Species Status Assessment

Common Name: Atlantic bluet **Date Updated:** March 2025

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

Class: Insecta

Family: Coenagrionidae

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

Atlantic Bluet is currently documented in 13 extant locations in Suffolk County. There is a possible record from Columbia County and Nassau County. It is historically known from Suffolk County as well, where they were reported common in 1999. They are known to inhabit coastal plain ponds in NY, which are the most vulnerable odonate habitat type in the region. While regional trend appears stable, the species is considered highly vulnerable in the Northeast (White et al. 2014). In New York and Massachusetts, Atlantic Bluets are found in coastal plain ponds (Nikula *et al.* 2003, New York Natural Heritage Program 2010). In the southern part of their range, they can also be found in lakes, temporary ponds, and slow stream, but are usually in fishless waters (Lam 2004, Paulson 2011). In the north, they can be found in bog-bordered ponds (Paulson 2011).

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:** G5

ii. **New York:** S1S2 **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: SGCN

-IUCN Red List: Least Concern

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

-Northeast regional vulnerability rank: R2, highly vulnerable

Status Discussion:

Atlantic Bluet is currently documented in 13 extant locations in Suffolk County. There is a possible record from Columbia County and Nassau County. It is historically known from Suffolk County as well. They are known to inhabit coastal plain ponds in NY, which are the most vulnerable odonate habitat type in the region.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown			-
Northeastern US	Yes	Stable	Stable	Pre-post 2000		-
New York	Yes	Unknown	Increasing			Yes
Connecticut	Yes	-	-	Post 1995		Yes
Massachusetts	Yes	Unknown	Unknown			No
New Jersey	Yes	Stable	Stable			No
Pennsylvania	Yes	-	-			No
Vermont	No	-	-			-
Ontario	No	-	-			-
Quebec	-	-	-			-

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):*

Atlantic Bluet is currently documented in 13 extant locations in Suffolk County. There is a possible record from Columbia County and Nassau County. It is historically known from Suffolk County as well, where they were reported common in 1999. Information on exact locations for the species on LI is unknown pre-2005. They appear to be stable regionally, as well as in CT and NJ, but may be state historical in PA(?) and their status in MA is unknown. They are known to inhabit coastal plain ponds in NY, which are the most vulnerable odonate habitat type in the region.

