Species Status Assessment

Common Name wild chives Date Updated: 2023-03-07

Scientific Name Allium schoenoprasum Updated By: Richard Ring

Family Amaryllidaceae

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

Wild chives (*Allium schoenoprasum*) is a perennial herb species in the Amaryllis family (previously included in the Lily family). There are twelve *Allium* species found growing wild in New York, although only five of them are native (Werier *et al 2023*). Wild chives also may escape from cultivation, so care must be taken to identify populations from its native habitat; in NY, that is riverside ledges and outcrops, as well as alvar (limestone pavement) (NYNHP 2023). *Allium schoenoprasum* has a circumboreal distribution across North America, northern Europe, and Siberia (FNA 2003). The North American species has previously been known as *Allium schoenprasum* var. *sibiricum*, or var. *laurentianum*, but those varieties are no longer considered to be valid, or distinguishable from the species overall. In North America, wild chives are considered native and of conservation concern in many northern US states and eastern Canada. Only four native populations, three of them quite small, are known from NY, and only one has been revisited since 1990. Additional research is needed to determine wild chives' population trend in NY and to seek additional sites for the species.

I. Status

a. Current legal protected Status

i. Federal: Candidate:

ii. New York: Unlisted

b. Natural Heritage Program

i. Global: G5

ii. New York: S1 Tracked by NYNHP? On Active Tracking List

Other Ranks:

COSEWIC: Not listed in Canada IUCN Red List: Least Concern

Status Discussion:

There are at least four known extant, native populations of wild chives in NY. Wild chives is known to escape cultivation, sometimes making it difficult to determine native from escaped populations (Native Plant Trust 2024). Currently the only populations considered native are those from rocky river shores and ledges in Warren, Hamilton, and Jefferson Counties, as well as at least one population from alvar (limestone pavement) in Jefferson County (David Werier, personal communication 2024). There is one population which had 100's of plants when last surveyed – the other three had only a few stems or even just a single clump.

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	Е	
Connecticut	Yes	Unknown	Unknown	Unknown	SNR	
Massachusetts	Yes	Unknown	Unknown	Unknown	SNR	
New Jersey	No	-	-	-		
Pennsylvania	Yes	Unknown	Unknown	Unknown	SNA	
Vermont	Yes	Unknown	Unknown	Unknown	S1	
Ontario	Yes	Unknown	Unknown	Unknown	S4	
Quebec	No	-	-	-		

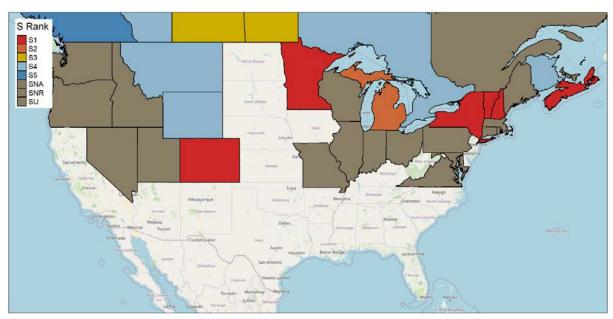


Figure 1: Allium schoenoprasum North American distribution. Juridictions with "SNR", "SNA", or "SU" ranks represent non-native populations.

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

Short term trends (<100 years)

There are no short-term trend data for the known, extant sites because they have never been revisited since discovery (NYNHP 2023).

Long term trends

The long-term trend appears to be stable in terms of number of native populations, although there are no estimates of population size from the historically known populations. Many of the historically documented populations are suspected to be non-native escapes from cultivation, although there is little documentation to confirm this and visits to native habitats in the counties with historical records are needed (NYNHP 2023).

Details of historic and current occurrence

Wild chives is known from four populations in Hamilton, Jefferson, and Warren Counties in New York, where the known extant populations have been reported from the early 1900's through 2018. There have been no formal surveys of three of these sites since the early 1990s, and updated information is needed. One large population is estimated to have hundreds of plants,

and the others only a few, so that total current NY population is unknown but estimated to be in the hundreds. There are historical records from elsewhere in northern and eastern New York, but these collections are suspected to be from plants escaped from cultivation.

