

Species Status Assessment

Common Name woodland arctic cudweed **Date Updated:** 2024-01-10
Scientific Name *Omalotheca sylvatica* **Updated By:** Rachael A. Renzi
Family Asteraceae

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

Woodland arctic cudweed (*Omalotheca sylvatica*) is in the aster family; it is the only *Omalotheca* found in New York. The closely related genera *Gnaphalium* and *Pseudognaphalium* can be distinguished by their lack of a persistent, horizontally growing underground stem (rhizome) in New York (NYNHP 2024). There are two populations of *Omalotheca*, which occur in generally northern counties in NY, which are at the southern extent of the plant's range in North America. The plants seem to rely on some degree of disturbance to maintain their population, growing in a mowed lawn, and in and around a dirt road in the Adirondacks. Additional populations may exist in similar habitat in the Adirondack, so further targeted surveys are recommended. Given its discovery in 1989 and its limited number of known populations, there is not enough data to determine the trend in New York (NYNHP 2024).

I. Status

a. Current legal protected Status

i. Federal: **Candidate:**
ii. New York: Endangered

b. Natural Heritage Program

i. Global: G4G5
ii. New York: S1 **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:

Omalotheca sylvatica is Endangered In New York (Ring 2023). there are two existing populations with hundreds of plants each, though one is of questionable native status (NYNHP 2023). There are no historical populations. It is thought that the plants rely on some disturbance;

for example, they can be found in a mowed lawn, or the median of a dirt road (NYNHP 2023). Despite growing in disturbed areas, the plants are not weedy and will not form dense colonies. One population occurs in or near dirt roads in the Adirondacks, and the other occurs in a mowed lawn in a state park in Wyoming county. It is likely that more searches in the Adirondacks will find additional populations (NYNHP 2023). The plants are 200 miles disjunct from the nearest population, in Vermont (NYNHP 2023, 2024). Its circumboreal population is apparently secure, though it has suffered a great loss in the United Kingdom, where 25% of the world's population of the plants are said to occur (Edinburgh Biodiversity Partnership; NatureServe 2023). As a circumboreal species, *Omalotheca sylvatica* occurs in the temperate northern hemisphere and reaches its North American southern limit in northern New England, northern New York, and the northern Great Lakes (NatureServe 2023). It is possibly adventive to Pennsylvania and other areas south (NatureServe 2023).

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	E	
Connecticut	No	-	-	-		
Massachusetts	No	-	-	-		
New Jersey	No	-	-	-		
Pennsylvania	Yes	Unknown	Unknown	Unknown	SH	
Vermont	Yes	Unknown	Unknown	Unknown	S2	
Ontario	Yes	Unknown	Unknown	Unknown	S4	
Quebec	No	-	-	-		