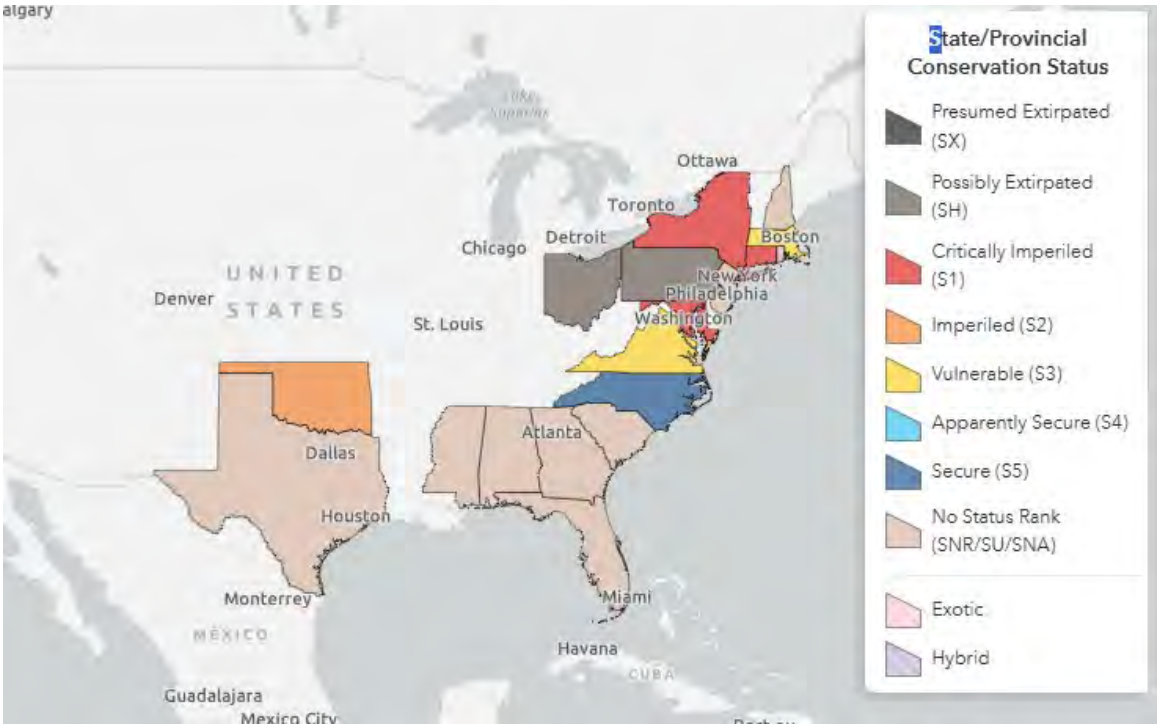

Figure 1. Conservation status of *Enallagma doubledayi* in North America (NatureServe 2025).

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

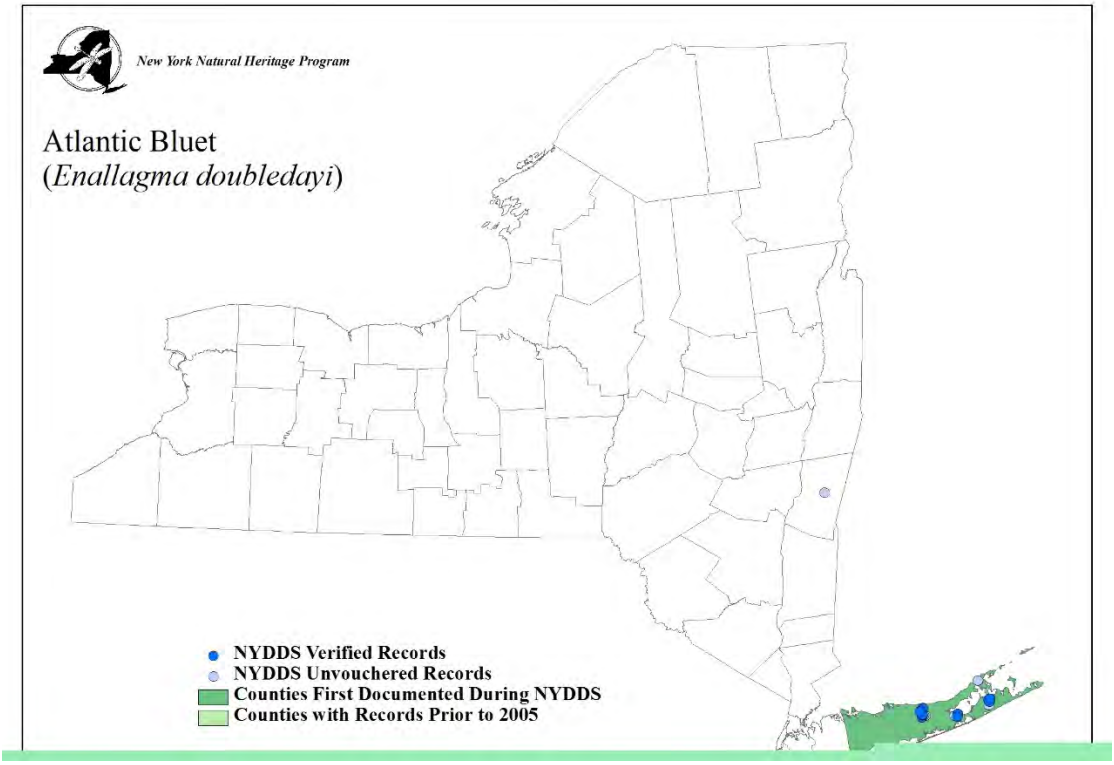

Figure 2. Occurrence of Atlantic Bluet in New York (White *et al.* 2010).

