

Species Status Assessment

Common Name: Northern Wasp Fly **Date Updated:** 2025-03-02
Scientific Name: *Ceriana abbreviata* **Updated By:** Erin L. White
Class: Insecta
Family: Syrphidae

Species Synopsis

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

The Northern Wasp Fly has a large North American range. In the US, it is known from Utah, Oklahoma, and North Carolina northward and from the lower Canadian provinces as well as the Northwest Territories (NatureServe 2025, Skevington et al. 2019).

The species was ranked an S1 as part of the ESNPS (White et al. 2022) based on rarity, trend, and threat information. The species is historically (1999 and earlier) known from Tompkins County and remains very rare in NY, with three confirmed locations in recent years (iNaturalist 2025).

Ceriana abbreviata is a forest species and saproxylic where larvae are filter feeders in flowing sap within tree wounds and adults visit flowers (Skevington et al. 2019).

I. Status

a. Current legal protected Status

i. Federal: Not Listed

Candidate: No

ii. New York:

Unprotected

b. Natural Heritage Program

i. Global: G5

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: Not assessed by IUCN Red List
 Northeast Regional SGCN: Not listed

Status Discussion:

The species was ranked an S1 as part of the ESNPS (White et al. 2022) based on rarity, trend, and threat information. The species is historically (1999 and earlier) known from Tompkins County and remains very rare in NY, with three confirmed locations in recent years (iNaturalist 2025).

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	Unknown		
New York	Yes	Unknown	Unknown	Unknown	S1	No
Connecticut	No	Unknown	Unknown	Unknown	SNR	
Massachusetts	No	-	-	-		
New Jersey	No	Unknown	Unknown	Unknown	SNR	
Pennsylvania	No	Unknown	Unknown	Unknown	SNR	
Vermont	No	Unknown	Unknown	Unknown	SNR	
Ontario	No	Unknown	Unknown	Unknown	S3	
Quebec	No	Unknown	Unknown	Unknown	SNR	

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 Empire State Native Pollinator Survey (ESNPS) was conducted from 2017-2021, but there are no organized, regular monitoring or survey activities directed toward this species or to sites where they have been documented. Some regular monitoring may occur at protected sites that Heritage staff revisit if they occur on state properties, as part of OPRHP or State Lands inventory work.

Trends Discussion

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

The species is historically (1999 and earlier) known from Tompkins County. It has been confirmed in Columbia, Tompkins, and Washington Counties since 2000, with a possible record from Suffolk County. Despite survey effort as part of a statewide pollinator survey, few sites have been confirmed in recent years, and there were no NYNHP specimens from the ESNPS effort.

