Species Status Assessment

Common Name: New England bluet **Date Updated:** March 2025

Scientific Name: *Enallagma laterale* **Minor Edits By:** NYSDEC Wildlife Section

Class:

Family:

Species Synopsis *(a short paragraph which describes species taxonomy, distribution, recent trends, and habitat in New York):*

The New England bluet (*Enallagma laterale*) has a small range that runs only from eastern Pennsylvania eastward, and northward along the Atlantic Coast of the Unites States to southern Maine (Butler *et al.* 2005, Abbott 2010). The species was recently documented in Vermont as well (Blust 2008). In New York, it is known to occur in at least 17 locations from the following counties: seven in Orange, one in Rockland, three in Westchester, six in Suffolk (New York Natural Heritage Program 2010). Eleven of the sites were visited during the New York State Dragonfly and Damselfly Survey (NYDDS), five of which were first documented during the survey. All of the sites were first documented between 1990 and 2009 (New York Natural Heritage Program 2010).

Enallagma laterale is generally known to occur in ponds and lakes with emergent vegetation or boggy margins and sphagnum bogs (Carpenter 1991, Lam 2004, New York Natural Heritage Program 2009, Butler *et al.* 2005). In New York, it is known to inhabit Long Island coastal plain ponds with sandy substrate and also bog-bordered ponds in southern New York away from the coastal plain (New York Natural Heritage Program 2009, 2010). The presence of emergent vegetation and floating plants at the shorelines and boggy, shrubby borders is characteristic of New York sites (New York Natural Heritage Program 2009).

In New York, it is known to occur in at least 17 locations, all of which were first documented between 1990 and 2009. Possibly expanding range in New England (P. Hunt).

DEC is not aware of any additional data or new information on population trends or threats to this species since the last SWAP revision in 2015 to indicate a need for change in SGCN status.

I. Status

a. Current legal protected Status

i. **Federal:** Not listed **Candidate:** No

ii. **New York:** Not listed

b. Natural Heritage Program

i. **Global:** G3G4

ii. **New York:** S3 **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: SGCN

-IUCN Red List: Least Concern

-Northeast Regional RSGCN: RSGCN

-Northeast Regional Rank (White et al.2015):

Status Discussion:

White *et al.* (2010) calculated a revised draft S-rank of S3 from S2. This species is extremely widespread and is possibly expanding its range in New England (P. Hunt, personal communication).

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown			-
Northeastern US	Yes	Unknown	Stable			-
New York	Yes	Unknown	Stable	2005-2009		-
Connecticut	Yes	Unknown	Unknown			Yes
Massachusetts	Yes	Unknown	Unknown		SC	Yes
New Jersey	Yes	Unknown	Unknown			Yes
Pennsylvania	No data	-	-			-
Vermont	Yes	Unknown	Unknown			-
Ontario	No	-	-			-
Quebec	No	-	-			-

Column options
Present?: Yes; No; Unknown; No data; (blank) or Choose an Item
Abundance and Distribution: Declining; Increasing; Stable; Unknown; Extirpated; N/A; (blank) or Choose an item
SGCN?: Yes; No; Unknown; (blank) or Choose an item

Monitoring in New York *(specify any monitoring activities or regular surveys that are conducted in New York):*

The New York State Dragonfly and Damselfly Survey (NYSDDS) was conducted from 2005-2009.

Trends Discussion *(insert map of North American/regional distribution and status):*

Trend information for this species is unknown.

