

# Species Status Assessment

**Common Name:** Pale-bristled Logsitter      **Date Updated:** 2024-10-10  
**Scientific Name:** *Hammerschmidtia sedmani*      **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):

Pale-bristled Logsitter is known from Alberta, British Columbia, New Brunswick, Ontario, Prince Edward Island, and Quebec in Canada. In the U.S., it is known from Maine, Michigan, New York and New Hampshire (NatureServe 2024).

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 two counties in NY. It has been confirmed in two other counties since 2000. Despite survey effort as part of a statewide pollinator survey, few observations have been confirmed in recent years and it has always been a rare fly in the state.

*Hammerschmidtia sedmani* is known to inhabit bogs and mixed woods with mature trees (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:

-New York 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 two counties in NY. It has been confirmed in two other counties since 2000. Despite survey effort as part of a statewide pollinator survey, few observations have been confirmed in recent years and it has always been a rare fly in the state.

**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		No
New York	Yes	Unknown	Unknown	Unknown	S1	No
Connecticut	No	-	-	-		
Massachusetts	No	-	-	-		
New Jersey	No	-	-	-		
Pennsylvania	No	-	-	-		
Vermont	No	-	-	-		
Ontario	No	Unknown	Unknown	Unknown	SNR	
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.

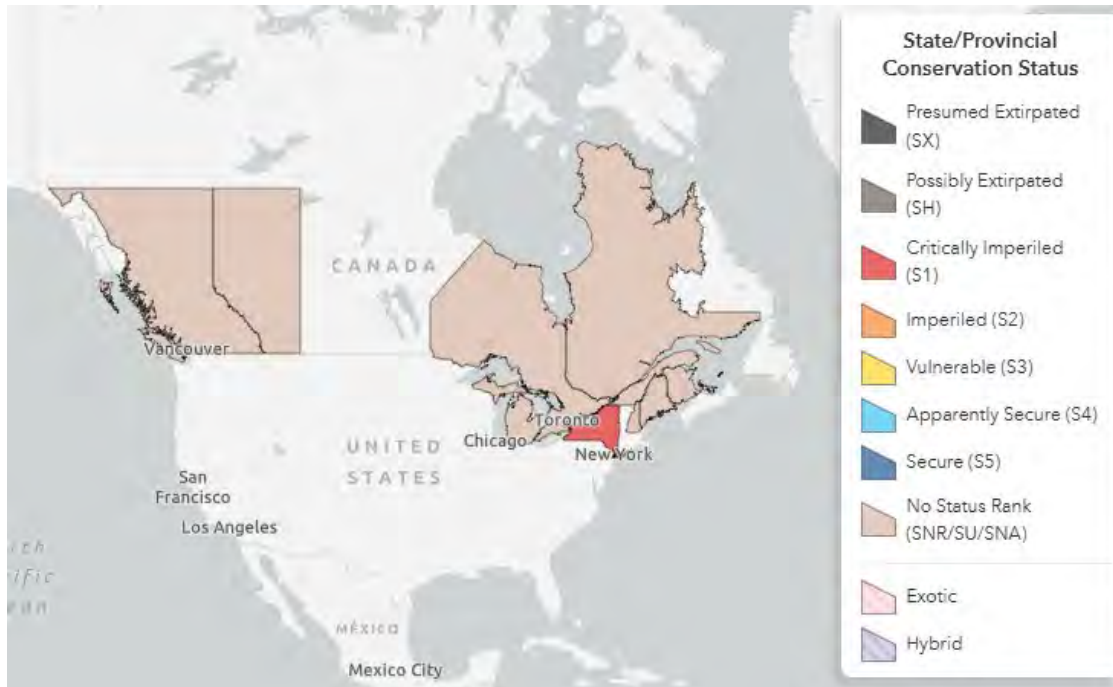
## Trends Discussion

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

The species is historically (1999 and earlier) known from two counties in NY. It has been confirmed in two other counties since 2000. Despite survey effort as part of a statewide pollinator survey, few observations have been confirmed in recent years and it has always been a rare fly in the state.



**Figure 11:** *Hammerschmidtia sedmani* North American distribution. Points show research-grade iNaturalist observations-note-should also include NY.



**Figure 2.** Conservation status of *Hammerschmidtia sedmani* in North America (NatureServe 2024).

### III. New York Rarity

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

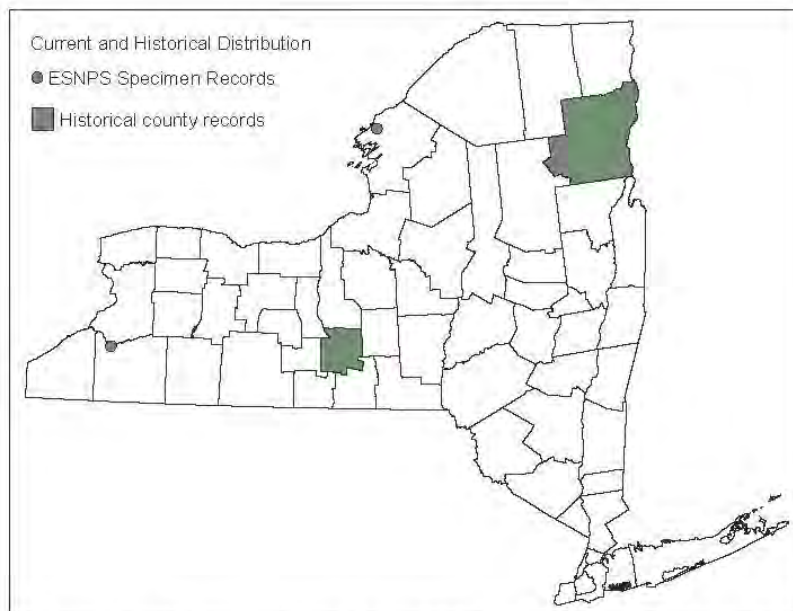


Figure 1: Observations from 2000 to present depicted as dots; those from 1999 and earlier as shaded counties.

