

# Species Status Assessment

**Common Name:** Black Fungus Moth

**Date:** 3/9/2025

**Scientific Name:** *Metalectra tantillus*

**By:** Hollie Shaw

**Class:** Insecta

**Family:** Erebidae

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

*Metalectra tantillus*.has been found from Long Island in New York south to Florida and west to Montana and Texas (Covell 1984, iNaturalist 2025). There is one recent isolated record from Ontario in Canada (iNaturalist 2025) which represents to most northern extent.

Recent trends are unknown. There have been scattered reports from 2005 to 2020 in Kings, Queens, Suffolk (iNaturalist 2025), New York, and Delaware counties (Lotts and Naberhaus 2025).

Habitat requirements are unknown. It has been reared on the bark of dead maple (*Acer spp.*) and assumed it was feeding on the associated fungus (Covell 1984).

## I. Status

### a. Current legal protected Status

i. **Federal:** not protected \_\_\_\_\_ **Candidate:** no \_\_\_\_\_

ii. **New York:** not protected; SGCN \_\_\_\_\_

### b. Natural Heritage Program

i. **Global:** G4 \_\_\_\_\_

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

### Other Ranks:

-IUCN Red List:

-Northeast Regional SGCN:

### Status Discussion:

The New York Natural Heritage rank was recently changed from SH to S1 (New York Natural Heritage Program 2025) based on observations reported between 2005 and 2020 (iNaturalist 2025, Lotts and Naberhaus 2025).

## II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown			-
Northeastern US	Yes	Unknown	Unknown			-

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
New York	Yes	Unknown	Unknown			Yes
Connecticut	Unknown	Unknown	Unknown			-
Massachusetts	Unknown	Unknown	Unknown			-
New Jersey	Yes	Unknown	Unknown			No
Pennsylvania	Yes	Unknown	Unknown			No
Vermont	No	-	-			-
Ontario	Yes	Unknown	Unknown			-
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*):

There are no known monitoring activities or regular surveys.

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

Recent trends are unknown other than there have been scattered reports from 2005 to 2020 in Kings, Queens, and Suffolk counties (iNaturalist 2025). Covell (1984) stated that this species is uncommon.

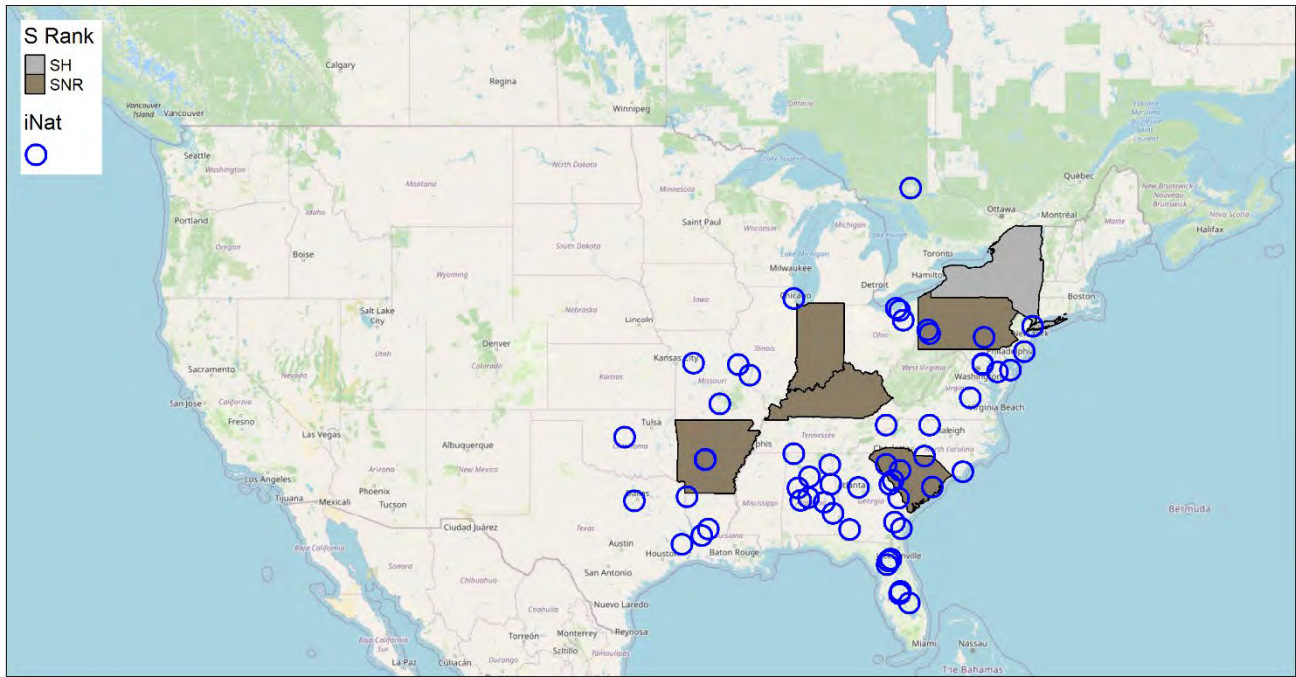


Figure 1. *Metalectra tantillus* distribution status in North America (iNaturalist 2025, NatureServe 2025)

