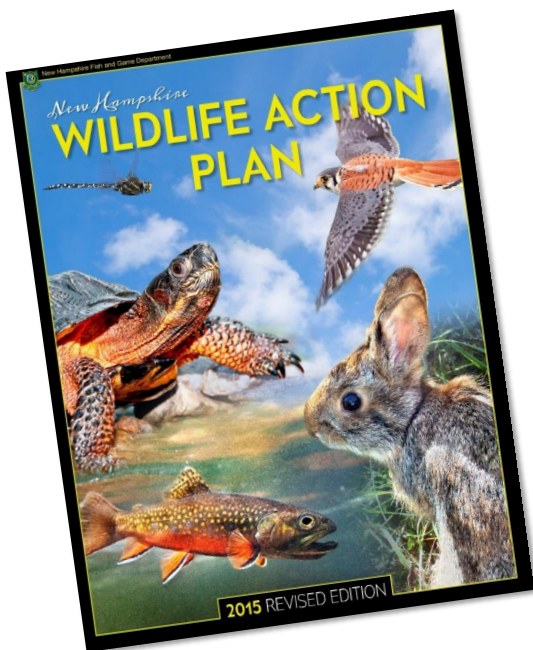




2025 NH Wildlife Action Plan Revision

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NH Wildlife Action Plan



Restore rare wildlife and habitats
Keep common species common

169 Species of Greatest Conservation Need



bobolink



new england cottontail



wood turtle



silver-haired bat

Appendix A: Reptiles

Wood Turtle

Glyptemys insculpta

Federal Listing	N/A
State Listing	SC
Global Rank	
State Rank	S3
Regional Status	Very High



Photo by Ethan Nedow

Justification (Reason for Concern in NH)

The wood turtle is a species of high regional concern (conservation concern and high regional responsibility) in the northeast that warrants federal endangered or threatened species listing considerations (NEPARC 2010, Therres 1999). Many states across the species range have reported declines, population structures with a disproportionate number of adults, or local extirpations (Ross et al. 1991, Garber and Burger 1995, Ernst 2001a, Daigle and Jutras 2005, Willoughby et al. 2013). In New England, the wood turtle is listed as a species of special concern in Maine (Hunter et al. 1999), Massachusetts (Massachusetts Natural Heritage and Endangered Species Program 2007), Connecticut (Connecticut Department of Energy and Environmental Protection 2014), New Hampshire, and Vermont (Vermont Nongame and Natural Heritage Program 2013). Historically, wood turtles were considered one of the most common turtle species in New Hampshire (Oliver and Bailey 1939). A petition to list the wood turtle as threatened under the Endangered Species Act by the Federal government was declined in the mid-1990s; the U.S. Fish and Wildlife Service stated the petition did not present "substantial scientific or commercial information indicating that listing the species is warranted" (USFWS 1995). Life history traits including late sexual maturation (Ontario: 17-18 years, Brooks et al. 1992) and limited fecundity (Garber 1989, Farrell and Graham 1991, Ross et al. 1991, Brooks et al. 1992) make wood turtles extremely vulnerable to increased adult mortality. Wood turtles depend on high rates of adult survival to compensate for a large mortality in the early stages of life. A model developed by Compton (1999) predicted that the annual removal of only 2 adult wood turtles from a stable population of 100 individuals would result in the extirpation of the population in less than 80 years. Human populations are rapidly expanding in New Hampshire (Society for the Protection of New Hampshire Forests 2005). As a result, residential and commercial development and human recreation opportunities are increasing, likely reducing the local viability of wood turtle populations (Tuttle and Carroll 1997, M. N. Marchand, personal observation).

Distribution

The wood turtles range extends from Maine to Minnesota, south to Virginia and Iowa in the United States, as well as southern Canada from Nova Scotia to Ontario (Ernst et al. 1994). The northeast United States comprises a significant portion of the wood turtle's global range (Therres 1999). Wood turtles appear to be distributed throughout New England, but are less common in coastal zones (Klemens 1993) and absent from offshore islands (Jones 2007). In New Hampshire, wood turtles likely occur throughout much of the state excluding higher altitudes such as the White Mountains Region (Taylor 1993, New Hampshire Natural Heritage Bureau 2005). High elevation records for southern New England include 442 m (1450 ft) at Norfolk, Connecticut, 497 m (1630 ft) Becket, Massachusetts, and 518 m (1700 ft) Plainfield, Massachusetts (Klemens 1993).

