

Species Status Assessment

Common Name	showy aster	Date Updated:	2024-03-20
Scientific Name	<i>Eurybia spectabilis</i>	Updated By:	Gregory J. Edinger
Family	Asteraceae		

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

Showy aster (*Eurybia spectabilis*), also called purple wood aster, is a perennial forb/herb in the Aster Family (Asteraceae). There are five species of *Eurybia* in NY and all are native to the state (Werier et al. 2023).

Showy aster reaches the northern edge of its range in New York and Massachusetts; and is found south to Georgia and Alabama. In NY, nearly all records of showy aster are from Long Island, except for a population known from the Hudson Highlands. There are 15 existing populations in NY with four locations having 500 to 1000 plants each. The rest of them have under 50 plants each and in small areas that are under threat. There are about 25 historical populations, many of which have not been resurveyed or are considered extirpated (NYNHP 2023, 2024).

In NY, showy aster has most often been found in sandy, grassland habitats. Many of the known sites for this plant are within pine barrens habitats, particularly at disturbed sites such as airstrips, railroads, and mowed roadsides. The sole known site from the lower Hudson Valley is on a rocky summit, where it grows with a mixture of shrubs, grasses, and herbs (NYNHP 2023, 2024).

Improper mowing and maintenance of roadsides and other open habitats where these plants grow is the greatest threat. Existing populations that have been resurveyed are stable but about half of them have not been resurveyed and are in small openings that are susceptible to succession or other disturbances. The long-term trend has been negative, as many populations have been extirpated by development on Western Long Island and many existing populations are small and threatened (NYNHP 2023, 2024).

This species only occurs in a small portion of the many open habitats along roads and trails and natural grasslands. Research is needed to understand why more of this habitat is not occupied and if population augmentation would be successful (NYNHP 2023, 2024).

I. Status

a. Current legal protected Status

i. Federal:

Candidate:

ii. New York:

Threatened

b. Natural Heritage Program

i. Global: G5

ii. New York: S2 Tracked by NYNHP? On Active Tracking List

Other Ranks:

COSEWIC: Not listed in Canada

IUCN Red List: Not assessed by IUCN Red List

Status Discussion:

Eurybia spectabilis is Threatened in New York (Ring 2023). There are 15 existing populations in NY with four locations having 500 to 1000 plants each. The rest of them have under 50 plants each and in small areas that are under threat. There are about 25 historical populations, many of which have not been resurveyed or are considered extirpated. In NY, nearly all records of showy aster are from Eastern Long Island, except for a single extant population known from the Hudson Highlands in Orange County. Flowering specimens are necessary for identification (NYNHP 2023, 2024).

II. Abundance and Distribution

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	T	
Connecticut	Yes	Unknown	Unknown	Unknown	S2	
Massachusetts	Yes	Unknown	Unknown	Unknown	SNR	
New Jersey	Yes	Unknown	Unknown	Unknown	S5	
Pennsylvania	Yes	Unknown	Unknown	Unknown	S1	
Vermont	No	-	-	-		
Ontario	No	-	-	-		
Quebec	No	-	-	-		

