Species Status Assessment

Common Name:	Attenuated Bluet	**Date Updated:**	2024-03-25
Scientific Name:	*Enallagma daeckii*	**Updated By:**	Erin L. White
Class:	Insecta		
Family:	Coenagrionidae		

Species Synopsis

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

Attenuated Bluets range from Texas and Oklahoma eastward to the coastal United States and north to New York and Massachusetts (NatureServe 2024).

The species was first documented as breeding in NY in 2019 (NYNHP 2024). It is currently known from Richmond and Suffolk Counties from 2-9 locations (iNaturalist 2024, NYNHP 2024). With only recent records since 2019 and few locations, it is impossible to suggest a population trend for NY, but probably indicates a recent range expansion northward for the species.

Attenuated Bluets inhabit swamps, vegetated lakes, and ponds associated with woodland. They are often found perching in vegetation (including shrubs) along edges of habitat (Lam 2003, IUCN 2024). The Long Island sites include at least one coastal plain pond (NYNHP 2024).

I. Status

a. Current legal protected Status

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

ii. New York: Unprotected

b. Natural Heritage Program

i. Global: G4

ii. New York: S1 **Tracked by NYNHP?** On Active Tracking List

Other Ranks:

NYS 2025 SGCN Status: High Priority Species of Greatest Conservation Need

COSEWIC: Not listed in Canada
IUCN Red List: Least Concern
Northeast Regional SGCN: Not listed; R3 Vulnerability, shared responsibility

Status Discussion:

Attenuated Bluet has recently expanded its range northward into NY, with the first documented breeding record in 2019. There may be as few as two known locations for NY (Richmond and Suffolk Counties) or as many as nine (locations obscured on iNaturalist), depending on the sightings and separation distance between them (iNaturalist 2024, NYNHP 2024).

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status or S-Rank	SGCN?
North America	Yes	Unknown	Unknown	Unknown		
Northeastern US	Yes	Unknown	Unknown	Pre and post 2000	R3	No
New York	Yes	Unknown	Unknown	Pre and post 2005	S1	No
Connecticut	Yes	Unknown	Unknown	Unknown	S1	Yes
Massachusetts	Yes	Unknown	Unknown	Unknown	S1	Yes
New Jersey	Yes	Unknown	Unknown	Unknown	SNR	No
Pennsylvania	No	Unknown	Unknown	Unknown	SH	Yes
Vermont	No	-	-	-		No
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 was conducted from 2005-2009, but there are no organized, regular monitoring or survey activities directed toward this species or to sites where it has been documented.

Trends Discussion

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

With the only documentations since 2019 and few locations, it is impossible to suggest a population trend for NY, but probably indicates a recent range expansion northward for the species.