Records in New Hampshire of WOOD TURTLE

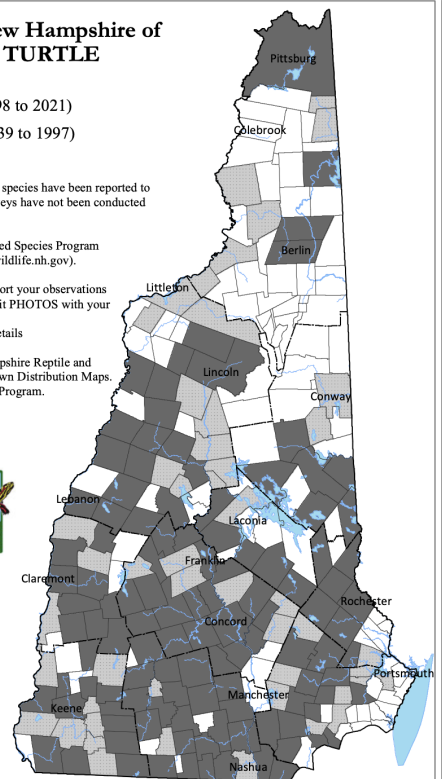
- Current (1998 to 2021)
- Historic (1939 to 1997)

Distribution maps represent where species have been reported to NH Fish & Game. Systematic surveys have not been conducted for most species.

Contact the Nongame & Endangered Species Program for more information (RAARP@wildlife.nh.gov).

HELP FILL IN THE GAPS! Report your observations to NH Fish & Game. Please submit PHOTOS with your observations whenever possible.
See: www.wildnh.com for more details

Cite as: 'RAARP 2021. New Hampshire Reptile and Amphibian Reporting Program Town Distribution Maps. Nongame & Endangered Wildlife Program. NH Fish & Game Department.'



27 Habitats



marsh & shrub wetland



lowland spruce-fir



northern hardwood conifer



grasslands

Threats

- Pollution
- Climate Change
- Natural System Modifications
- Invasive and problematic species, genes, & diseases
- Development

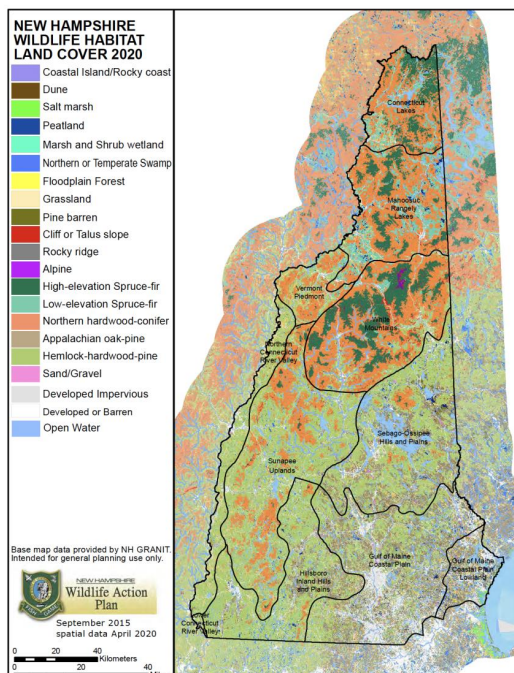


Conservation Actions

- Species and Habitat
- Planning
- Agency Coordination, Regulation, and Policy
- Education and Technical Assistance



