

Other Ranks:

COSEWIC: Not listed in Canada

IUCN Red List: Not assessed by IUCN Red List

Status Discussion:

Fuirena pumila is Rare in New York (Ring 2023). There are 30 occurrences of dwarf umbrella sedge in NY, but only five have been recently surveyed (e.g., 2021 to 2023). The remaining 25 were last observed in the mid-1980s. Of the recently surveyed locations, one site has “a few thousand” plants on a coastal plain pond shore in a preserve owned by The Nature Conservancy. Two sites are on Brookhaven State Park land (one with “hundreds of plants” and the other with “400 plants”). One recently (2022) surveyed occurrence on Fishers Island has 53 plants. At least six of the records from the mid-1980s are on Suffolk County parkland and need to be assessed (NYNHP 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	T	
Connecticut	Yes	Unknown	Unknown	Unknown	SU	
Massachusetts	Yes	Unknown	Unknown	Unknown	S3	
New Jersey	Yes	Unknown	Unknown	Unknown	S4	
Pennsylvania	No	-	-	-		
Vermont	No	-	-	-		
Ontario	Yes	Unknown	Unknown	Unknown	SX	
Quebec	No	-	-	-		

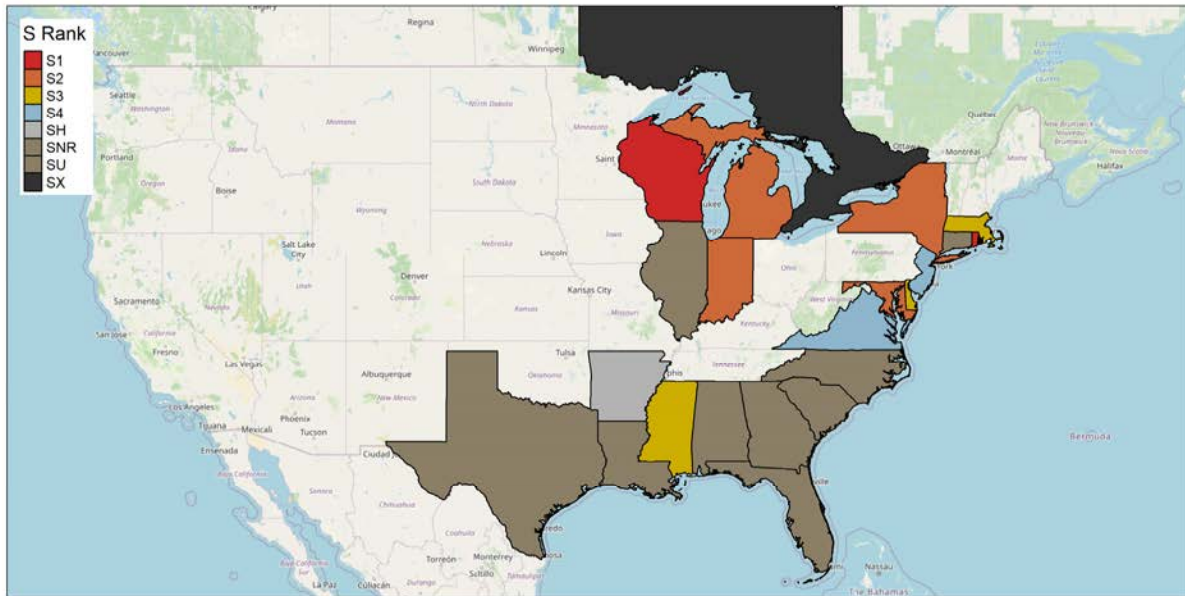


Figure 11: *Fuirena pumila* North American distribution.

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

Dwarf umbrella sedge is becoming rare in nearby New England as demands for water by rapidly growing towns alter the hydrology of its fragile pond shore habitat (Native Plant Trust 2024). In NY, phragmites (*Phragmites australis*) has impacted over half of the documented occurrences of pond shores that provide habitat for dwarf umbrella sedge (NYNHP 2023).

Details of historic and current occurrence

Massachusetts to Florida and Texas, chiefly on or near the coastal plain, and disjunct to southern Michigan and northern Indiana (Gleason and Cronquist 1991). Florida to Massachusetts; southern Michigan, northwestern Indiana and northeastern Illinois (Fernald 1950). In NY, dwarf umbrella sedge is only known from Long Island (NYNHP 2023). There are approximately 1000-3000 individuals in the state (NYNHP 2023).