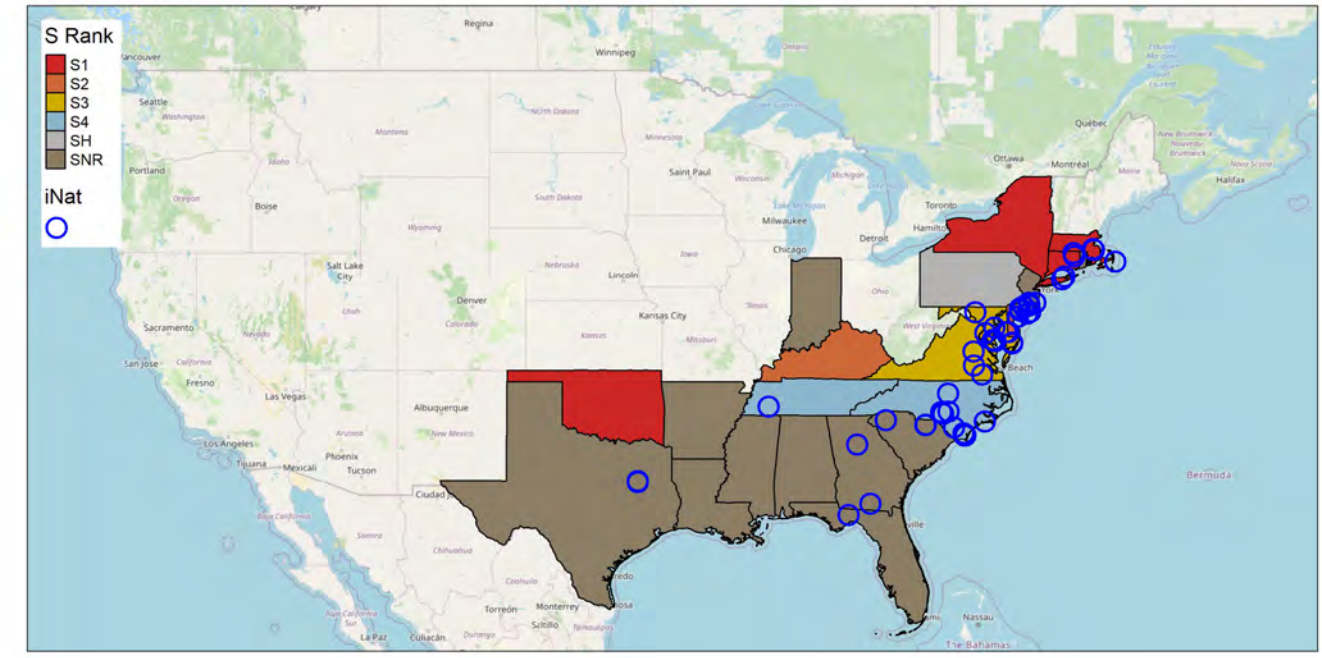

Figure 1: *Enallagma daeckii North American distribution. Points show research-grade iNaturalist observations.*

Figure 2: *Enallagma daeckii regional distribution as reported at https://northeastwildlifediversity.org/rsgcn and found in a regional odonate project.*

III. New York Rarity

(provide map, numbers, and percent of state occupied)

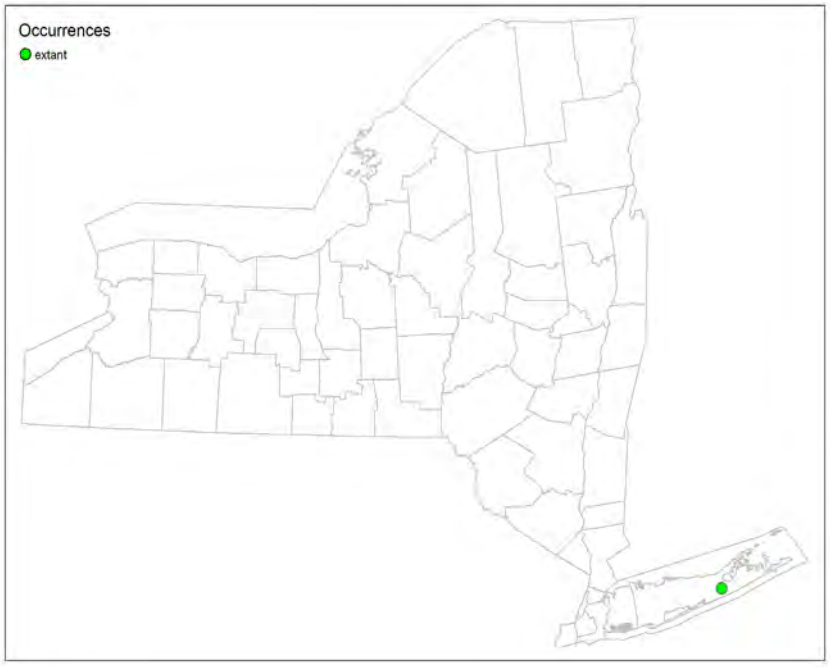

Figure 3: *NYS distribution for Enallagma daeckii based on element occurrence data.*

