Yellow Flatsedge

Cyperus flavescens

Photo credits: *Stephen M. Young*

Scientific Name	*Cyperus flavescens* L.
Family Name	Cyperaceae Sedge Family

Did you know?
The first species of the smut fungi genus Entorrhiza, Entorrhiza cypericola, was described from the roots of yellow flatsedge in the late 1800s. These fungi are now put in the genus Melanotaenium. In New York this species was first collected in Yonkers in 1875 but almost half of the 15 historical records are now considered extirpated by development around New York City.

Summary

Protection Endangered in New York State, not listed federally.

This level of state protection means: listed species are those with: 1) 5 or fewer extant sites, or 2) fewer than 1,000 individuals, or 3) restricted to fewer than 4 U.S.G.S. 7 ? minute topographical maps, or 4) species listed as endangered by U.S. Department of Interior.

Rarity G5, S1

A global rarity rank of G5 means: This species is demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
A state rarity rank of S1 means: This plant is endangered/critically imperiled in New York because of extreme rarity (typically 5 or fewer populations or very few remaining individuals) or is extremely vulnerable to extirpation from New York due to biological factors.

Conservation Status in New York

There are five existing populations but four of these populations are from specimens and observations that need more survey work. There are 15 historical locations but about half of these are considered extirpated and the other half have not been relocated.

Short-term Trends

One existing population has survived for 10 years in a highly disturbed area but there is not enough information about four other populations to understand short-term trends.

Long-term Trends

Development on Long Island and Staten Island has significantly reduced the habitat for this species and none of the 15 historical records have been relocated. Half of the historical records are now considered extirpated.

Conservation and Management

Threats

One population is threatened by roadside management, another by the invasion of phragmites and the threats to the remaining populations is unknown because they have not been surveyed in detail.

Conservation Strategies and Management Practices

Phragmites control is needed to prevent the destruction of saltmarsh habitat where these populations exist. The largest population is along a roadside where it needs to be protected from road maintenance that could destroy the plants.

Research Needs

Habitat availability for this species in New York seems to be very large but it only occupies a very small portion of that habitat. More research is needed to determine its habitat preference and if present populations can be augmented.

Habitat

Yellow Flatsedge occurs at wet sandy sites. In New York such habitats have included salt marshes, coastal plain pond shores, wet, sandy, weedy roadsides (New York Natural Heritage Program 2007). Wet soil (Gleason & Cronquist 1991).

Associated Ecological Communities

Coastal Plain Pond Shore

The gently sloping shore of a coastal plain pond with seasonally and annually fluctuating water levels. Plants growing on the pond shore vary with water levels. In dry years when water levels are low there is often a dense growth of annual sedges, grasses, and herbs. Submerged and floating-leaved aquatic plants, such as fragrant waterlily and pondweeds, may become "stranded" on the exposed shore. In wet years when the water level is high

only a few emergents and floating-leaved aquatics may be noticeable. The vegetation of this pond shore community can change dramatically from one year to the next depending on fluctuations in groundwater levels.

Unpaved Road/path
A sparsely vegetated road or pathway of gravel, bare soil, or bedrock outcrop. These roads or pathways are maintained by regular trampling or scraping of the land surface. The substrate consists of the soil or parent material at the site which may be modified by the addition of local organic material (woodchips, logs, etc.) or sand and gravel. Abandoned railroad beds where tracks have been removed are included here. One characteristic plant is path rush.

Other Probable Associated Communities

High salt marsh

Associated Species

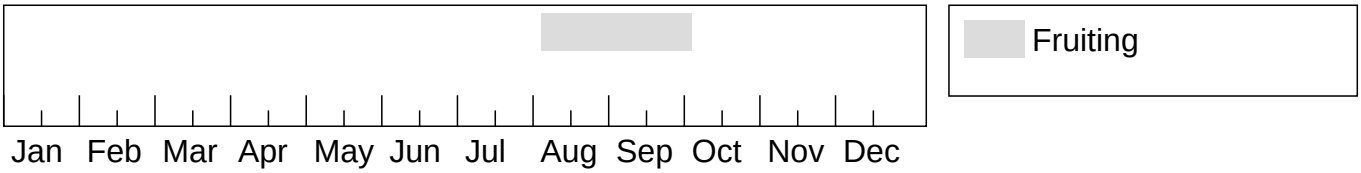
Straw-colored Flatsedge (*Cyperus strigosus*)
Common Rush (*Juncus effusus*)
Spreading Panic-grass (*Panicum dichotomiflorum*)
Switchgrass (*Panicum virgatum*)

Identification Comments

Yellow flatsedge is a tuft-forming sedge. Its stems are from 5 to 30 cm tall, 3-sided, and glabrous. There are 1-5 leaves, often lacking blades butsimply sheathing the stem, and 10-18 cm long. The infloresence consists of 1-3 spikes, each 1-3 cm long, each of these usually subtended by a bract (reduced leaf) 1-12 cm long. Each spike, in turn, contains 1-6 yellow to yellowish brown spikelets compressed and layered together like shingles. The flowers are subtended by straw-colored (stramineous) scales no more than twice as long as wide, and have 2 stigmas. The fruit (achenes) are hard, black to reddish-brown, lens-shaped, and 1-1.2 mm long.

The Best Time to See

Cyperus flavescens fruits from July through October.



The time of year you would expect to find Yellow Flatsedge in New York.

Similar Species

Cyperus polystachyos and C. filicinus have narrower scales, about 3 times as long as wide.

Taxonomy

Kingdom Plantae
└─ **Phylum** Anthophyta
└─ **Class** Monocots (Monocotyledoneae)
└─ **Order** Cyperales
└─ **Family** Cyperaceae (Sedge Family)

Additional Common Names

Cyperus
Flat Sedge

Synonyms

Cyperus flavescens var. *poaeformis* ((Pursh) Fern.)
Cyperus flavescens var. *flavescens* (L.)
Cyperus flavescens var. *poiformis* ((Pursh) Fern.)

Additional Resources

Links

New York Flora Atlas
http://www.newyork.plantatlas.usf.edu/Plant.aspx?id=1060
USDA Plants Database
http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=CYPERUS+FLAVESCENS
Flora of North America
http://efloras.org/florataxon.aspx?flora_id=1&taxon_id=242357663
NatureServe Explorer
http://natureserve.org/explorer/servlet/NatureServe?searchName=CYPERUS+FLAVESCENS
Google Images
http://images.google.com/images?q=CYPERUS+FLAVESCENS

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