

## **Lyre-tipped Spreadwing**

*Lestes unguiculatus*

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



*Photo by Cliff Bernstein*

### **Justification (Reason for Concern in NH)**

The Northeastern Odonata Conservation Assessment (White et al 2014), considered Lyre-tipped Spreadwing a species of “moderate” vulnerability. An important factor in this ranking was a region-wide decrease in range occupancy, in which metric the species fell in the bottom 10% of 228 species. It was also relatively low with respect to habitat diversity and habitat vulnerability. Recent data from the Northeast suggest widespread absence from formerly-occupied areas (White et al. 2010, Hunt 2012) or overall rarity (Brunelle and DeMaynadier 2005).

### **Distribution**

Widespread across the northern and central United State and southern Canada. In general it is a northern and western species, with the northeast at the periphery of a much larger continental range. Suitable habitat is presumably widespread in New Hampshire, but the species has been recorded in only ten towns through 2014. These are clustered in two areas: northern NH and near the seacoast, perhaps reflecting an observer bias. Despite extensive field work, it was only documented from two sites during the NH Dragonfly Survey in 2007-2011: Stewartstown and Rye.

### **Habitat**

Appears to use a variety of small and/or temporary wetlands, with recent New Hampshire sites including a gravel pit pond, shrubby roadside pond, and wetlands within a northern white cedar swamp.

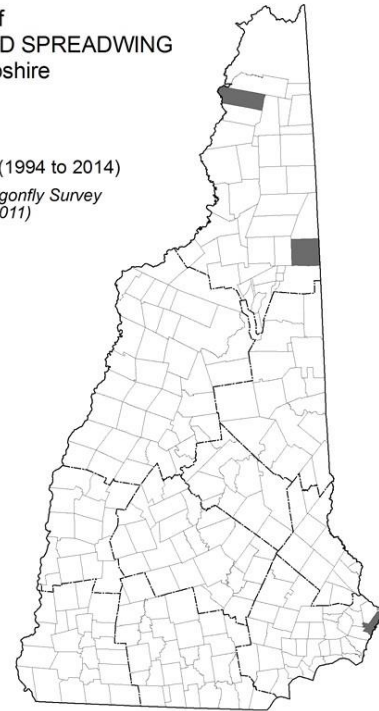
## Appendix A: Insects

### NH Wildlife Action Plan Habitats

- Marsh and Shrub Wetlands
- Vernal Pools
- Northern Swamps

### Distribution of LYRE-TIPPED SPREADWING 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, but may be less common in NH than historically

### 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

No information

### Habitat Protection Status

Limited information, although two of the recent sites are in protected areas.

### Habitat Management Status

Habitat is not currently managed for this species.

### 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 from the direct filling of wetlands for development (Threat Rank: Medium)

Although most habitat for this species is not at high risk for development, the potential exists in parts of its NH range. See the vernal pool and marsh/shrub wetlands habitat profiles for more detail.

#### List of Lower Ranking Threats:

Mortality and species impacts from insecticide use (mosquito treatment)

Habitat degradation from fertilizer use

Mortality and disturbance from extreme drought and pond drying that impacts reproduction

Habitat conversion and impacts from the development of uplands surrounding breeding sites

### Actions to benefit this Species or Habitat in NH

#### Lyre-tipped Spreadwing Surveys

##### Objective:

Determine species status in the state

##### 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:

Statewide

##### Watershed Location:

### References, Data Sources and Authors

#### Data Sources

NH Dragonfly Survey (Hunt 2012); Hunt unpublished data

#### Data Quality

This species is sparsely distributed and occurs at low densities. This, in combination with its similar to more common species in the genus *Lestes*, makes it likely that the Lyre-tipped Spreadwing is more common than generally believed. Even so, it is clearly rare given the lack of records during extensive survey effort in 2007-2011.

## *Appendix A: Insects*

### **2015 Authors:**

Pamela Hunt, NHA

### **2005 Authors:**

#### **Literature**

Brunelle, P.-M., and P.G. deMaynadier. 2010. The Maine damselfly and dragonfly survey: A final report. Report to Maine Department of Inland Fisheries and Wildlife, Bangor, ME. New York Natural Heritage Program, Albany.

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., J. D. Corser, and M. D. Schlessinger. 2010. The New York dragonfly and damselfly survey: Distribution and status of the odonates of New York. New York Natural Heritage Program, Albany, NY.

White, E.L., P.D. Hunt, M.D. Schlessinger, 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.