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

Table 1. Number of observations of *Hammerschmidtia sedmani* 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	Observations	# of Counties	% of counties in State
Pre-2000	2	2	3.2
2000-2023	2	2	3.2

**Details of historic and current occurrence:**

The species was documented in Jefferson and Cattaraugus Counties in recent years (White et al. 2022).

Historically, 1999 and earlier, the species is known from Essex and Tompkins Counties, but has not been documented there in recent years.

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~1000

*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):*

Floodplain Forest, Freshwater Marsh, Northern White Cedar Swamp

Mixed Northern Hardwoods

**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:**

*Hammerschmidtia sedmani* is known to inhabit bogs and mixed woods with mature trees (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 throughout its range are mid-May to mid-July (Skevington et al. 2019), and recent NY records have been observed in the third week of May while there are historical records from mid-June (White et al. 2022).

## VI. Threats

Threats facing saproxylic hover flies 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. Like all saproxylic (dead wood) insects, this hover fly is threatened by modern forestry and land management practices that remove trees from stands before they can reach old age because the partially decayed breeding sites within senescent trees take upwards of 100 years to form (Speight 2015, New York Natural Heritage Program 2024).

<b>Threat Level 1</b>	<b>Threat Level 2</b>	<b>Threat Level 3</b>	<b>Spatial Extent*</b>	<b>Severity*</b>	<b>Immediacy*</b>	<b>Trend</b>	<b>Certainty</b>
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	4.2 Utility & Service Lines	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.
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	11.3 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 & 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	11.5.1 Storms & severe weather	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 2. Threats to *Hammerschmidtia sedmani*.

**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:**

Suggested actions for habitat management should include maintaining standing old trees and coarse woody debris on the ground as breeding and larval sites. Forest management practices allowing long rotation times (more than 100 years) are required to allow deciduous trees to reach an advanced stage (Speight 2015, New York Natural Heritage Program 2024). Maintaining a spring ephemeral understory, especially with *Cornus*, *Heracleum*, and *Physocarpus* (Skevington et al. 2019) will benefit adults of this species. Limiting exposure of Pale-bristled Logsitter to insecticides would also benefit them. Suggested actions include avoidance of application to flowers that flies are attracted to and application of solutions or soluble powders (rather than dusts or wettable powders) to the ground in calm wind and warmer temperatures during periods of dewless nights to minimize the impact to resident native pollinator populations (Schweitzer et al. 2012).

Complete Conservation Actions table using IUCN conservation actions taxonomy at link below. Use headings 1-6 for Action Category (e.g., Land/Water Protection) and associated subcategories for Action (e.g., Site/Area Protection) -

<https://www.iucnredlist.org/resources/conservation-actions-classification-scheme>

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.0.0.0 Direct habitat management	Site/Area management
A.1 Direct Habitat Management	A.1.1.0.0 Manage plants, animals, fungi, or bacteria	Invasive/Problematic species control
B.3 Outreach	B.3.1.4.0 Public outreach and information	Awareness & Communications
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation planning	-Site/Area protection -Resource/Habitat Protection

Action Category	Action	Description
C.6 Design and Plan Conservation	C.6.5.1.3 Develop a conservation, management, or restoration plan for protected private lands	Habitat/Natural process restoration
C.7 Legislative and Regulatory Framework or Tools	C.7.1.3.0 Create, amend, or influence regulation	Policies and regulations
C.9 Education and Training	C.9.2.0.0 Training and individual skill development	Training

Table 3. Recommended conservation actions for *Hammerschmidtia sedmani*.

## VII. References

**This SSA drew heavily from these resources:**

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NatureServe. 2024. NatureServe Explorer. Page last published 11/14/24. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.1137686/Hammerschmidtia\\_sedmani](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.1137686/Hammerschmidtia_sedmani). Accessed November 20, 2024.

Additional references:

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New York Natural Heritage Program. 2024. Online Conservation Guide for *Criorhina nigriventris*. Available from: <https://guides.nynhp.org/bare-cheeked-bumblefly/>. Accessed October 10, 2024.

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Schweitzer, D.F., N.A. Capuano, B.E. Young and S.R. Colla. 2012. Conservation and management of North American bumble bees. NatureServe, Arlington, Virginia, and USDA Forest Service, Washington, D.C. 17 pp.

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Speight, M. C. D.2015. Species accounts of European Syrphidae (Diptera),2015 (Vol. 83). Dublin: Syrph the Net Publications.

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.

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<b>Last revision</b>	