

Species Status Assessment

Common Name: Sable clubtail

Date Updated: April 2025

Scientific Name: *Stenogomphurus rogersi* **Minor Edits By:** NYSDEC Wildlife Section

Class: Insecta

Family: Gomphidae

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

The sable clubtail (*Gomphus rogersi*) is a member of the subgenus *Gomphurus*, one of three subdivisions of the large and diverse clubtail genus, *Gomphus*. The distributional center occurs along the southern West Virginia/Virginia border in the Appalachian Blue Ridge ecoregion. The range extends south to central Alabama and north to the New Jersey/New York border. Its northernmost locale occurs on Deep Hollow Brook at Harriman State Park where it was last observed in 2008, a location which is at nearly the same latitude as locations in western Pennsylvania (Donnelly 2004). However, these northwestern Pennsylvania records are over 35 years old and more recently, the species has only been found in southern Pennsylvania (Pennsylvania Natural Heritage Program 2010). It is possible that this central Appalachian species is temperature-limited at its northern range margin (Beatty and Beatty 1986) so a possible range contraction southward seems counter intuitive in a warming climate.

G. rogersi inhabits clear, moderately flowing small forest streams and brooks with sand, silt, or rocky substrate. Adults forage at forest edges, and perch on rocks, overhanging grass, and floating plants (Dunkle 2000). In New York, an extant site occupied since 1995 is a cold headwater brook that runs through a mixed hardwood forest with occasional sunny and marshy openings. The brook is alternately wide (approximately 8 feet) and deep, and narrow (1-3 feet), with shallow, rocky riffles. The bank is lined with ferns and nettles in sunny areas and boulders or moss-covered rocks line the stream in other places. In some areas, the stream bank is elevated 1-5 feet above the stream surface. New York's other known site is also a heavily forested stream outlet of gentle gradient connecting a small pond to a larger lake (White *et al.* 2010).

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:** G4

ii. **New York:** S1 **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: HPSGCN

-IUCN Red List: Least Concern

-Northeast Regional SGCN: RSGCN

Status Discussion:

White *et al.* (2010) suggests that the status remain S1 (5 or fewer occurrences, or few remaining acres or miles of stream, or factors demonstrably making it especially vulnerable to extinction rangewide or in New York State).

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown	1990		-
Northeastern US	Yes	Unknown	Stable	1990		RSGCN
New York	Yes	Unknown	Stable	2005-2009		Yes
Connecticut	No	-	-			-
Massachusetts	No	-	-			-
New Jersey	No data	-	-		SC	-
Pennsylvania	No data	-	-			-
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 (NYSDDS) was conducted from 2005-2009.

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

One of New York’s two populations appears to be stable; it has been extant for 15 years. However, despite some searches, it has not been re-confirmed at the other site (Little Cedar Pond outlet) since it was first found in 1989, at which time it was noted as “common.” The current status of the New Jersey sites adjacent to New York is unknown. It seems likely that this species occurs on additional favorable streams in Orange and Rockland Counties, especially in the heavily forested Harriman and Sterling Forest State Parks. An informative distribution model created by NY Natural Heritage also predicted potentially suitable habitat in central Ulster County, at the Ward Pond Ridge Reservation in Westchester County, and in the Hudson Highlands State Park on the Dutchess/Putnam County border (White *et al.* 2010, New York Natural Heritage Program 2007). Clearly, with the scant number of records for this species there is no basis for discerning population trend information.