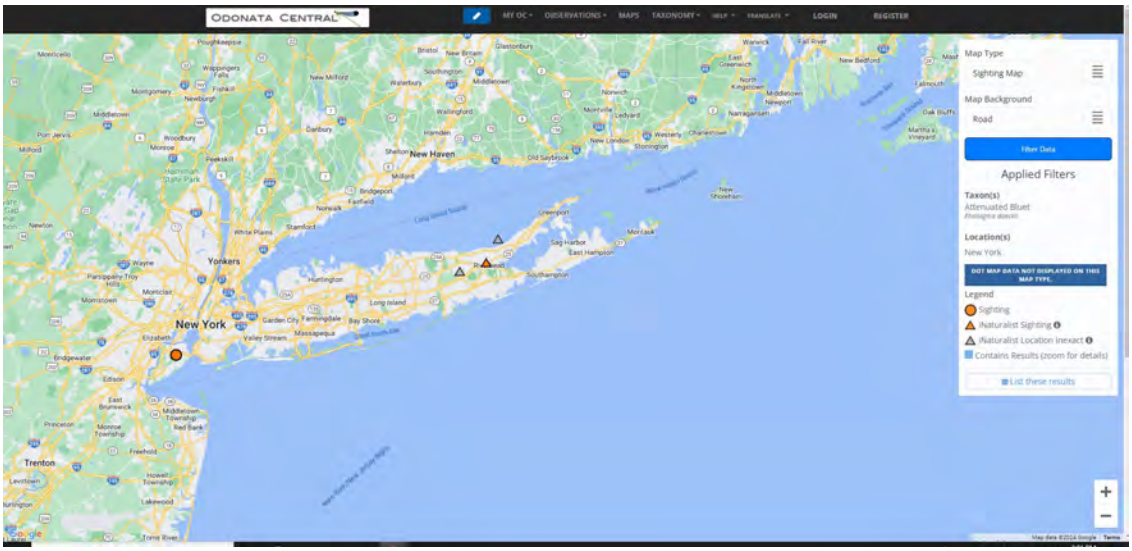

Figure 4: *Distribution of the Attenuated Bluet in NY according to OdonataCentral records (Abbott 2024).*

Table 1. Number of observations of *Enallagma daeckii* grouped by the dates known to be extant (repeat observations (element occurrences) include the years spanning first observation to last observation) and the number and percent of total of counties these observations fall within for New York State.

Years	eocount	# of Counties	% of counties in State
Pre-2005	0	0	0.0
2005-2009	0	0	0.0
2010-present	2-9	2	3.2

Details of historic and current occurrence:

The specific locations of observations are obscured on iNaturalist. There may be as few as two known locations for NY (Richmond and Suffolk Counties) or as many as nine, depending on the sightings and separation distance between them. Attenuated bluets were first documented in NY in 2019 by Ginger and Charlie Brown at Bellows Pond. Another location was confirmed for Staten Island in 2021 by David Eib. Several others have observed the species in Suffolk county in recent years but precise locations are unknown (iNaturalist 2024, NYNHP 2024).

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~1200 mi

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):

15. Warm to Cool, Oligo-Mesotrophic, Acidic

Habitat or Community Type Trend in New York

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

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

Habitat Discussion:

Attenuated Bluets inhabit swamps, vegetated lakes, and ponds associated with woodland. They are often found perching in vegetation (including shrubs) along edges of habitat (Lam 2003, IUCN 2024). The Long Island sites include at least one coastal plain pond (NYNHP 2024).

V. Species Demographics and Life History

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/ Catadromous?
Yes	Yes	No	Yes	Yes	No

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):

Adults fly from early July to late August in MA (Lam 2003) and NY sightings have been recorded from late June to early August (Abbott 2024, iNaturalist 2024).

VI. Threats

Any activity which might lead to water contamination or the alteration of natural hydrology could impact Scarlet Bluet populations (NYS DEC 2005). Such threats might include roadway and agricultural run-off, ditching and filling, eutrophication and nutrient loading from fertilizers, herbicides, and septic systems, changes in dissolved oxygen content, and development near

their habitats (NYS DEC 2005). Groundwater withdrawal is a potential threat in lentic habitats on Long Island, as are invasive plant species replacing native plants native damselflies require for oviposition (NYNHP 2024). The introduction of grass carp is also a threat to coastal plain ponds on Long Island. In addition, both emergence rates and/or species ranges may shift for odonate species as a result of climate change (Kalkman et al. 2008).