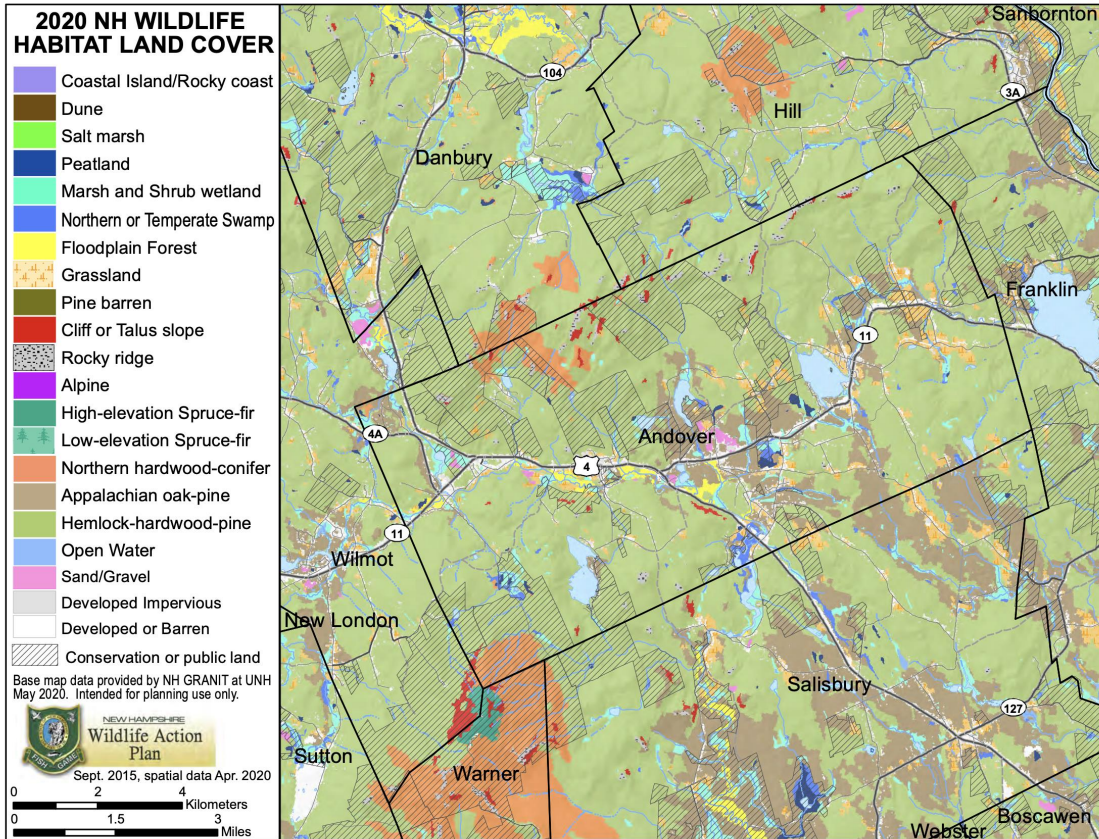
Maps: Habitat Land Cover



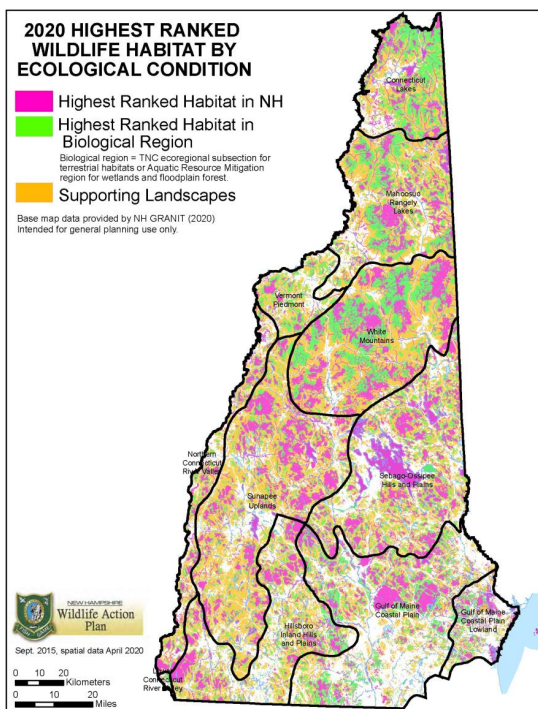
Based on Regional Data

New Hampshire Data used to improve accuracy

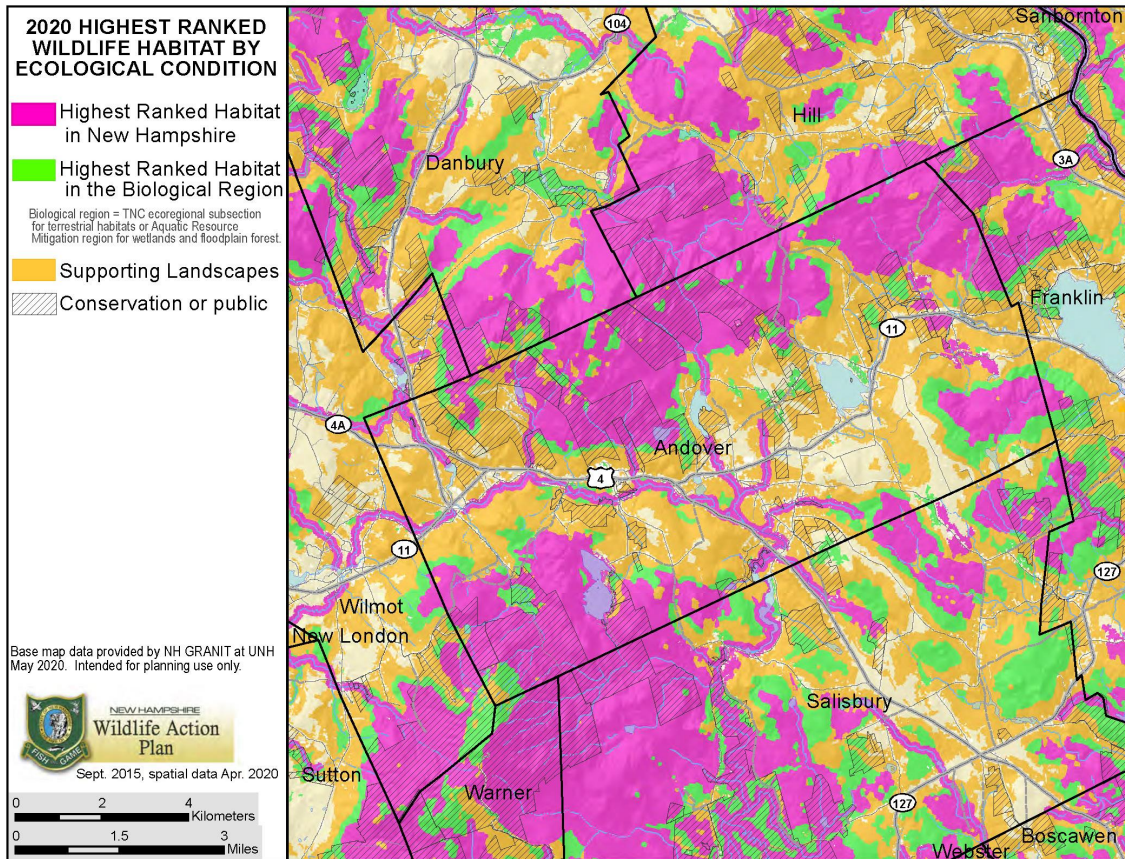
Mapped to accuracy of $\pm \frac{1}{4}$ acre



WAP Maps: Ranked Habitat Map



- Biological factors
- Landscape factors
- Human impact



NH Wildlife Action Plan 2025 Revision

- Required every 10 years by US Fish and Wildlife Service
- Changes in wildlife and habitats, the threats facing them, and the needed conservation actions
- Chance for NHFG to engage with partners



Habitat management is an important conservation tool for many SGCN.

Photo by Jim Oehler, NHFG.

NH Wildlife Action Plan 2025 Revision

- Updated Species of Greatest Conservation Need & Habitats lists
- Assessment of current threats in NH
- New conservation actions
- New conservation tools



Common Eider (*Somateria mollissima*) is a new addition to the 2025 NH SGCN list.

Photo by Tim Bowman, USFWS; NCTC Image Library.

Updated Species of Greatest Conservation Need



Blanding's Turtle (*Emydoidea blandingii*)

Photo by Mike Marchand, NHFG.



Canada Warbler (*Cardellina canadensis*)

Photo by Ryan Hagerty, USFWS.