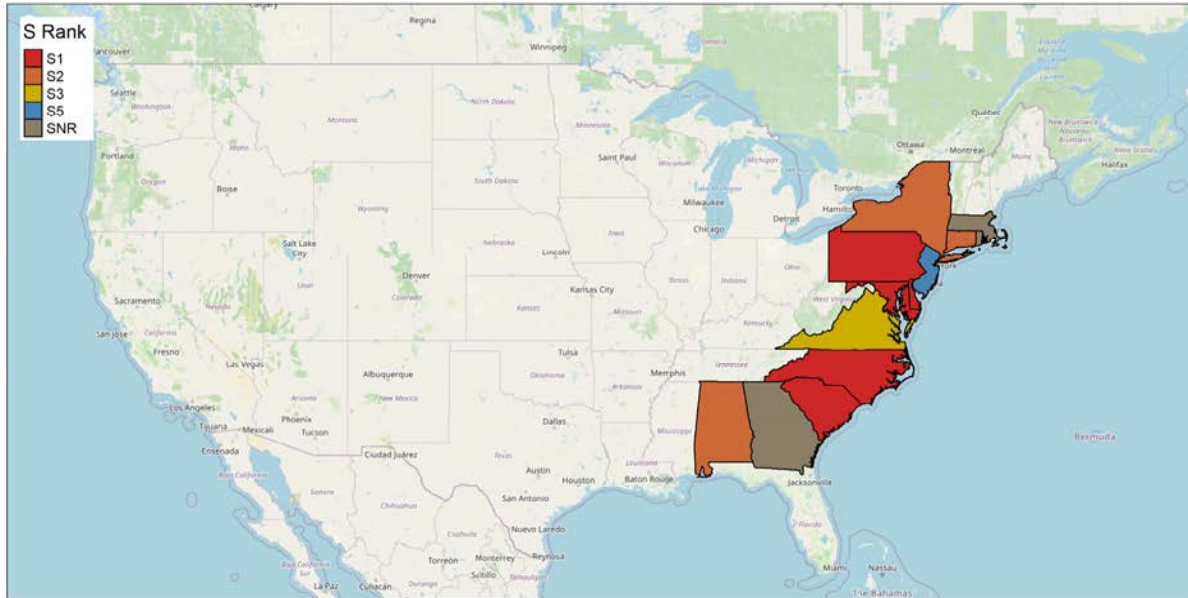


Figure 11: *Eurybia spectabilis* North American distribution.

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

III. NY Rarity and Trends

Trends Discussion

Existing populations of showy aster that have been resurveyed are stable but about half of them have not been resurveyed and are in small openings that are susceptible to succession or other disturbances. The long-term trend has been negative, as many populations have been extirpated by development on Western Long Island and many existing populations are small and threatened (NYNHP 2023, 2024).

Details of historic and current occurrence

Showy aster reaches the northern edge of its range in New York and Massachusetts, and is found south, chiefly (though not solely) along the coast, to Georgia and Alabama. It is of conservation concern in much of its range. In NY, nearly all records of showy aster are from Eastern Long Island, except for a single extant population known from the Hudson Highlands in Orange County (NYNHP 2023, 2024). There are probably over 3000 plants in New York (NYNHP 2023).