White et al. (2015) found coastal plain pond habitats of Attenuated Bluets to be highly vulnerable, forested wetlands to be moderately vulnerable, lake and pond shorelines to be moderately vulnerable, and freshwater emergent/shrub marshes to be low vulnerability.

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
4. Transportation & Service Corridors	4.1 Roads & Railroads	4.1.1 Roads	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	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.3 Agricultural & Forestry Effluents	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 2. Threats to *Enallagma daeckii*

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 regulated wetlands greater than 12.4 acres in size under Article 24 of the NYS Conservation Law. The Adirondack Park Agency has the authority to regulate smaller wetlands within the Adirondack Park. The Army Corps of Engineers has the authority to regulate smaller wetlands in New York State, and the DEC has the authority to regulate smaller wetlands that are of unusual local importance. The Protection of Waters Program provides protection for rivers, streams, lakes, and ponds under Article 15 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:

Any efforts to reduce roadway and agricultural run-off, eutrophication, development of upland borders to ponds and resulting increased groundwater withdrawal, invasive plant and animal species, trampling of vegetation from recreation, and ditching and filling activities should be considered when managing for this species (NYS DEC 2005, White et al. 2010). Maintenance or restoration of native shoreline vegetation and surrounding upland habitat will benefit native damselflies, as females require native emergent vegetation for successful reproduction and spend much of their time in upland habitats away from the breeding pond (Gibbons et al. 2002, White et al. 2010). Many of the known sites on Long Island are located within or on preserves or protected lands, but the above listed threats might be present on adjacent lands.

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

Conservation Actions	
Action Category	**Action**
Land/water protection	1.1. Site/area protection
Land/water protection	1.2. Resource & habitat protection
Land/water management	2.1. Site/area management
Land/water management	2.2. Invasive/problematic species control
Land/water management	2.3. Habitat & natural process restoration

Conservation Actions	
Action Category	**Action**
Education & awareness	4.2. Training
Education & awareness	4.3. Awareness & communications
Law & policy	5.2. Policies and regulations

VII. References

This SSA drew heavily from these resources:

New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry. 2023. Element Occurrence and Element Dataset. Albany, New York. [Exported 12/14/2023].

NatureServe. 2023. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. http://www.natureserve.org/explorer. [Accessed 12/14/2023].

Additional references:

Abbott, J.C. 2006-2024. OdonataCentral: An online resource for the distribution and identification of Odonata. Available at https://www.odonatacentral.org/. (Accessed: 3/25/2024).

Gibbons, L.K., J.M. Reed, and F.S. Chew. 2002. Habitat requirements and local persistence of three damselfly species (Odonata: Coenagrionidae). Journal of Insect Conservation 6:47-55.

iNaturalist. Available from https://www.inaturalist.org. Accessed March 26, 2024.

IUCN 2024. IUCN Red List of Threatened Species. Version 2023.1. <www.iucnredlist.org>. Accessed 26 March 2024.

Lam, Ed. 2003. Damselflies of the Northeast: A guide to the species of eastern Canada and the northeastern United States. Biodiversity Books: Forest Hills, NY.

New York State Department of Environmental Conservation. (2005). *New York State Comprehensive Wildlife Conservation Strategy*. Albany, NY: New York State Department of Environmental Conservation.

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Olivero-Sheldon, A. and M. G. Anderson. 2016. Northeast Lake and Pond Classification. The Nature Conservancy, Eastern Conservation Science, Eastern Regional Office. Boston, MA.

White, E. L., J. D. Corser, and M. D. Schlesinger. 2010. The New York dragonfly and damselfly survey 2005-2009: Distribution and status of the odonates of New York.

New York Natural Heritage Program, Albany, New York.

White, E.L., J.D. Corser, P.D. Hunt, P. DeMaynadier, and M.D. Schleshinger. 2015. Prioritizing Odonata for conservation action in the northeastern USA. Freshwater Science (34): 1079-1093.

Originally prepared by	Erin L. White
Date first prepared	March 26, 2024
First revision	
Last revision	