138 Wildlife Species of Greatest Conservation Need (proposed)

157 Wildlife Assessment Need Species (proposed)

New: Plant Species



Wild Lupine (*Lupinus perennis* L.)
Photo by Lisa Hupp, USFWS.



American Ginseng (*Panax quinquefolius*)
Photo by Dan Pittillo.

200 Plant Species of Greatest Conservation Need (proposed)

203 Plant Assessment Need Species (proposed)

New: Plant Species of Greatest Conservation Need



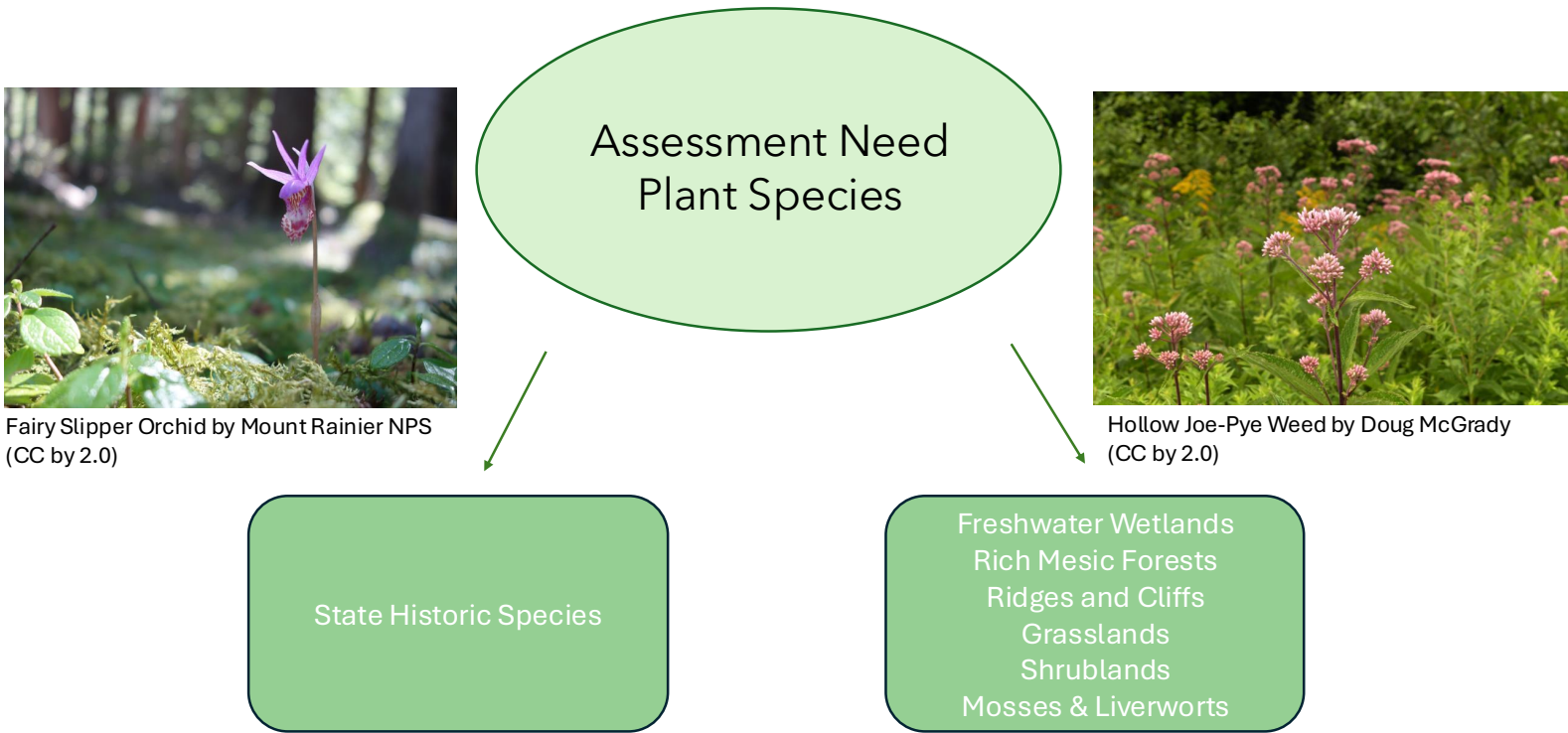
Showy Lady Slipper by NC Orchid (CC by 2.0)



Butterfly Weed by Derek Ramsey



New: Assessment Need Plant Species



Updated Key Habitat Types



Pine Barrens
Photo by Pete Bowman, NHB.