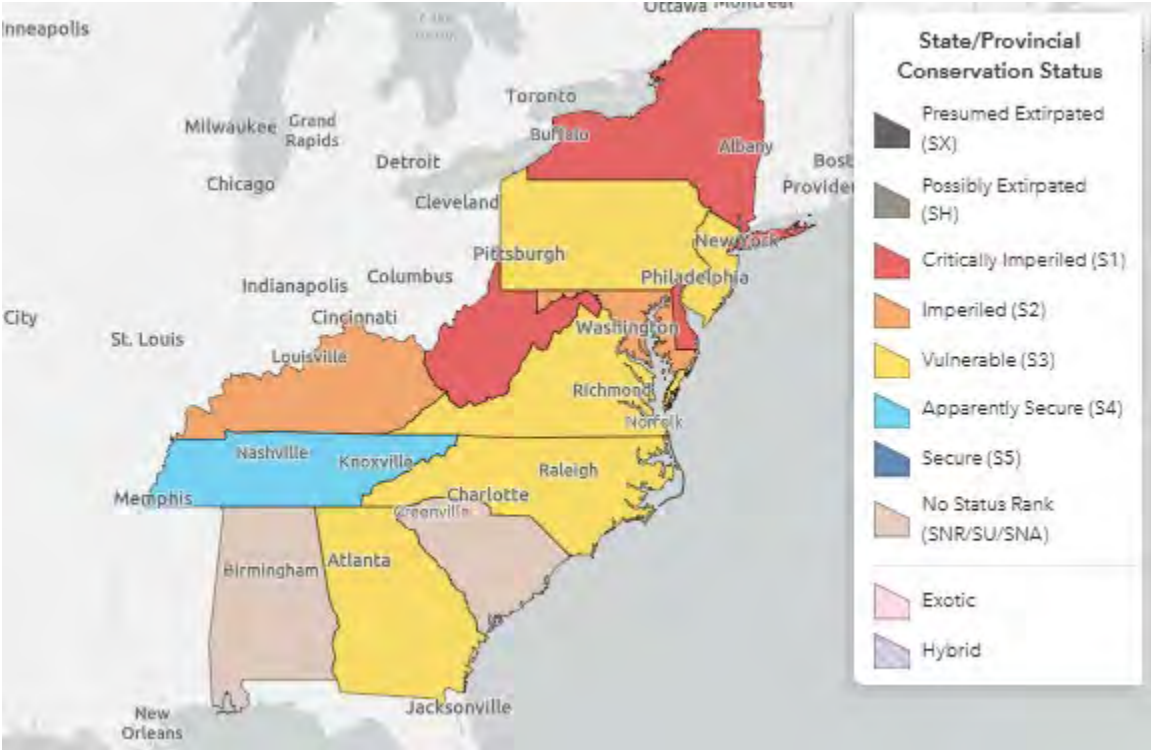


Figure 1. Conservation status of *Stenogomphurus rogersi* in North America (NatureServe 2025).

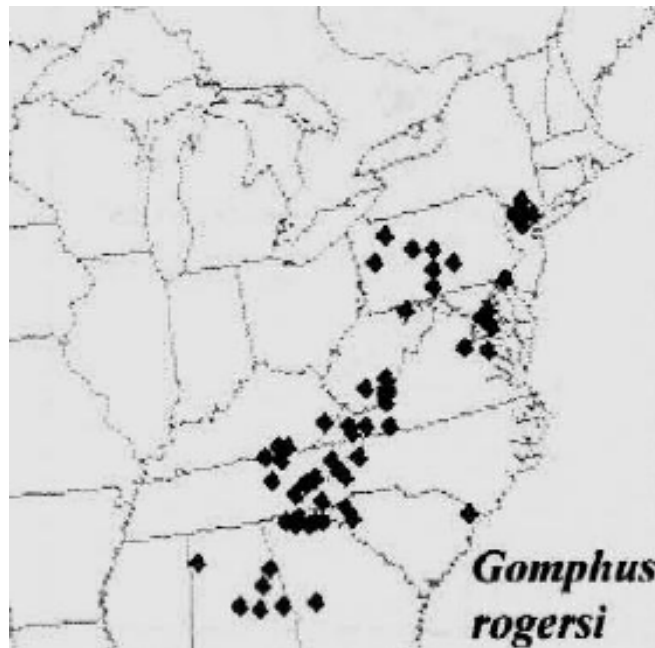


Figure 2. Distribution of the sable clubtail in the United States (Donnelly 2004).

