT except in a few cases where the habitat name is broader. For example the habitat “Acidic Cliff and Talus” corresponds to four ecosystems (e.g Cumberland Acidic Cliff and Rockhouse, Southern Appalachian Montane Cliff and Talus, etc.) ECOSYSTEM is also synonymous with GAWL2008 unless the system name or concept has changed since that publication was released
MODIFIER	The modifier field contains information on finer classification splits available for some habitats. For example, several matrix forming forests can be split into a conifer variant, a moist cool variant, and the typic type. More detail on modifiers can be found below.
PATTERN	The pattern and scale of the habitat. Choices are: Matrix forming, Large or small patch, Wetland, Other.
FORMATION	The Formation is a broad grouping of similar Macrogroups developed by NatureServe
GRP2008	Formerly GRP_130912: A useful grouping of habitats first developed in 2008 .
MACR2008	Formerly MACROGROUP: This is the 2008 Macrogroup name, now slightly obsolete.
GAWL2008	Formerly ES_NAME: This is the original Ecological system name as documented in Gawler 2008. If the name has not changed this field will be synonymous with HABITAT and ECOSYSTEM described above.
CODE2008	Formerly: ES_CODE: This is a numeric code for the Gawler 2008 system classification
COMMENTS	Notes on the mapping of some systems.

Referenced Citations

Anderson, M.G. M. Clark, C.E. Ferree, A. Jospe, A. Olivero Sheldon and K.J. Weaver. 2013. Northeast Habitat Guides: A companion to the terrestrial and aquatic habitat maps. The Nature Conservancy, Eastern Conservation Science, Eastern Regional Office. Boston, MA. <http://nature.ly/HabitatGuide>.

Comer, P. D. et al. 2010. Ecological Systems of the United States: A Working Classification of U.S. Terrestrial Systems. NatureServe, Arlington, Virginia.

FGDC (Federal Geographic Data Committee), Vegetation Subcommittee. 2008. National Vegetation Classification Standard, Version 2. FGDC-STD-005-2008 (Version 2). available at: <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/>

Ferree, C and M. G. Anderson. 2013. A Map of Terrestrial Habitats of the Northeastern United States: Methods and Approach. The Nature Conservancy, Eastern Conservation Science, Eastern Regional Office. Boston, MA. <https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/habitatmap/Pages/default.aspx>

Gawler, S. C. 2008a. Northeastern Terrestrial Wildlife Habitat Classification. Report to the Virginia Department of Game and Inland Fisheries on behalf of the Northeast Association of Fish and Wildlife Agencies and the National Fish and Wildlife Foundation. NatureServe, Boston, Massachusetts. 102 pp. <http://rcngrants.org/project-final-reports?page=1>.

Detail on the Modifiers.

Modifiers are available for some macrogroups and allow users to divide a system into finer, ecologically-relevant units. Here are some examples and definitions

Wetland Modifiers

Macrogroup = Large River Floodplain Forest.

Modifiers These are components of a floodplain ecosystem that could be classified to a different, more detailed, ecological system based solely on composition and structure. For example, a marsh in a large river floodplain is classified as a **Large River Floodplain** in the Northeast Terrestrial Habitat map with a modifier of **floodplain: freshwater marsh**. The full set of floodplain modifiers are:

Floodplain: Acidic Swamp
Floodplain: Alkaline Conifer-Hardwood Swamp
Floodplain: Basin Peat Swamp
Floodplain: Basin Swamp and Wet Hardwood Forest
Floodplain: Brownwater Floodplain Forest
Floodplain: Conifer-Hardwood Acidic Swamp
Floodplain: Eastern Boreal Wet Forest
Floodplain: Floodplain Forest
Floodplain: Freshwater Marsh
Floodplain: Pitch Pine Lowland
Floodplain: Rich Swamp
Floodplain: Wet Meadow-Shrub Swamp

Macrogroups = Coastal Plain Peat Swamp, Coastal Plain Peatland, Coastal Plain Swamp, Emergent Marsh, Northern Peatland, Northern Swamp, Southern Bottomland Forest, Wet Meadow / Shrub Marsh

Modifiers: These indicate the context of the wetland

Smaller river floodplain/riparian:	The examples of the habitat are associated with a stream or small river as mapped in the National Hydrography (NHD) dataset.
Isolated	Not associated with a stream or river
Isolated -- conifer-dominated	(Piedmont Ecoregion only)
Isolated, -- bedrock not mafic	"
Isolated, -- mafic bedrock	"
Isolated,-- oak-dominated	"
Isolated/headwater streams	Isolated or associated with a small headwater stream
Great Lakes	Associated with one of the Great Lakes

Macrogroup = Tidal Marsh, Tidal Swamp

Modifier

Tidal or Tidal/salt/brackish/oligohaline (e.g. tidally influenced)

Macrogroup = Central Hardwood Swamp, Northern Peatland

Modifier

Undifferentiated or Undifferentiated by hydrology: relationship to NHD stream or river not specified

Upland Modifiers

Macrogroup = Northern Hardwood & Conifer

Modifier This modifier indicates the probable pH class based on bedrock

Acid

Calcareous

Circumneutral

Macrogroup = Central Oak-Pine, Northern Hardwood & Conifer

Modifiers

Drier

Drier topographic settings: ridges, summits

Moist-cool

Moister topographic settings: coves, footslopes, basins

Typic

Typical expression of the ecological system

High conifer

Examples with strong conifer component