Species Status Assessment

Common Name: Mantled baskettail **Date Updated:** March 2025

Scientific Name: *Epitheca semiaquea***Minor Edits By:** NYSDEC Wildlife Section

Class: Insecta

Family: Corduliidae

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

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; SGCN

b. Natural Heritage Program

i. Global: G5

ii. New York: S2 **Tracked by NYNHP?:** Yes

Other Ranks:

-IUCN Red List: Least Concern

-Northeast Regional SGCN: Not listed

Status Discussion:

White *et al.* (2010) calculated a revised draft S-rank of S2 from SH. While the recent records for this species obtained during the New York Dragonfly and Damselfly Survey confirmed that the species is still present in New York and that it is not restricted to Long Island, the difficulty in separating it— even with a specimen in hand—from the abundant and widespread common baskettail (*Epitheca cynosura*) make an accurate status assessment of the mantled baskettail in New York problematic without additional survey work.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown	2004		
Northeastern US	Yes	Unknown	Increasing	2004		
New York	Yes	Unknown	Increasing	1992-2015		Yes
Connecticut	No					

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
Massachusetts	No data					
New Jersey	No data					
Pennsylvania	No					
Vermont	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):*

The small number of records for this species and the difficulty in separating it from the abundant and widespread common baskettail (*Epitheca cynosura*) make any assessment of populations trend for the mantled baskettail in New York difficult to impossible.

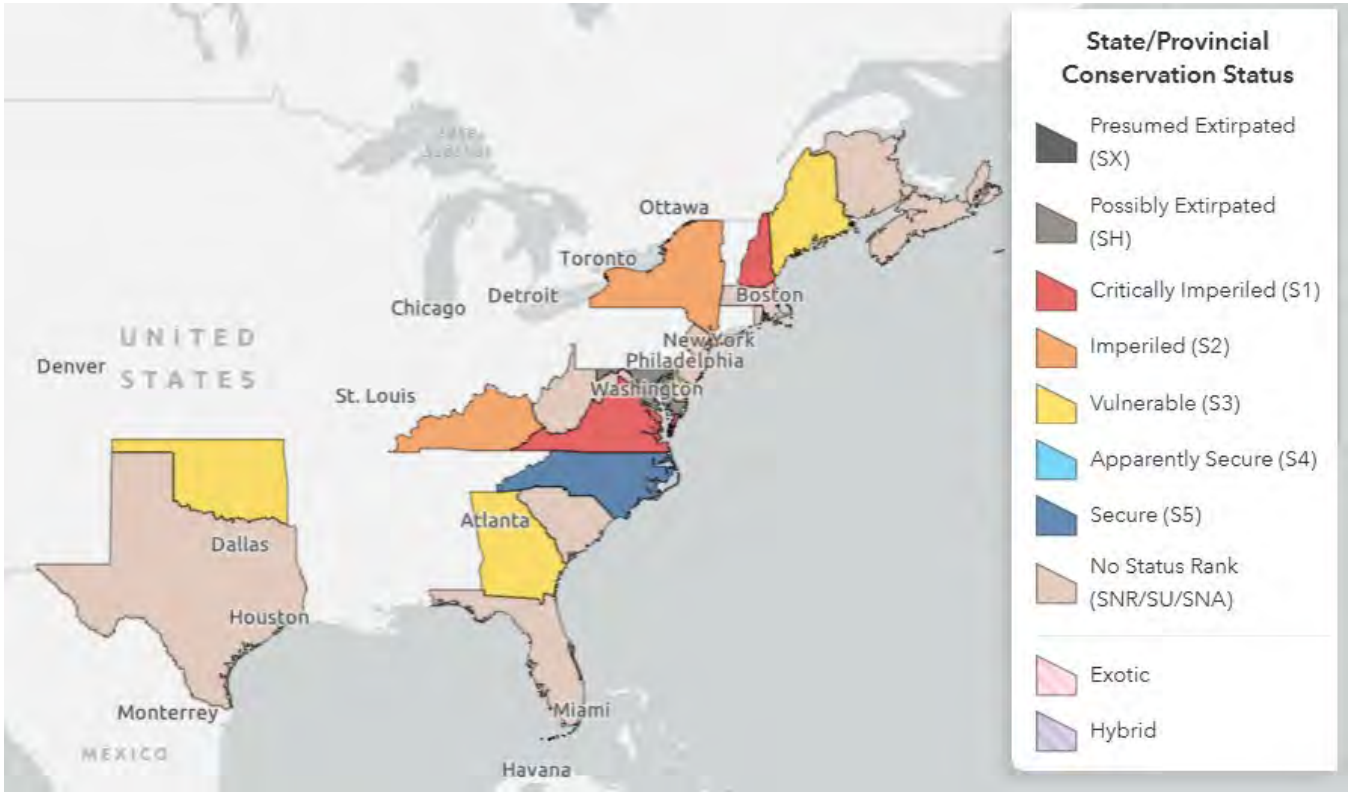

Figure 1. Conservation Status of *Epitheca semiaquea* in North America (NatureServe 2025).