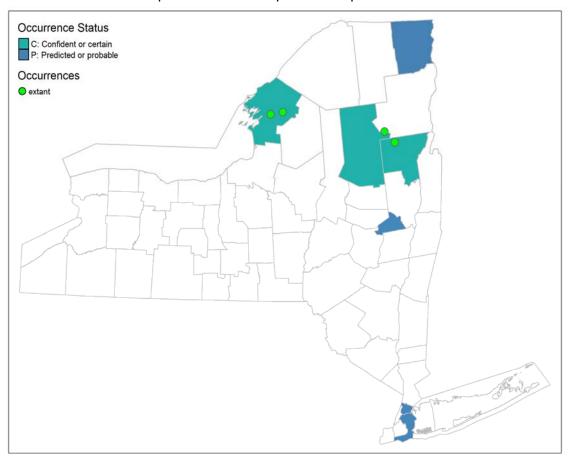


Figure 2: NYS distribution for Allium schoenoprasum

Table 1. Number of records (element occurrences) of Allium schoenoprasum 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	4	4	0.4
1995-2004	1	1	0.1
2005-2014	1	1	0.1
2015-2023	1	1	0.1

Monitoring in New York

None of the NY populations are being regularly monitored, and three of the four have been surveyed only once (NYNHP 2023). Regular monitoring is needed to determine the current status and population trends of this plant in the state.

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

Northeastern Habitat Classification Macrogroup: Glade and Savanna, Outcrop and Summit Scrub

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, native populations of wild chives occur on rocky ledges, and shores along rivers, as well as in openings on alvar (limestone pavement) (NYNHP 2023). Non-native populations also occasionally naturalize from cultivation into thickets, roadsides, fields, and other disturbed areas (New York Flora Association 2020). Rocky riverbanks and rock crevices (Reznicek 2011). Wet meadows, rocky or gravelly stream banks and lake shores, circumboreal (FNA 1993).

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):

Wild Chives is a perennial herbaceous species. In cultivation, clumps of wild chives persist from their basal bulbs for many years, although data on the longevity of wild populations is lacking. The species is insect-pollinated, by bees, flies, and lepidopterans, and is self-fertile (Balkan Ecology Project 2024).

Table 2. Phenology of Allium schoenoprasum in NY (NYNHP 2023).

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Flowering													

VI. Threats

The known populations occupy fragile shoreline habitat where they may be threatened by trampling from recreational activity, as well as climate change (prolonged flooding and scouring due to flooding events), and exotic plant species. The largest known population was dominated by the invasive reed canary grass (*Phalaris arundinacea*) when last surveyed, and another population was adjacent to a railroad where it could be impacted by herbicide drift (NYNHP 2023).

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

Yes:	No:	Unknown:

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

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 Allium schoenoprasum.

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:

New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry. 2023. Element Occurrence and Element Dataset. Albany, New York. [Exported 12/14/2023].

NatureServe. 2023. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. http://www.natureserve.org/explorer. [Accessed 12/14/2023].

Werier, David, Kyle Webster, Troy Weldy, Andrew Nelson, Richard Mitchell, and Robert Ingalls. 2023 New York Flora Atlas. [S. M. Landry and K. N. Campbell (original application development), USF Water Institute. University of South Florida]. New York Flora Association, Albany, New York. [Accessed 11/21/2023].

Additional references:

Native Plant Trust. 2024. Go Botany 3.9. Framingham, Massachusetts. Available from: https://gobotany.nativeplanttrust.org/

Reznicek, A.A., E.G. Voss, & B.S. Walters. 2011. Allium schoenoprasum. Michigan Flora Online. University of Michigan. Available from: https://lsa-miflora p.lsait.lsa.umich.edu [Accessed 1/11/2024].

Ring, Richard M. 2023. New York Rare Plant Status Lists. New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry, Albany, NY. December 2023. 108 pp.

Flora of North America Editorial Committee. 2002. Flora of North America, North of Mexico. Volume 26. Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford University Press, New York. 723 pp.