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

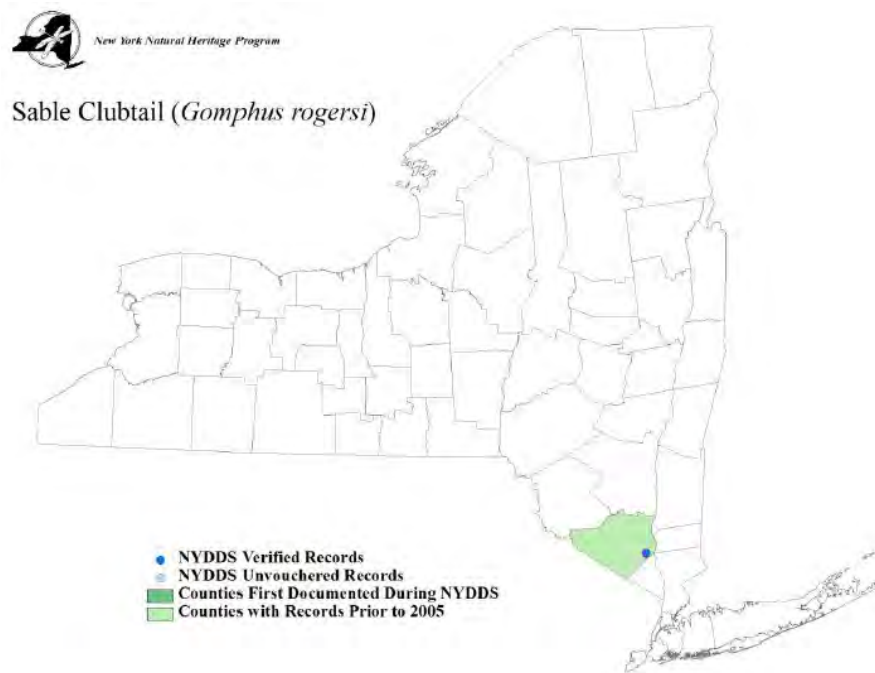


Figure 3. Occurrence records of the sable clubtail in New York (White et al. 2010).

Details of historic and current occurrence:

Little Cedar Pond, Orange County

Orange County— 1995, 2008

From The New York Dragonfly and Damselfly Survey 2005-2009 and based on the number of occurrences obtained from map by White *et al.* 2010 and information in Donnelly (1999).

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	~900 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. Headwater Creek, Low Gradient
- b. Headwater Creek, Low-Moderate Gradient
- c. Small River, Low Gradient
- d. Small River, Low-Moderate Gradient

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/Community Trend	Time frame of Decline/Increase
No	No	Unknown	

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:

G. rogersi inhabits clear, moderately flowing forest streams with sand, silt, or rocky substrate (Dunkle 2000). Larvae are aquatic and found in the water during this lifestage, whereas adults are terrestrial and are found in habitats surrounding forested streams (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*):

There is not enough data for a definite conclusion but, *G. rogersi* likely has a very narrow flight season in New York. All of the few (<1/2 dozen) sightings both pre-NYSDDS and during, were between 23-27 June, and it was not seen at a confirmed site on 11 July. In northern New Jersey, the flight season is about one month long, from 23 May – 24 June (Bangma and Barlow 2010). Adults forage at forest edges and males are known to perch on rocks, overhanging grass, and floating plants of forest streams (Dunkle 2000). Males have been seen guarding ovapositioning females, a very unusual behavior for clubtails (Paulson 2011).

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

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
5. Biological Resource Use	5.3 Logging & Wood Harvesting	(siltation of streams)	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 hydrology)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.4 Changes in Precipitation & Hydrological Regimes	11.4.2 Droughts	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.5 Storms & Severe Weather	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to *Stenogomphurus rogersi*

Any activity that might lead to water contamination or the alteration of natural hydrology could impact *G. rogersi* and other stream-dwelling odonates. Such threats might include chemical contamination from agricultural run-off, changes in dissolved oxygen content, increases in sediment load, development near their habitats, and the building of dams (Novak 2006, New York Natural Heritage Program 2011).

The sable clubtail was classified as “not vulnerable/increase likely” (IL) to predicted climate change in an assessment of vulnerability conducted by the New York Natural Heritage Program. Available evidence suggests that abundance and/or range extent within the geographical area assessed is likely to increase by 2050 (Schlesinger *et al.* 2011).

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 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 measures to reduce water contamination or hydrological alteration such as agricultural run-off, upland development, and damming that would affect flow of small forested streams should be considered when managing for this species (New York Natural Heritage Program 2011).

Further surveys are needed to define the distribution and population size of *G. rogersi*. In addition, research is required to understand the habitat requirements and threats to this species, and to create appropriate management guidelines for its persistence in known locations (New York Natural Heritage Program 2011).

Action Category	Action	Description
B.3 Outreach	B.3.1.4.0 Public outreach and information	Awareness & Communications
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	
C.9 Education and Training	C.9.2.0.0 Training and individual skill development	Training

Table 2. Recommended conservation actions for *Stenogomphurus rogersi*.

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for odonates of small forest streams, and for sable clubtail 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 will 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 three of these species are known from fewer than 10 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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Experts Consulted: Paul Novak, Wildlife Biologist, NYSDEC Region 4

Originally prepared by	Jenny Murtaugh
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