Salt Marsh
Photo by Matt Poole, USFWS.



Alpine
Photo by Ben Kimball, NHFG.

28 Key New Hampshire Habitat Types

Threats Status Assessment



Pollution



Climate Change



Development

Mara Hoplamazian, NHPR

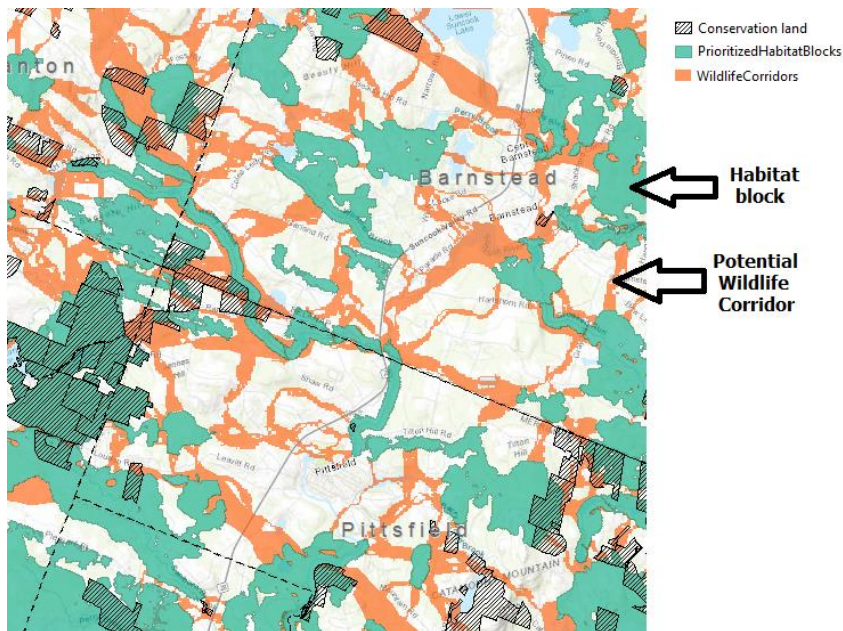
Updated Conservation Actions



Photo by Emily Lord



Updated Conservation Tools



TOWN	COMMON NAME	RANGE	Habitats
ANTRIM	American Black Duck	Statewide	Swamps, Peatlands, Temperate Swamps
ANTRIM	American Bumble Bee	Statewide	Grasslands, Shrublands
ANTRIM	American Kestrel	Statewide	Grasslands, Shrublands
ANTRIM	American Water Shrew (East)	Statewide	Northern Swamps, Swamps, Shrublands, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest
ANTRIM	American Woodcock	Statewide	Temperate Swamps, Wetlands, Warmwater Rivers and Streams
ANTRIM	Bald Eagle	Statewide	Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
ANTRIM	Bank Swallow	Statewide	Rivers and Streams
ANTRIM	Big Brown Bat	Statewide	Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
ANTRIM	Black-billed Cuckoo	Statewide	Shrublands
ANTRIM	Blanding's Turtle	Throughout	Swamps, Vernal Pools, Northern Swamps, Peatlands, Temperate Swamps, Vernal Pools
ANTRIM	Blue-Spotted/Jefferson Salamander	Statewide	Swamps, Vernal Pools
ANTRIM	Bobolink	Statewide	Grasslands
ANTRIM	Brown Thrasher	Statewide	Pine Barrens, Shrublands
ANTRIM	Burbot (Freshwater Cusk)	Localized	with Coldwater Habitats
ANTRIM	Canada Warbler	Statewide	Northern Swamps, Temperate Swamps
ANTRIM	Chimney Swift	Statewide	Forest, Northern Hardwood-Conifer Forest



Help us
 update the
**Wildlife
 Action
 Plan!**



Scan to learn more