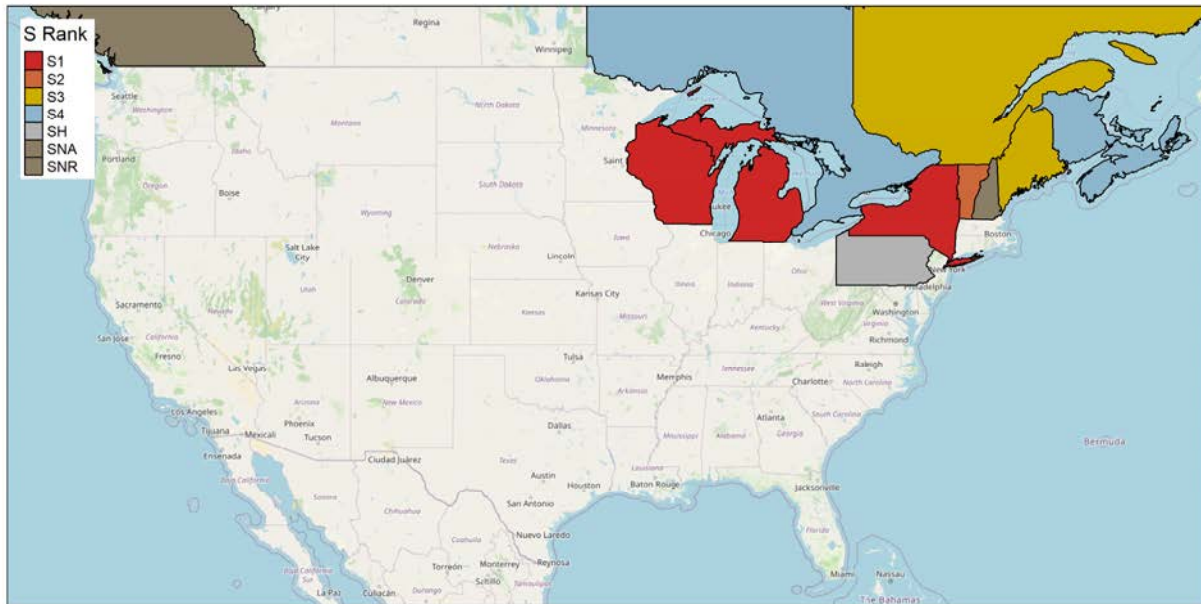


Figure 1. *Omalotheca sylvatica* North American distribution.

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~5,000km

III. NY Rarity and Trends

Trends Discussion

In New York, *Omalotheca sylvatica* is considered native and rare (NYNHP 2023, 2024; Werier et al. 2023). Because of the few known populations in the state, it is difficult to accurately assess trends. There are no historical records for *Omalotheca sylvatica* in New York, as the first specimen was collected in 1989. More information is needed on possible older records to assess long-term trends within the state (NYNHP 2023, 2024). In the short-term, the site in the Adirondacks has seen an expansion in population size since 1989 (NYNHP 2023). Growth is not the trend across the northern hemisphere, though. Over the last 25 years, it is estimated that this plant has declined about 50% in the UK, where approximately one-quarter of the world's *Omalotheca sylvatica* population grows (Edinburgh Biodiversity Partnership). Additional research elsewhere in the United States and Canada is needed to determine a global long-term trend.

Details of historic and current occurrence

There are currently only two known populations. The first is located along a logging road in the Adirondacks in Herkimer County and the second is located within Letchworth State Park in Wyoming County. Together, they comprise a state-wide count of less than 1,000 plants. There are no other known historical records. The next closest population occurs 200 miles away in Vermont (NYNHP 2023, 2024).