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

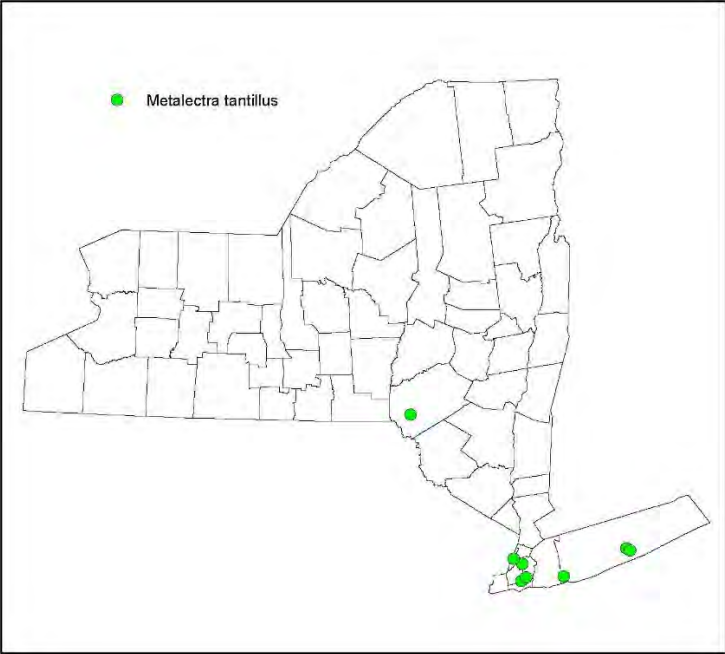


Figure 2. Records of *Metalectra tantillus* in New York (iNaturalist 2025 and Lotts and Naberhaus 2025)

Years	# of Records	# of Counties	% of State
Pre-2000	unknown	2	3%
2000- 2023	7	5	8%

Table 1. Records of *Metalectra tantillus* in New York.

**Details of historic and current occurrence:**

The number of historical records is unknown. Forbes (1954) indicated it was present on Long Island in Orient. There are currently seven known locations in Kings, Queens, Suffolk (iNaturalist 2025), New York, and Delaware counties (Lotts and Naberhaus 2025).

**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. unknown

b.

**Habitat or Community Type Trend in New York**

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

Column options

Habitat Specialist, Indicator Species and Pollinator Species: Yes; No; Unknown; (blank) or Choose an item

Habitat/Community Trend: Declining; Stable; Increasing; Unknown; (blank) or Choose an item

**Habitat Discussion:**

Habitat requirements are unknown. It has been reared on the bark of dead maple (*Acer spp.*) and assumed it was feeding on the associated fungus (Covell 1984).

**V. Species Demographic, and Life History:**

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/Catadromous?
Yes	-	No	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):

Little is known about the life history of *Metalectra tantillus* except adults are generally found from late May through August (Covell 1984).

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

Life history and habitat needs research is needed to fully grasp threats to this species. Assuming larvae feed on the fungus of dead maple trees (Covell 1984), removal of dead trees would impact the breeding success of this species. Artificial lighting and insecticide use may also be threats. Climate change and extreme weather events may also impact this species.

<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>
5. Biological Resource Use	5.3 Logging & Wood Harvesting	(removal of dead trees)	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.
9. Pollution	9.6 Excess Energy	9.6.1 Light pollution	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

**Table 2.** Threats to *Metalectra tantillus*

**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:**

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

An important first step to implementing a management plan is to gain a better understanding of the life history and habitat requirements of *Metalectra tantillus*. Covell (1984) indicated larvae have been reared on the bark of dead maples and suspected that the larvae feed on the associated fungus. Assuming this is true, dead trees should be left in known occupied habitats for this species to complete its life cycle.

In addition, minimizing lighting to maintain dark sky conditions would be beneficial. When lighting is necessary, it's best to use lights that emit red or yellow light because insects are generally not attracted to those colors. However, many sodium lights, which emit yellow light, are so bright that they do attract some insects. The best lighting appears to be low pressure sodium lights which have little effect on flying insects (Schweitzer et al. 2018).

Insecticide use should be avoided when possible if rare species are present. When insecticide use cannot be avoided, careful planning along with consistent rare species monitoring, can result in successful eradication of the target species without eliminating rare species.

It is suggested that to maintain a diversity of native vegetation to increase resiliency to climate change. Monitor for significant changes in the habitat quality, such as invasive species. Prepare sites for extreme weather events.

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

Action Category	Action	Description
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation planning	Site/Area Protection
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation planning	Resource/Habitat Protection
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	
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 *Metalectra tantillus*.

## VII. References

- Covell, Charles V. 1984. A field guide to the moths of eastern North America. Houghton Mifflin Company, Boston.
- Forbes, William T. M. 1954. Lepidoptera of New York and neighboring states part III. Cornell University Experiment Station Memoir 329.
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- Lotts, Kelly and Thomas Naberhaus, coordinators. 2025. Butterflies and Moths of North America. Data set accessed (or exported) 2025-03-08 at <http://www.butterfliesandmoths.org/>.
- NatureServe. 2025. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer>. [Accessed 03/8/2025].
- New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry. 2025. Element Occurrence and Element Dataset. Albany, New York.
- Schweitzer, D.F., M.C. Minno, and D.L. Wagner. 2018. Rare, Declining, and Poorly Known Butterflies and Moths (Lepidoptera) of Forests and Woodlands in the Eastern United States. USFS Technology Transfer Bulletin, FHTET-2009-02.

<b>Originally prepared by</b>	Hollie Shaw
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