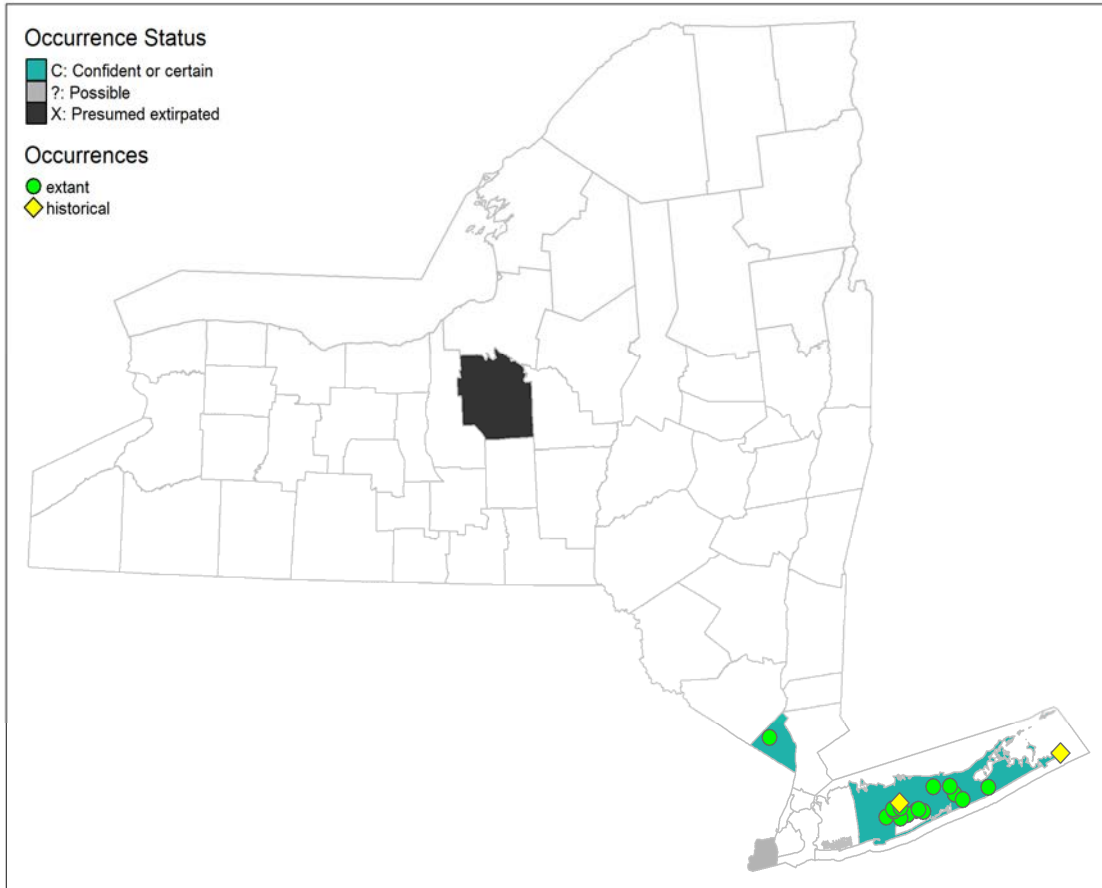


Figure 22: NYS distribution for *Eurybia spectabilis*.

Table 1. Number of records (element occurrences) of *Eurybia spectabilis* grouped by the dates known to be extant (the years spanning first observation to last observation) and the number and percent of total of USGS 7.5 minute map quadrangles these observations fall within for New York State.

Years	# of Records	# of distinct quads	% of quads in State
Pre-1995	13	7	0.7
1995-2004	6	5	0.5
2005-2014	3	2	0.2
2015-2023	1	1	0.1

Monitoring in New York

Four extant populations of showy aster occur on State Park lands and are monitored on a ten-year rotation. None of the other populations have been regularly monitored. One population is on NYS DEC land and one population is on National Wildlife Refuge land. The 15 extant occurrences were last observed between 1991 and 2022 with eight of those being last surveyed in the 1990s (NYNHP 2023, 2024).

IV. Primary Habitat or Community Type *(from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):*

NYNHP Ecological Communities: Pitch pine-oak-heath woodland, edge of Pitch pine-oak forest, Maritime grassland, Rocky summit grassland, Mowed roadside/pathway, Railroad (Edinger et al. 2014, NYNHP 2023, 2024).

Habitat or Community Type Trend in New York

Declining: **Stable:** **Increasing:** **Unknown:** ✓

Time Frame of Decline/Increase:

Habitat Specialist **Yes:** ✓ **No:**

Habitat Discussion:

In New York showy aster is most often found in sandy, grassland habitats. Many of the known sites are within pine barrens habitats, particularly at disturbed sites such as airstrips, railroads, and mowed roadsides. The sole known site from the lower Hudson Valley is on a rocky summit, where it grows with a mixture of shrubs, grasses, and herbs (NYNHP 2023, 2024). Dry, sandy soil, often among pines (Gleason and Cronquist 1991). Dry sandy open woods and clearings (Fernald 1950).

V. Species Demographics and Life History *(include information about species life span, reproductive longevity, reproductive capacity, age to maturity, and ability to disperse and colonize):*

Showy aster is extremely tolerant of drought and sun. Plants are pest resistant and somewhat unpalatable to deer and rabbits. Plants form small colonies from underground rhizomes but are not aggressive (New Moon Nursery 2024). In NY, four locations of showy aster have persisted for over 10 years (e.g., 11, 14, 15, and 20 years), but information on the life span of individual plants is lacking (NYNHP 2023).

Propagation considerations (Brooklyn Botanic Garden 2024): “Showy aster is wind dispersed, so to collect seeds, you have to go at just the right time—late enough that enough seeds have matured, but before they’ve blown away. You also want to collect from as many flowers as possible to increase genetic diversity. We collected only from large stands and always left at least two thirds of the flowers, enough for them to propagate. The actual collection is pretty easy—just pick the flower heads and bag them up in paper” (Brooklyn Botanic Garden 2024).

VII. References

This SSA drew heavily from these resources:

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