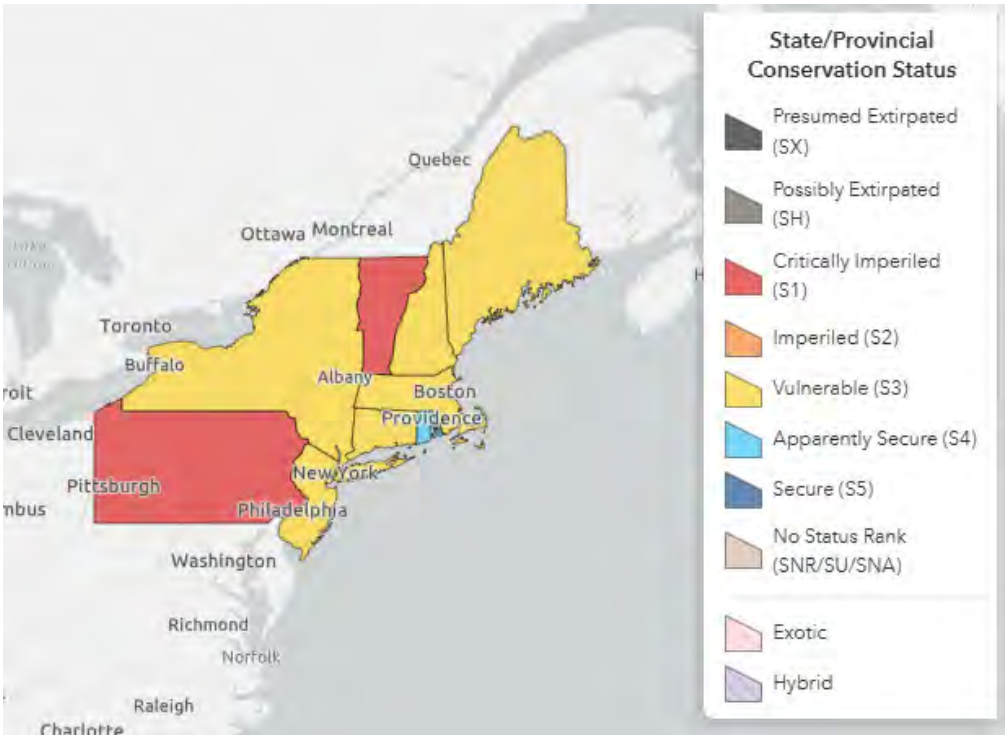

Figure 1. Conservation status of *Enallagma laterale* in North America (NatureServe 2025).

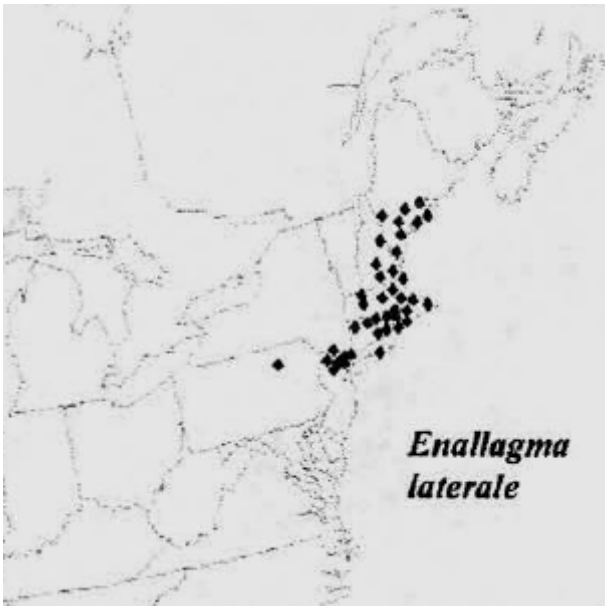

Figure 2. Distribution of New England bluet in the United States (Donnelly 2004).