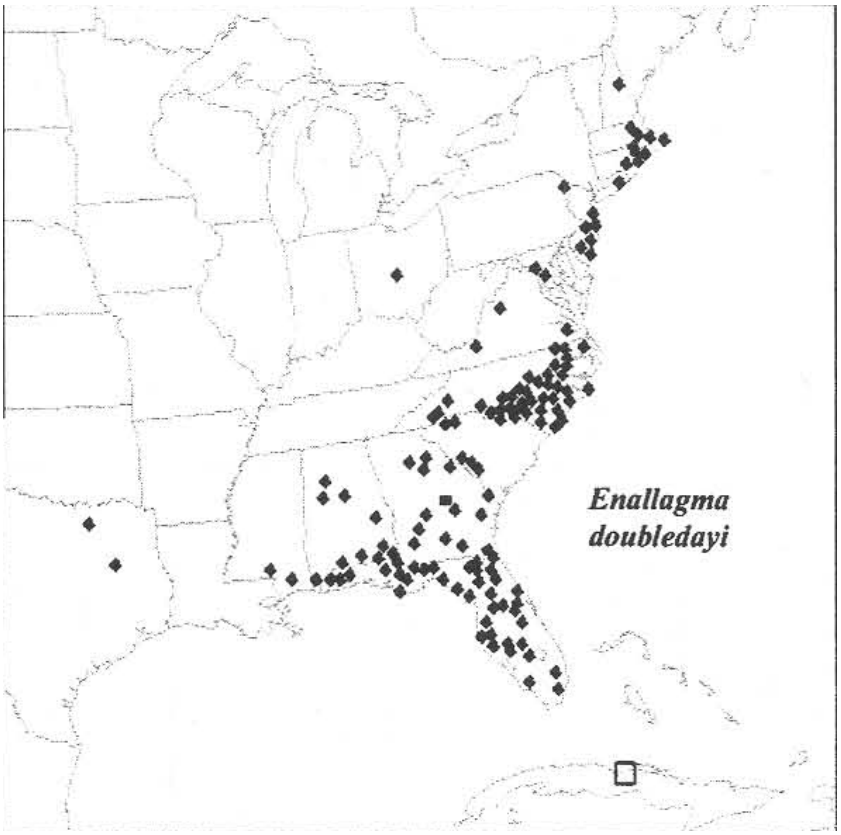

Figure 3. Distribution of Atlantic Bluet in North America (Donnelly 2004).

Details of historic and current occurrence:

Previously known from Suffolk county prior to 2005 at the start of the NYDDS.

Enallagma doubledayi is currently documented in 13 extant locations in Suffolk County.

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	

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. Coastal Plain Ponds

b. Lake and Pond Shorelines

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:

In New York and Massachusetts, Atlantic Bluets are found in coastal plain ponds (Nikula *et al.* 2003, New York Natural Heritage Program 2010). In the southern part of their range, they can also be found in lakes, temporary ponds, and slow stream, but are usually in fishless waters (Lam 2004, Paulson 2011). In the north, they can be found in bog-bordered ponds (Paulson 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):*

Damselflies undergo incomplete metamorphosis and live as aquatic larvae in streams and rivers before emerging into a terrestrial adult life stage. Adults live for a single warm season (few months), while larvae may live for a year or longer, depending on the species and environmental conditions. They have the ability to disperse as larvae through connected waterways if conditions are suitable and adults have the ability to disperse to new suitable habitats by flight. Paulson (2011) indicates pairs of this species oviposit in tandem, or the female may submerge to oviposit on stems while the male waits above the water.

Flight season in NY is June through August (Donnelly 1999, White *et al.* 2010) and is reported as May through Oct. in NJ (Paulson 2011).

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

Any activity which might lead to water contamination or the alteration of natural hydrology could impact Atlantic Bluet populations (NYSDEC 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 (NYSDEC 2005). Groundwater withdrawal is a potential threat in lentic habitats on Long Island. The introduction or encroachment of Phragmites 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)

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.
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.
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.

Table 1. Threats to *Enallagma doubledayi.*

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

Yes: X **No:** _____ **Unknown:** _____

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

Article 15 of Environmental Conservation Law provides some protection of rivers, streams, lakes and ponds through the Protection of Waters Program.

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 2006, White et al. 2010). Maintenance or restoration of native shoreline vegetation and surrounding upland habitat should benefit this species, as females in this genus 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).

Further inventory is needed to define the extent of populations of Atlantic Bluets in New York, and additional survey work on Long Island. In addition, research is required to understand the habitat requirements of this species, and to create appropriate management guidelines for its persistence in known locations (NYS DEC 2006).

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 doubledayi.*

VII. References

White, Erin. 2014. *Enallagma doubledayi* Status Assessment for the 2015 New York State Wildlife Action Plan. NYSDEC. Albany, New York.

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