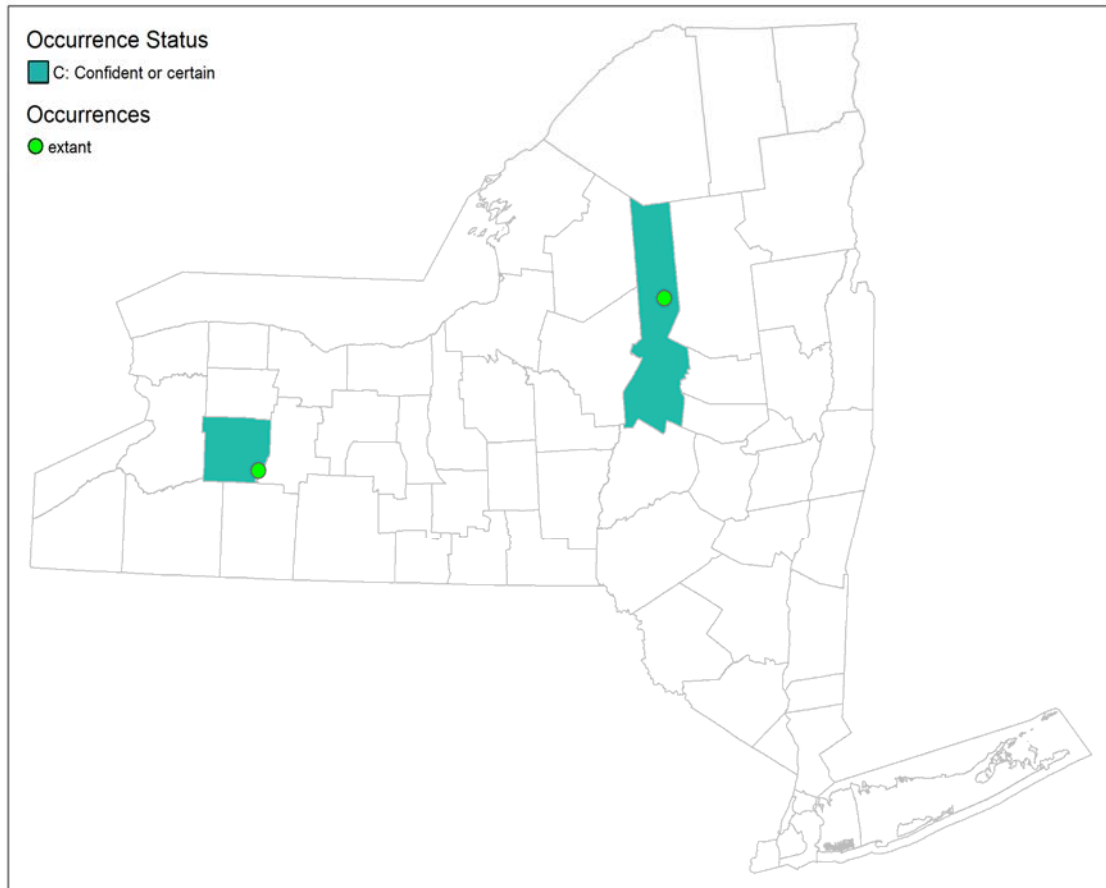


Figure 2: NYS distribution for *Omalotheca sylvatica*.

Table 1. Number of records (element occurrences) of *Omalotheca sylvatica* 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	1	1	0.1
1995-2004	2	2	0.2
2005-2014	1	1	0.1
2015-2023	1	1	0.1

Monitoring in New York

One of the populations occurs on State Park lands, which is surveyed on a 10-year rotation. The other location is not monitored on a regular basis, but was surveyed in 1989, 1994, and partly in 2022.

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

Northeastern Habitat Classification Macrogroups: Outcrop ad summit scrub, alpine, disturbed land pioneer / successional shrublands and grasslands, northern hardwoods and conifer ()

NY Ecological Communities: Mowed roadside/pathway, Unpaved road/path, Boreal heath barrens, Open alpine community, Successional northern hardwoods (Edinger et al. 2014, NYNHP 2023).

Habitat or Community Type Trend in New York

Declining: **Stable:** **Increasing:** **Unknown:** ✓
Time Frame of Decline/Increase:
Habitat Specialist **Yes:** **No:** ✓

Habitat Discussion:

There are two populations known from New York – one from a flat river terrace with shallow, sandy soils, and one from a dense patch of flattened oatgrass (*Danthonia compressa*) on an old logging road (NYNHP 2023, 2024). *Omalotheca sylvatica* is mostly confined to the northern part of the state. Although it grows in weedy areas it is not very weedy itself and does not form dense patches or large populations. It is probably more common in the Adirondacks than previous collections indicate. It seems to grow best in logging roads that are not shaded and that are covered with low graminoids (NYNHP 2023, 2024; Werier et al. 2023). In North America, *Omalotheca sylvatica* grows in open woods, boggy woods, rocky slopes, clearings, fields, borders of woods, roadsides, muddy banks, disturbed or waste sites (Werier et al. 2023; FNA 2006; Gleason and Cronquist 1991; Fernald 1970). In Pennsylvania, there was a single collection made from a dry wooded hillside (Rhoads and Block 2000). In Michigan, a single collection was made along old trails in hardwood forest (Voss 1996).

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):

Omalotheca sylvatica is a perennial herb that has a circumboreal distribution (NatureServe 2023). It seems to rely on disturbance, given its choice in habitat. Disturbance may reduce competition, provide openings, or cause soil scrapes (NYNHP 2024). It flowers in late summer, and fruits through October (NYNHP 2024). Seeds are wind dispersed (Bruun & Poschlod 2006).

Table 2. Phenology of *Omalotheca sylvatica* in New York State (NYNHP 2023).

Phenology	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering							█					
Fruiting								█				
Vegetative							█					

VI. Threats

This is a disturbance-dependent species with one population growing in an area that receives periodic mowing, and another that experiences road disturbance. Changes to the current disturbance regime, i.e., mowing pattern or vehicle visitation, could negatively impact the population. This plant may be threatened by liming of soils, changes to land management, and succession (NYNHP 2023, 2024). More research is needed to fully assess the threats.

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:

As a plant of early successional sites and natural disturbances, natural openings or even soil scrapes may be necessary for the persistence of this plant. Retain the current mowing pattern and avoid the use of herbicides, pesticides, and/or fertilizer where the plants grow (NYNHP 2023, 2024).

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>

Table 3. Recommended conservation actions for *Omalotheca sylvatica*.

Conservation Actions	
Action Category	Action
Land/water protection	1.1. Site/area protection
Land/water protection	1.2. Resource & habitat protection
Land/water management	2.1. Site/area management
Land/water management	2.2. Invasive/problematic species control
Land/water management	2.3. Habitat & natural process restoration

VII. References

This SSA drew heavily from these resources:

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