III. New York Rarity *(provide map, numbers, and percent of state occupied)*

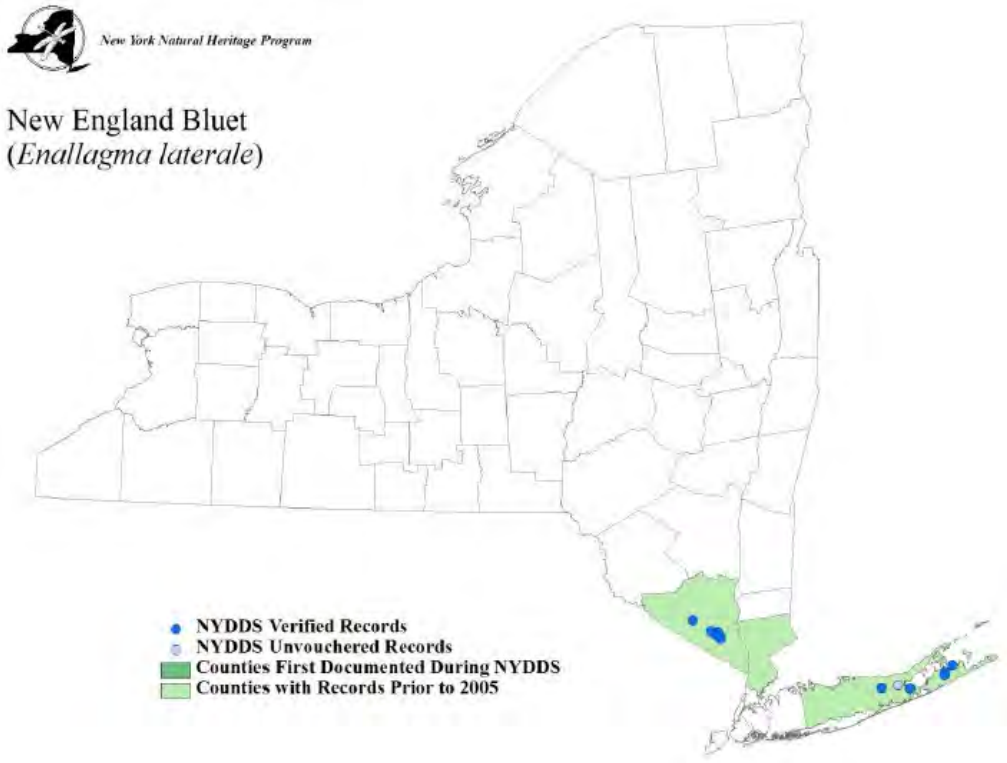

Figure 3. Occurrence records of New England bluet in New York (White *et al.* 2010).

Details of historic and current occurrence:

It is known to occur in at least 17 locations, all of which were first documented between 1990 and 2009 (P. Hunt, personal communication).

New York's Contribution to Species North American Range:

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~150 miles

Column options
Percent of North American Range in NY: 100% (endemic); 76-99%; 51-75%; 26-50%; 1-25%; 0%; Choose an item
Classification of NY Range: Core; Peripheral; Disjunct; (blank) or Choose an item

IV. Primary Habitat or Community Type *(from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):*

a. Lacustrine, coldwater shallow, emergent marsh

b. Estuarine, brackish marsh, coastal plain pond

c. Alustrine, peatlands, bog/fen

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/Increase
-	-	-	

Column options
Habitat Specialist and Indicator Species: Yes; No; Unknown; (blank) or Choose an item
Habitat/Community Trend: Declining; Stable; Increasing; Unknown; (blank) or Choose an item

Habitat Discussion:

E. laterale inhabits ponds and small lakes with emergent vegetation or boggy edges. On Long Island, as in coastal states such as Massachusetts and Rhode Island, these ponds are typically sandy-bottomed coastal plain ponds (Carpenter 1991, Nikula *et al.* 2003, Lam 2004, New York Natural Heritage Program 2005). In Rhode Island, Carpenter (1991) noted a particular association with emergent stands of rushes (*Juncus*) and pickerelweed. Although the majority of sites occupied by this bluet are in the coastal plain, it is also found at higher elevations away from the coastal plain in Pennsylvania and in the Hudson Highlands region of New York where it is found at ponds bordered by boggy vegetation (New York Natural Heritage Program 2011).

V. Species Demographic, and Life History:

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/ Catadromous?
Yes	-	-	Yes	Yes	-

Column options
First 5 fields: Yes; No; Unknown; (blank) or Choose an item
Anadromous/Catadromous: Anadromous; Catadromous; (blank) or Choose an item

Species Demographics and Life History Discussion *(include information about species life span, reproductive longevity, reproductive capacity, age to maturity, and ability to disperse and colonize):*

Little has been published on the life history of *E. laterale* in particular, but it is likely similar to other better-studied species in the genus. The flight season is longer than that of the closely related pine barrens bluet (*Enallagma recurvatum*), although the majority of records are restricted to the month of June. Emergence occurs during the last week of May (Massachusetts Natural Heritage and Endangered Species Program 2012).

E. laterale has a one-year lifecycle. The eggs are laid in early summer and hatch in the fall. The nymphs develop over winter and spring, undergoing several molts in the process. Emergence occurs during the last week of May. The process may last a few hours before the tenerals fly to upland areas where they spend one to two weeks maturing. Mating occurs in the wetlands and adults can be seen into July (Massachusetts Natural Heritage and Endangered Species Program 2012).