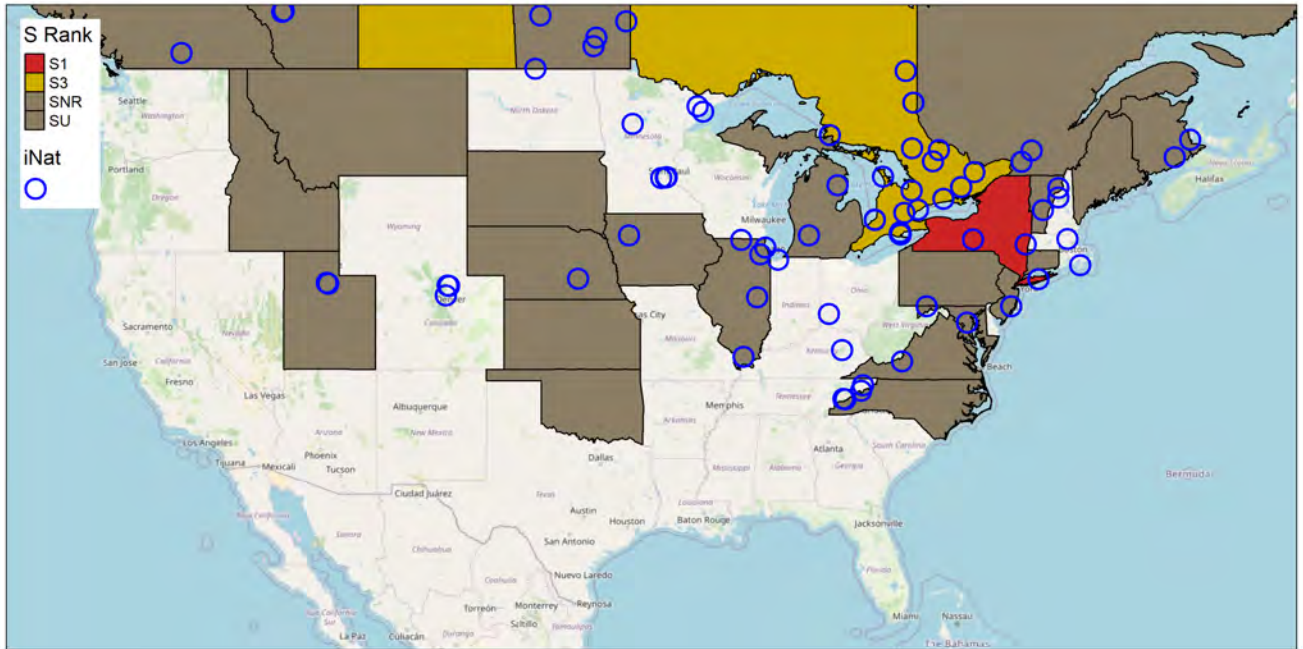


Figure 11: *Ceriana abbreviata* North American distribution. Points show research-grade iNaturalist observations.

III. New York Rarity

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

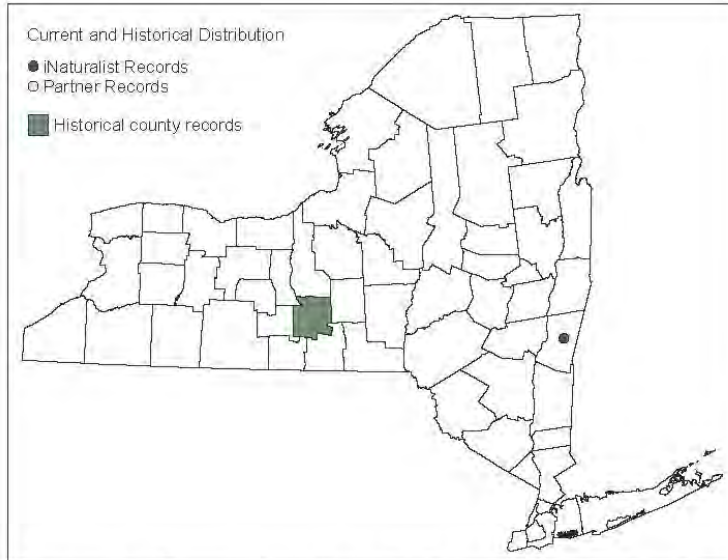


Figure 1: Observations from 2000 to present depicted as dots; those from 1999 and earlier as shaded counties.

Figure 22: NYS distribution for *Ceriana abbreviata* based on ESNPS data (White et al. 2022).

Years	Observations	# of Counties	% of counties in State
Pre-2000	1	1	1.6
2000-2024	3-4	3-4	4.8-6.5

Table 1. Number of observations of *Ceriana abbreviata* 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.

Details of historic and current occurrence:

Ceriana abbreviata is known historically from Tompkins County. It was documented during the ESNPS from partners on iNaturalist as well as more recently and has been found in Columbia, Tompkins and Washington counties. Another possible record is on iNaturalist from Suffolk County (iNaturalist 2025).

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~2000 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):

Habitat or Community Type Trend in New York

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

Ceriana abbreviata is a forest species and saproxylic where larvae are filter feeders in flowing sap within tree wounds and adults visit flowers (Skevington et al. 2019).

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):

Flight times are late April to late July (Skevington et al. 2019) and the New York observations were from late May and June (iNaturalist 2025).

VI. Threats

Threats facing our focal saproxylic hover flies and beetles include habitat loss and degradation, invasive plants and pathogens, pesticides, and climate change (White et al. 2022). Habitat shifting and alteration, droughts, and more frequent severe weather events due to climate change is expected to impact saproxylic flies and beetles.

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.3 Tourism & Recreation Areas	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
4. Transportation & Service Corridors	4.1 Roads & Railroads	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
4. Transportation & Service Corridors	4.2 Utility & Service Lines	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
5. Biological Resource Use	5.3 Logging & Wood Harvesting	Choose an item.	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	8.1.1 Terrestrial animals (wood boring insects)	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	8.1.2 Terrestrial plants	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.4 Pathogens	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.3 Agricultural & Forestry Effluents	9.3.3 Herbicides & pesticides	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.1 Habitat Shifting & Alteration	Choose an item. (ecosystem encroachment)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.2 Changes in Geological Regimes	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.3 Changes in Temperature Regimes	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.4 Changes in Precipitation &	11.4.2 Droughts	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

	Hydrological Regimes						
11. Climate Change	11.5 Storms & Severe Weather	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 2. Threats to *Ceriana abbreviate*

Action Category	Action	Description
C.9 Education and Training	C.9.2.0.0 Training and individual skill development	Training

Table 3. Recommended conservation actions for *Ceriana abbreviata*.

VII. References

This SSA drew heavily from these resources:

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Additional references:

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White, E.L., M. D. Schlesinger, and T.G. Howard. 2022. The Empire State Native Pollinator Survey (2017-2021). New York Natural Heritage Program, Albany, NY.

Originally prepared by	Erin L. White
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