Species Status Assessment

Common Name: A noctuid moth **Date Updated:** March 2025

Scientific Name: *Paectes abrostolella* **Minor Edits By:** NYSDEC Wildlife Section

Class: Insecta

Family: Euteliidae

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

The eastern range of *Paectes abrostolella* stretches from southern Ontario southward to central Missouri and Arkansas, with records from Florida being suspect (Wagner et al. 2011, C. Schmidt, personal communication). New York is on the eastern edge of the distribution and includes only one current record, in Jefferson County in 1996 (NY Nature Explorer 2009). There has been little research on this moth, and therefore, literature is sparse, with information on habitat preference, life cycle, population trend and threats. The larval foodplant of this species is thought to be *Rhus copallium* and *Rhus aromatica* (NYSDEC 2012, C. Schmidt, personal communication). Recent surveys in eastern Ontario had found this species to be found solely on *Rhus aromatica*, even when other *Rhus sp.* were present (C. Schmidt, personal communication). Research on this species is required to assess threats. Habitat fragmentation and development are thought to be likely threats.

There is currently one known location of this species in NY, in Jefferson County (NYSDEC SGCN Experts Meeting).

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. This species was listed as SPCN in 2015, but with the removal of this status in the 2025 revision it has been changed to SGCN.

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: SGCN

-IUCN Red List: N/A

-Northeast Regional SGCN: N/A

Status Discussion:

There is one current location in New York, verified since 1996, and one historical location (NYSDEC 2005). In the eastern United States, *Paectes abrostolella* occurs in disjunct populations

within remnant prairie patches (Hanks 1995). In western United States, the common oak moth is widespread, ranging from Arizona, northward to Montana (Metzler and Franclemont 1991). Increased monitoring could identify additional populations within preferred habitat locations. This species is listed as critically imperiled in New York and Virginia; and imperiled in Indiana and Arkansas (NatureServe 2012).

II. Abundance and Distribution Trends

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

Intermittent surveys have been conducted in pine barren communities of Long Island.

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

There is no information on the short or long term population trends. In New York, this species historically occurred in the Upper Hudson River Basin, but is now believed to be extirpated from the basin (NYSDEC 2005). One location, in Jefferson County in 1996, was recently confirmed (NY Nature Explorer (2009). This species originally was thought to range from Montana to California, eastward to New York and Florida; however, recent review has found the populations from Wyoming throught Oklahoma to Texas, Arizona and West to California to be a separate species (NYSDEC 2012, C. Schmidt, personal communication). The currently known range of *P. abrostolella* is from eastern Ontario southward to central Missouri and Arkansas (C. Schmidt, personal communication).

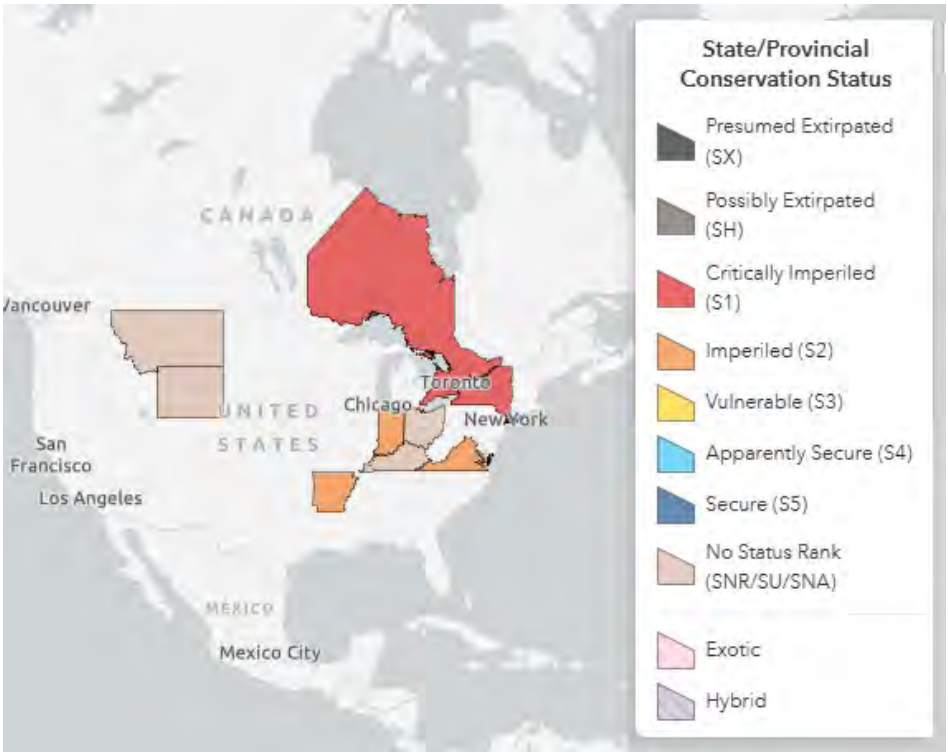

Figure 1. Conservation status of *Paectes abrostolella* in North America (NatureServe 2025).

