



Delaware Wildlife Habitats

As part of the federal requirement to address conservation of the broad array of wildlife in Delaware, Key Habitats that support Species of Greatest Conservation Need were identified in Delaware’s 2007 Wildlife Action Plan. Beginning in March 2014, the habitats were re-evaluated resulting in a new wildlife habitat classification scheme for the 2015 Wildlife Action Plan.

Habitat Classification

Since 2007, there has been a significant increase in the amount of habitat information available for use in the wildlife action planning process.

Changes in Habitat Classification since 2007

The original habitat classification system from the 2007 DE WAP was revised to better match several recent habitat classification standards. Terrestrial and palustrine habitats were aligned as closely as possible with Natureserve ecological systems and the Northeast Terrestrial Wildlife Habitat Classification (Gawler 2008). Stream and river habitats were aligned with the Northeast Aquatic Habitat Classification System (Olivero & Anderson 2008) and marine and estuarine aquatic habitats were aligned with the FGDC Coastal and Marine Ecological Classification Standard and the Atlantic Coastal Fish Habitat Partnership habitats. In addition, the development team worked closely with Maryland DNR to maintain as much consistency as possible for habitats on the Delmarva Peninsula.

Table 1. Classification Standards Used to Generate DEWAP Habitat Classification System

Habitat Classification Source	Date of Last Revision
Guide to Delaware Vegetation Communities (Coxe 2013)	Winter 2013
FGDC Coastal and Marine Ecological Classification Standard (CMECS)	June 2012
Atlantic Coastal Fish Habitat Partnership Conservation Strategic Plan	2012
Northeastern Terrestrial Wildlife Habitat Classification (NETWHC) (Gawler 2008)	2008
Northeast Aquatic Habitat Classification System (NEAHCS) (Olivero & Anderson 2008)	Sep 2008
Northeast Odonate Conservation Status Assessment (White et al 2014)	2014
Maryland Key Wildlife Habitats Draft (Harrison 2014)	Nov 2014

Habitat Condition and Extent

Numerous resources helpful to the assessment of habitat condition and extent in Delaware have been developed since the first edition of the WAP was completed in 2007. The entire state is covered by a GIS layer of Delaware Vegetation Communities based on the Coxe (2013) community types, allowing assessment of habitat extent by vegetation type. Several habitat classes have recent condition assessment information, including forests (Delaware Forest Service 2010) and wetlands (Tiner et al 2011)

Through an integrated effort by the Delaware Coastal Programs, the University of Delaware, and Delaware State University, a benthic and sub-bottom imaging project to identify and map the benthic habitat and sub-bottom sediments of Delaware Bay and River was initiated. This effort has resulted in many major milestones, which include: mapping over 350 square miles, identifying the spatial extent and relative density of the oyster and corbicula beds, and locating key habitats for several species.

The Northeast Habitat Guides and GIS map products developed by The Nature Conservancy (Anderson et al 2013a,b) address condition and extent of ecological systems and aquatic habitats in the northeast region.

Perhaps most significantly, a major landscape mapping and prioritization effort, the Delaware Ecological Network (DEN) was developed by The Conservation Fund. The DEN, based on principles of landscape ecology and conservation biology, provides a consistent framework to help identify and prioritize areas for natural resource protection. The DEN is composed of the following elements: core areas, which contain relatively intact natural ecosystems, and provide high-quality habitat for native plants and animals; hubs, which are slightly fragmented aggregations of core areas, plus contiguous natural cover; and corridors, which link core areas together, allowing wildlife movement and seed and pollen transfer between them. Core areas were validated using independent field data, and verified using aerial photos.

Table 2. A Sampling of Resources for Assessing Extent and Condition of Delaware Habitats

Data Source	Date of Last Revision
Delaware Ecological Network (DEN) GIS Product	
TNC Northeast Habitat Guides (Anderson et al 2013a, 2013b)	2013
Delaware State Vegetation Mapping Project	
Delaware Bay Benthic Habitat Mapping Project	
Delaware Forest Resource Assessment	2010
Delaware Wetlands: Status and Changes from 1992 to 2007	2011

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