

Flax-leaf Whitetop



Sericocarpus linifolius in flower



Photo credits: *Arieh Tal*

Scientific Name *Sericocarpus linifolius*
(L.) B.S.P.

Family Name Asteraceae
Aster Family

Did you know?

Formerly known as *Aster solidagineus*, this is one of the few rare plants where both the name of its genus and species has changed. Both of its species names are descriptive; it has narrow leaves (*linifolius*) and it does have a goldenrod shape (*solidagineus*). Its new genus means silky-fruited.

Summary

Protection Threatened in New York State, not listed federally.

This level of state protection means: listed species are those with: 1) 6 to fewer than 20 extant sites, or 2) 1,000 to fewer than 3,000 individuals, or 3) restricted to not less than 4 or more than 7 U.S.G.S. 7 ½ minute topographical maps, or 4) listed as threatened by U.S. Department of Interior.

Rarity G5, S2

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 S2 means: This plant is threatened/imperiled in New York because of rarity (typically 6-20 populations or few remaining individuals) or is vulnerable to extirpation from New York due to biological factors.

Conservation Status in New York

There are seven existing populations but only three of them have more than 100 plants, and they occur in human-disturbed areas that are not managed for this species. More occurrences will likely be found since its habitat is common on Long Island. There are 18 additional historical occurrences and about one third of these are considered extirpated.

Short-term Trends

The short-term trend of the existing populations seem stable as long as favorable disturbance continues.

Long-term Trends

The long-term trend is apparently negative. This species has always been rare in New York, but population numbers were probably higher in the past when larger expanses of grassland occurred on Long Island. There may be just as many populations existing today, but with smaller numbers of plants in grassland remnants.

Conservation and Management

Threats

Improper maintenance of successional grasslands where it grows can lead to succession and a loss of plants to competition. Too much direct disturbance during the growing season may also reduce numbers of plants.

Conservation Strategies and Management Practices

This species needs disturbance to reduce competition from woody plants and more aggressive herbaceous plants. However, too much direct disturbance to the plants will reduce or eliminate the population. Its habitat could be disturbed in the non-growing season to open it up for seed germination and colonization, but direct disturbance should be prevented during the growing season.

Research Needs

Research is needed to determine both the soil conditions that favor this plant in remnant grasslands, and whether existing populations can be augmented.

Habitat

In New York, this species has been found in openings within pine barrens communities, often growing along roadsides, railroads, or in other disturbed areas. Dry to moist sandy, clay, and gravelly soils of open deciduous and pine woods, oak and pine barrens, roadsides, fields (FNA 2006). Dry woods and open ground (Gleason and Cronquist 1991). Dry woods, thickets and clearings (Fernald 1970).

Associated Ecological Communities

Hempstead Plains Grassland

A tall grassland community that occurs on rolling outwash plains in west-central Long Island. This community occurs inland, beyond the influence of offshore winds and salt spray.

Mowed Roadside/pathway

A narrow strip of mowed vegetation along the side of a road, or a mowed pathway through taller vegetation (e.g., meadows, old fields, woodlands, forests), or along utility right-of-way corridors (e.g., power lines, telephone lines, gas pipelines). The vegetation in these mowed strips and paths may be dominated by grasses, sedges, and rushes; or it may be dominated by forbs, vines, and low shrubs that can tolerate infrequent mowing.

Pitch Pine-scrub Oak Barrens

A shrub-savanna community that occurs on well-drained, sandy soils that have developed on sand dunes, glacial till, and outwash plains.

Other Probable Associated Communities

Maritime pitch pine dune woodland
Pitch pine-heath barrens
Pitch pine-oak forest

Associated Species

White-tubed Colicroot (*Aletris farinosa*)
Broom-sedge (*Andropogon virginicus*)
Yellow Wild-indigo (*Baptisia tinctoria*)
Sweet Fern (*Comptonia peregrina*)
Hyssop-leaved Thoroughwort (*Eupatorium hyssopifolium*)
Western Showy Aster (*Eurybia spectabilis*)
Black Huckleberry (*Gaylussacia baccata*)
Sandplain Flax (*Linum intercursum*)
Pitch Pine (*Pinus rigida*)
Nuttall's Milkwort (*Polygala nuttallii*)
Prunus
Eastern Bracken (*Pteridium aquilinum*)
Little Bluestem (*Schizachyrium scoparium*)
Toothed White-top Aster (*Sericocarpus asteroides*)
Early Goldenrod (*Solidago juncea*)
Yellow Indiangrass (*Sorghastrum nutans*)

Identification Comments

Flax-leaf Whitetop is a perennial, stout aster species growing up to 75 cm tall. Its leaves

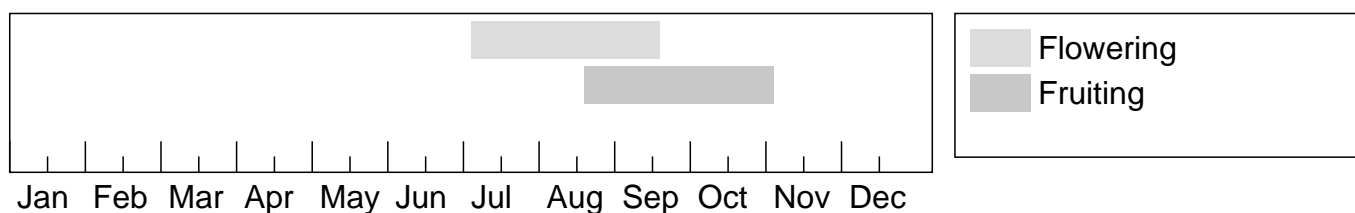
are linear, glabrous, and entire, up to 1 cm wide and 8 cm long. The basal and lower leaves wither by flowering time. The capitulescence is flat-topped, with 2 to 4 heads per branch. The phyllaries (the bracts of the involucre beneath each head) are white with a distinct green patch, and spreading. The flowers have 2 to 6 white ray flowers up to 1 cm long, and 5 to 15 white disc flowers up to 4 mm long.

Best Life Stage for Identifying This Species

Flowers or fruits are needed to positively identify Flax-leaf Whitetop.

The Best Time to See

The best time to identify this plant is in July through September.



The time of year you would expect to find Flax-leaf Whitetop in New York.

Similar Species

The only other species of *Sericocarpus* in New York is *S. asteroides*, which has (at least some) toothed stem leaves, differing from the entire leaves of *S. linifolius*. The combination of linear and entire stem leaves, flat-topped capitulescence, and recurved, glabrous, green-tipped phyllaries should also distinguish this species from those of other aster genera.

Taxonomy

Kingdom Plantae

└ Phylum Anthophyta

└ Class Dicots (Dicotyledoneae)

└ Order Asterales

└ Family Asteraceae (Aster Family)

Synonyms

Aster solidagineus (Michx.)

Additional Resources

Links

Online Key to the Asters of New England

http://www.nttlphoto.com/botany/asters-goldenrods/Resources/Aster-Key_2010-01_Online.htm

USDA Plants Database

<http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=ASTER+SOLIDAGINEUS>

Neoarctica - Eastern Wildflowers

<http://www.nearctica.com/flowers/composit/aster/Slinifol.htm>

Google Images

<http://images.google.com/images?q=ASTER+SOLIDAGINEUS>

NatureServe Explorer

<http://natureserve.org/explorer/servlet/NatureServe?searchName=ASTER+SOLIDAGINEUS>

Best Identification Reference

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