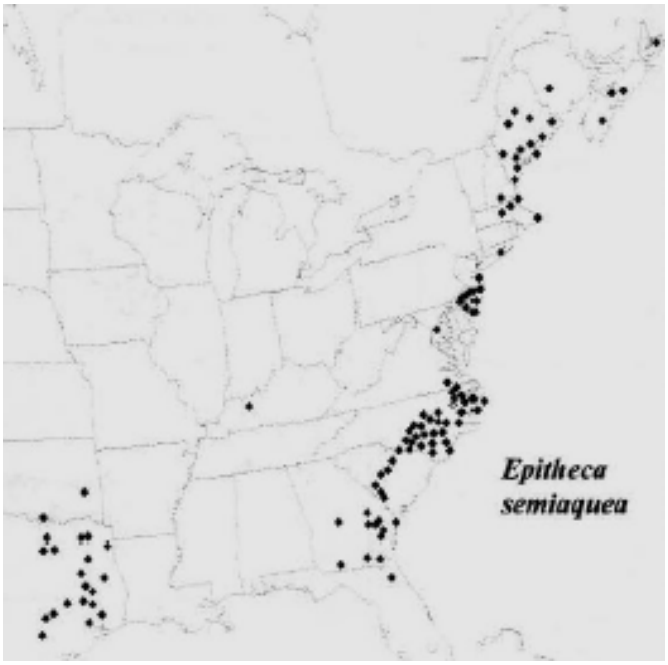

Figure 2. Distribution of mantled baskettail in the United States (Donnelly 2004).

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

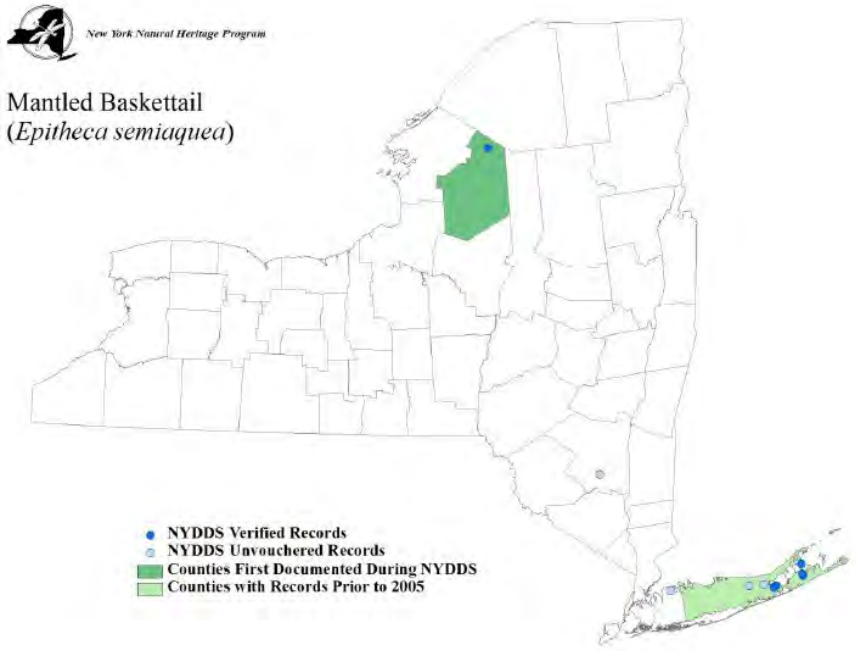

Figure 3. Occurrence records of mantled baskettail in New York (White *et al.* 2010).

Details of historic and current occurrence:

Older New York records were from Yaphank (1913), North Sea (1953 or 1954), and Greenport (1953 or 1954)in Suffolk county (Donnelly 1999).

Lewis County, Sunday Swamp -2006

Suffolk County

Sears Bellows Wetlands (Sears Pond and Penny Pond) - 2008

Sag Harbor (Crooked Pond and Lily Pond) - 2008

Mashomack Preserve on Shelter Island – 2008

In addition to these confirmed records obtained , several other slightly (therefore not considered extant occurrences) uncertain, but highly probable recent records were also obtained during the New York Dragonfly and Damselfly Survey from Lake Minnewaska, Ulster County and three additional Suffolk County locations (White *et al.* 2010)

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%	Disjunct	~500 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):*

a. Lacustrine, coastal plain, sand/gravel bottom

b. Lacustrine, warm water shallow, sand/gravel bottom

c. Coastal plain pond

d. Open acidic peatland

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/Increase
No	No	Declining	Short-term and long-term

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. semiaquea is known to inhabit lakes, ponds, marshy wetlands, swampy beaver ponds, slow streams, and ditches with clear water (Nikula *et al.* 2003). In New York, they have been found recently at a large bog upstate as well as coastal plain ponds on Long Island (White *et al.* 2010).

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):*

New Jersey reports adults from 24 April through 24 June (Bangma and Barlow 2010), while Maine has documented a flight season from mid-May to the third week in July (Brunelle and deMaynadier 2005). In New York, there are observations from 31 May through 13 July, NYNHP 2013).

Adult *E. semiaquea* forage for food in clearings with a rapid and bouncy flight, and adult males are known to patrol their territories either in the shade or at dusk (Dunkle 2000). Both larvae and adults are predators and feed on smaller invertebrates (New York Natural Heritage Program 2011).

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

Due to the aquatic life history of *E. semiaquea*, any activity that causes water contamination or the alteration of natural hydrology could impact their populations (New York Natural Heritage Program 2010). Such threats might include eutrophication, changes in dissolved oxygen content, agricultural run-off and other pollutants, chemical contamination, increases in sediment load, and acidification. Residential development and the resulting increase in water withdrawal may have negative impacts at the Long Island coastal plain pond sites (Novak 2006, New York Natural Heritage Program 2010).

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.
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	(invasive plants)	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 *Epitheca semiaquea.*

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 Adirondack Park Agency has the authority to regulate smaller wetlands within the Adirondack Park.

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

Additional survey efforts may be necessary before any specific stewardship needs at any given location can be identified. As with all recent documentations of this species in New York, the presence and size of breeding populations have not been determined. However, any measures to reduce water contamination or hydrological alteration should be considered when managing for this species (New York Natural Heritage Program 2010).

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 3. Recommended conservation actions for *Epitheca semiaquea*

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for odonates of lakes and ponds, and for mantled baskettail 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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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.

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