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

Figure 2. Current occurrence record of *P. abrostolella* in New York (New York Nature Explorer 2009). Map created by Shawn Ferdinand, NYSDEC.

Details of historic and current occurrence:

There are no specific locations recorded for historic occurrences. *P. abrostolella* was documented in the Upper Hudson River Valley and but is now extirpated from the area (NYSDEC 2005).

There is a recent record from the Chaumont Barrens, Jefferson County in 1996 (New York Nature Explorer 2009).

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	

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. Pine barrens

Habitat or Community Type Trend in New York

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

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:

The habitat needs of common oak moths are unknown, but the species is thought to thrive in remnant prairie patches. This species may also be found in areas containing *Rhus* species, especially fragrant sumac (*Rhus aromatica*) and winged sumac (*Rhus copallium* (C. Schmidt, personal communication). Winged sumac is considered a weed and can be abundant in western New York (McCabe 2012).

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):*

The life history of *Paectes abrostolella* is unknown. The only known foodplant for this species is winged sumac (McCabe 2012). Other reports suggest that *Rhus aromatica* and other low-growing sumac (*Rhus spp.*) species could be additional foodplants (Wagner et al. 2011). Adult flight period is from May to June and July to August (McCabe 2012).

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

Threats specific to this species have not been identified in the literature. General threats identified to affect moth species include habitat loss and degradation caused by development; habitat fragmentation; alteration of natural fire regimes; natural succession of shrubland, woodland, and barrens habitats; land clearing; coastal erosion; and sea level rise. Past use of chemical biocides to control gypsy moth and other pest insects continues to kill native Lepidoptera (Schweitzer 2004). Introduced parasitoid flies have been known to negatively affect native Lepidoptera (Boettner et al. 2000). Other threats may include invasive species, light pollution affecting reproductive success, over grazing of host plants by wild deer populations, and off-road vehicle use (NYSDEC 2005).

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)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
6. Human Intrusions & Disturbance	6.1 Recreational Activities	6.1.1 Motor vehicles	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.1 Fire & Fire Suppression	7.1.2 Suppression in the fire regime	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 (parasitoid flies)	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	(over-grazing by deer)	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.
11. Climate Change	11.1 Habitat Shifting & Alteration	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to *Paectes abrostolella.*

Are there regulatory mechanisms that protect the species or its habitat in New York?

Yes: _____ **No:** _X_ **Unknown:** _____

If yes, describe mechanism and whether adequate to protect species/habitat:

The specimen recorded in New York was within the Chaumont Barrens, which is owned by The Nature Conservancy and is thus protected from development.

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

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
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation planning	Resource/Habitat Protection
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 2. Recommended conservation actions for *Paectes abrostolella* (add more lines as needed).

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for other moths, and for *Paectes abrostolella* in particular.

Easement acquisition:

____ Where appropriate, acquire easements to promote moth protection and conservation.

Fact sheet:

____ Create fact sheets covering moths.

Habitat management:

____ Determine best management regime for moth species, including fire and other forms of management.

Habitat monitoring:

____ Develop standardized measures of habitat parameters for each species of listed moth.

____ Investigate threats to food and host plants.

____ Monitor land development projects.

Habitat research:

____ Examine role of light pollution as threat to moths.

____ Determine host/ food plant.

Life history research:

____ Investigate the metapopulation dynamics of those species which warrant it.

____ Examine role of introduced parasites and predators in threats to moths.

Other action:

____ Develop standard definition of what is needed for "viable" populations of moths.

____ Research the role of pesticide use in threats to moths.

Population monitoring:

____ Inventory of species within historical range.

____ Develop standardized survey protocols for moths.

Private fee acquisition:

____ Where appropriate, encourage/assist private entities to acquire land for moth protection and conservation.

State fee acquisition:

____ Where appropriate, acquire land essential to moth protection and conservation.

State land unit management plan:

____ Incorporate needs of moths into state land management plans.

VII. References

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Experts Consulted: Chris Schmidt, Canadian National Collection

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