

Appendix A: Insects

Ocellated Emerald

Somatochlora minor

Federal Listing	N/A
State Listing	
Global Rank	G5
State Rank	S1
Regional Status	High



Photo by Pamela Hunt

Justification (Reason for Concern in NH)

Several species of Odonata are specialized on peatlands of various types, and while many are widespread in appropriate habitat in New Hampshire, a handful appear to be sufficiently rare to warrant additional considerations. In the Northeast Odonata Conservation Assessment (White et al. 2014), Ocellated Emerald was considered "high vulnerability" due to habitat specificity and a restricted range in the Northeast.

Distribution

Occurs across Canada from southern Yukon to Newfoundland, and south to the northern U.S. from Oregon to Massachusetts (where rare). In NH it is known from the White Mountains and Coos County.

Habitat

Generally occurs in forested peatlands or forest streams, and adults forage over adjacent uplands.

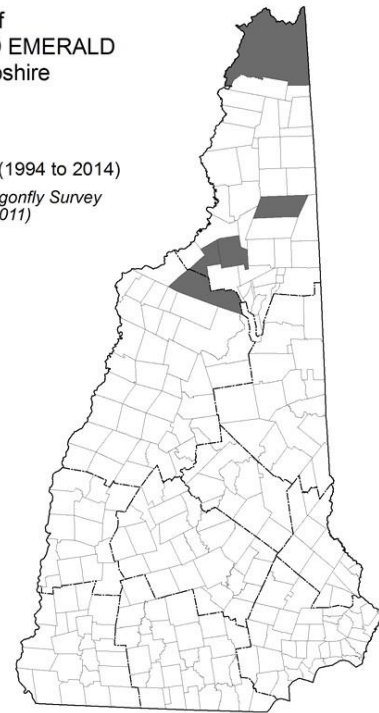
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NH Wildlife Action Plan Habitats

- Peatlands
- Northern Swamps
- Lowland Spruce-Fir Forest

Distribution of OCELLATED EMERALD in New Hampshire

■ Current (1994 to 2014)
*Includes NH Dragonfly Survey
records (1987-2011)*



Distribution Map

Current Species and Habitat Condition in New Hampshire

Unknown

Population Management Status

Not managed

Regulatory Protection (for explanations, see Appendix I)

- Fill and Dredge in Wetlands - NHDES
- Comprehensive Shoreland Protection Act - NHDES

Quality of Habitat

Unknown

Habitat Protection Status

Highly variable, although much suitable habitat is protected in the White Mountain National Forest or by other conservation entities in Coos County (e.g., Pondicherry, Connecticut Headwaters).

Habitat Management Status

Habitat management has not been implemented for this species

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Threats to this Species or Habitat in NH

Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a “medium” or “high” score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.

Habitat conversion due to development (Threat Rank: Medium)

Development may involve filling of wetlands to a variable degree, which reduces or degrades habitat for this species.

Although most habitat for this species is not at high risk for development, the potential exists in parts of its NH range. See the corresponding habitat profiles for more detail.

List of Lower Ranking Threats:

Habitat degradation from the loss of adult upland forest habitat

Habitat degradation from roads that alter hydrology (culverts)

Mortality from extreme drought and reduced productivity; increased decomposition of peat

Actions to benefit this Species or Habitat in NH

Ocellated Emerald Surveys

Objective:

Maintain up-to-date information on this species' distribution and abundance in NH

General Strategy:

Experienced observers working in suitable habitat should be aware of this species' potential occurrence and report it if found and documented.

Political Location:

Watershed Location:

References, Data Sources and Authors

Data Sources

NH Dragonfly Survey (Hunt 2012).

Data Quality

Like most members of its genus, the Ocellated Emerald occurs at low densities and can be difficult to detect. It was only found at three sites during the NH Dragonfly Survey (Hunt 2012), but has a relatively wide historic range within which current records are evenly dispersed. This suggests there has been no significant change in distribution and that the species is simply overlooked regularly.

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2015 Authors:

Pamela Hunt, NHA

2005 Authors:

Literature

Hunt, P.D. 2012. The New Hampshire Dragonfly Survey: A final report. Report to NH Fish and Game Department, Nongame and Endangered Species Program. New Hampshire Audubon, Concord, NH.

White, E.L., P.D. Hunt, M.D. Schessinger, J.D. Corser, and P.G. deMaynadier. 2014. A conservation status assessment of Odonata for the northeastern United States. Report to Northeastern Association of Fish and Wildlife Agencies. New York Natural Heritage Program, Albany, NY.