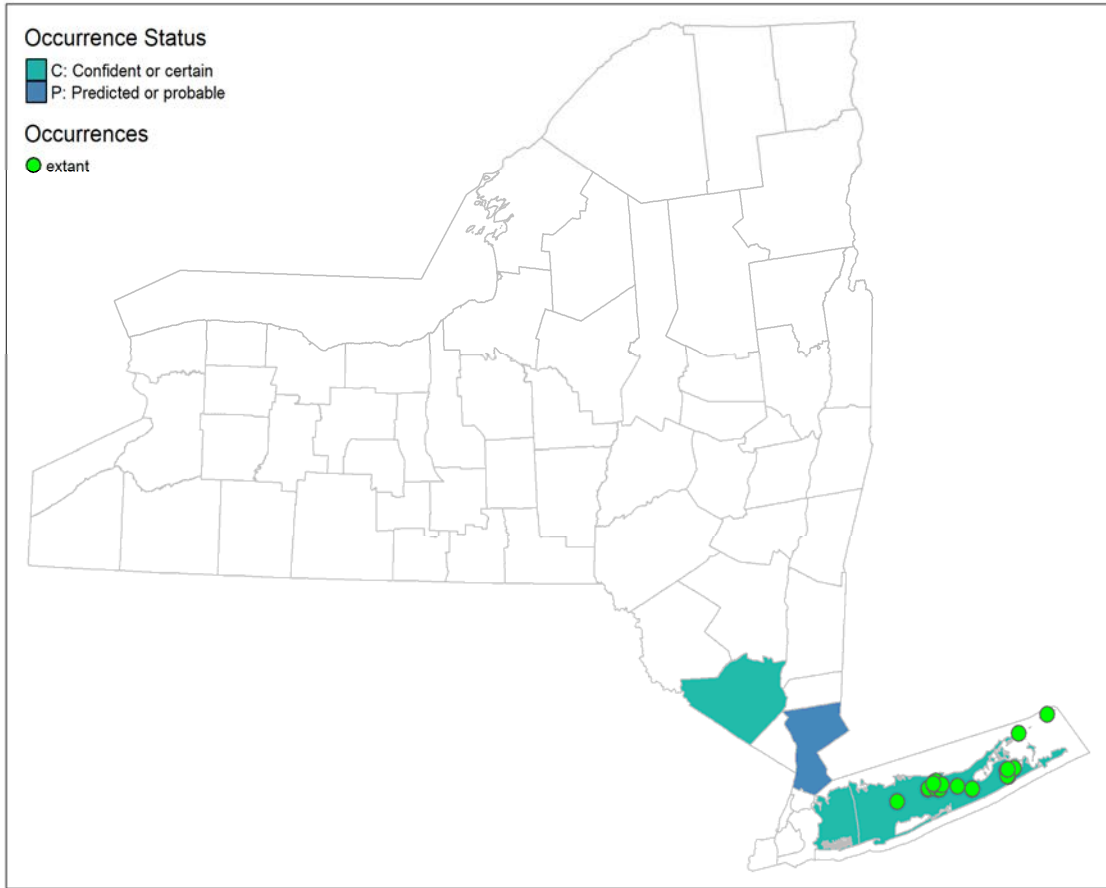


Figure 22: NYS distribution for *Fuirena pumila*.

Table 1. Number of records (element occurrences) of *Fuirena pumila* 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	30	9	0.9
1995-2004	3	2	0.2
2005-2014	3	2	0.2
2015-2023	3	2	0.2

Monitoring in New York

Two extant populations of dwarf umbrella sedge are on State Park lands and are monitored on a ten-year rotation. None of the other populations have been regularly monitored (NYNHP 2023).

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

NYNHP Ecological Communities: Coastal plain pond shore, Pine barrens shrub swamp, Coastal salt pond (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:

Dwarf umbrella sedge is a coastal plain species of pond shores and low areas (Native Plant Trust 2024). Moist to wet, usually sandy places (Gleason and Cronquist 1991). Bogs and wet peaty or sandy shores (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):*

Dwarf umbrella sedge is an annual plant, and as such it completes its life cycle, from germination to the production of seeds, within one growing season, and then dies. The five extant locations of dwarf umbrella-sedge in NY have persisted at roughly the same population size for over 30 years. All five were first documented between 1985 and 1990; and recently resurveyed between 2021 and 2023 (NYNHP 2023).

Table 2. Phenology of *Fuirena pumila* in New York State (NYNHP 2023).

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

VI. Threats

Dwarf umbrella sedge is becoming rare in nearby New England as demands for water by rapidly growing towns alter the hydrology of its fragile pond shore habitat (Native Plant Trust 2024). Invasive plants are the primary threat to coastal plain pond shores where most populations of dwarf umbrella sedge occur in NY. In NY, phragmites (*Phragmites australis*) has impacted over half of the documented occurrences of pond shores that provide habitat for dwarf umbrella sedge (NYNHP 2023).

In addition, coastal plain pond shores are threatened by development and its associated run-off (e.g., residential, roads), recreational overuse (e.g., ATVs, hiking trails causing erosion and compaction), and habitat alteration in the adjacent landscape (e.g., logging, pollution, nutrient

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