VI. Threats *(from NY 2015 SWAP or newly described):*

Any activities that degrade the sensitive hydrology or water quality of the ponds where the New England bluet occurs could threaten populations of these damselflies. Examples include: ditching, filling, eutrophication and changes in dissolved oxygen content, direct effects of pesticides (e.g. for mosquito control or from agricultural runoff), and other chemical contamination from runoff or discharge of agricultural, industrial, or urban effluent. Introduction of fish may be a threat as a number of *Enallagma* species are thought to be restricted to, or reach their highest population levels in, fishless ponds. Historically, coastal plain ponds dried out completely during occasional severe droughts, which prevented fish from establishing themselves in these ponds. Today, many ponds in the Central Pine Barrens never go completely dry due to deep holes dug at the edge of nearly all coastal plain ponds, and several species of fish introduced by the public have become permanent pond residents. Off-road vehicle use along or near pond shores and groundwater withdrawal have been noted as specific problems in New England and New York (Carpenter 1990, Donnelly 1999). At the present time, only a few public water supply wells are currently located near existing coastal plain ponds on Long Island, so groundwater withdrawal may not be a major threat to known populations of this species (Central Pine Barrens Joint Planning and Policy Commission 2003). Future new supply water wells could pose a threat, if they are located near ponds occupied by this bluet. While groundwater sources are protected for the majority of ponds within the Central Pine Barrens Core Preserve, they are not protected for ponds in the Compatible Growth Area (Central Pine Barrens Joint Planning and Policy Commission 2003) or other areas of Long Island. The Westchester County populations could be threatened or negatively affected by further lakeshore development. Fish stocking is a potential threat at one of the Orange County sites. Treatment of ponds for mosquito control relative to West Nile Virus may be a threat, particularly at sites on Long Island (New York Natural Heritage Program 2011).

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.1 Housing & Urban Areas	(habitat loss from lakeside development)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.2 Dams & Water Management/Use	(alteration of natural hydrology)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
6. Human Intrusions & Disturbance	6.1 Recreational Activities	6.1.1 Motor vehicles	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	8.1.3 Aquatic animals (grass carp)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	8.1.4 Aquatic plants (phragmites)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.2 Problematic Native Plants & Animals	(fish stocking)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.1 Domestic & Urban Wastewater	9.1.1 Domestic wastewater (lawn care)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to *Enallagma laterale*

Are there regulatory mechanisms that protect the species or its habitat in New York?

Yes: ✓ **No:** **Unknown:**

If yes, describe mechanism and whether adequate to protect species/habitat:

The Freshwater Wetlands Act provides protection for wetlands greater than 12.4 acres in size under Article 24 of the NYS Conservation Law. The Tidal Wetlands Act provides protection for all tidal wetlands under Article 25 of the NYS Conservation Law.

Describe knowledge of management/conservation actions that are needed for recovery/conservation, or to eliminate, minimize, or compensate for the identified threats:

Known populations should be monitored and new locations should be searched at appropriate habitats within or just outside the species' known range (New York Natural Heritage Program 2011).

Action Category	Action	Description
C.7 Legislative and Regulatory Framework or Tools	C.7.1.3.0 Create, amend, or influence regulation	
C.7 Legislative and Regulatory Framework or Tools	C.7.2.1.0 Create or amend policies	

Table 2. Recommended conservation actions for *Enallagma laterale.*

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for odonates of lakes and ponds, and for New England bluet in particular.

Habitat monitoring:

____ Support and encourage habitat monitoring efforts that would complete the baseline assessment of habitat quality and threats.

Habitat research:

____ Support and encourage research projects that will help define preferred habitat in order to guide future monitoring, restoration and habitat protection efforts.

New regulation:

____ Recommendations for official state endangered, threatened, and special concern listing are an anticipated result of the statewide inventory. It is expected that one or more of these species may be recommended for listing and officially adding these species to the list would constitute a specific action.

Population monitoring:

____ Conduct surveys to obtain repeatable, relative abundance estimates for these species at known sites and newly discovered sites where access permission to conduct surveys is obtained (as indicated in the State Wildlife Grant Odonate Inventory Project).

Statewide baseline survey:

____ All five of these species are known from fewer than 15 locations in the state, but new populations undoubtedly remain to be discovered. A currently approved, but not yet begun State Wildlife Grant Statewide Odonate Inventory Project will utilize volunteers, Natural Heritage Program and other staff to conduct surveys for these species at potential sites throughout the state.

VII. References

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