

Coast Violet



Viola brittoniana var *brittoniana*



Photo credits: Troy Weldy

Scientific Name *Viola brittoniana*
Pollard

Family Name Violaceae
Violet Family

Did you know?

The decline in numbers of this violet is very similar to the decline of the silvery aster. Once widespread on Long Island, it is now only known from one location, even though there seems to be abundant habitat left.

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 ½ minute topographical maps, or 4) species listed as endangered by U.S. Department of Interior.

Rarity G4G5, S1

A global rarity rank of G4G5 means: Apparently or Demonstrably Secure globally - Uncommon to common in the world, but not rare; usually widespread, but may be rare in some parts of its range; possibly some cause for long-term concern due to declines or other factors. More information is needed to assign a single conservation status.
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 is only one existing population of less than 50 plants. This was once more widespread on Long Island with 30 historical records, but most of them have been extirpated by development.

Short-term Trends

Succession at its only location may be causing the population to decline.

Long-term Trends

This was once more widespread on Long Island with 30 historical records but most of them have been extirpated by development.

Conservation and Management

Threats

The remaining population is threatened by trail maintenance that allows too much succession. Historical populations were threatened and extirpated by development of open habitats, failure to contain exotic plant invasions and lack of fire management.

Conservation Strategies and Management Practices

This species needs disturbance to reduce competition from woody plants or more aggressive herbaceous plants, but 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. A management plan is needed at its current location.

Research Needs

Research is needed to determine the best management strategy to augment the existing population. Plants should be grown in the greenhouse to preserve the genetic stock, and studies should be done to evaluate reintroduction sites on Long Island.

Habitat

The only extant site for Coast Violet in New York is along trails and roadsides in a wet pine barrens. It was previously collected from a sandy Long Island grassland (New York Natural Heritage Program 2010). Moist sandy woods and flats (Rhoads and Block 2000). Well drained soil in woods, clearings and glades (Gleason and Cronquist 1991). Sandy or peaty soil (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.

Associated Species

- Coast Pepper-bush (*Clethra alnifolia*)
- Teaberry (*Gaultheria procumbens*)
- Canadian St. John's-wort (*Hypericum canadense*)
- Eastern Yellow Stargrass (*Hypoxis hirsuta*)
- Path Rush (*Juncus tenuis*)
- Nipple-seed Plantain (*Plantago major*)
- Potentilla*
- Eastern Bracken (*Pteridium aquilinum*)
- Horned Beakrush (*Rhynchospora capillacea*)
- Bristly Dewberry (*Rubus hispidus*)
- Little Bluestem (*Schizachyrium scoparium*)
- Primrose-leaf Violet (*Viola primulifolia*)

Identification Comments

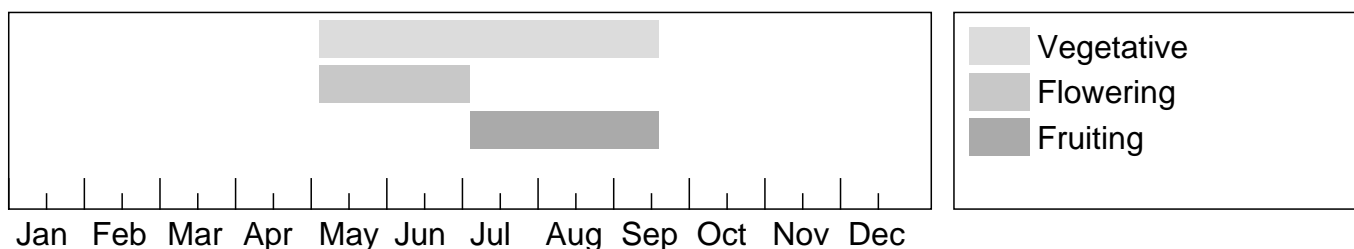
Viola brittoniana is a perennial wildflower species. The leaves are glabrous and deeply palmately divided nearly to the base, then again divided into slender lobes. It is a "stemless" violet, meaning that the flowers are borne singly on leafless stalks emerging directly from the base of the plants. The petals are purple, the lateral ones "bearded" inside with long thread-like hairs. The sepals are lance-shaped, coming to a point at the apex. The fruit are green, long egg-shaped capsules containing brown seeds 1.3 to 1.5 mm long, held on erect peduncles (Rhoads and Block 2000, Haines 1998).

Best Life Stage for Identifying This Species

Flowering or fruiting individuals are needed for identification.

The Best Time to See

Coast Violet flowers from May through June, and the fruits may persist into September.



The time of year you would expect to find Coast Violet in New York.

Similar Species

V. palmata and *V. subsinuata* are two violet species closely related to *Viola brittoniana*. *Viola palmata* differs from *V. brittoniana* by having leaves divided only halfway to their bases, and seeds 2 mm long on prostrate peduncles. *V. subsinuata* has hairy leaves, divided only halfway to their bases, beardless bottom petals, and purple-spotted fruit on short prostrate peduncles.

Conservation Comments

Includes var. *pectinata* as a synonym. This taxon is a good entity although it may be listed as a variety by some researchers.

Taxonomy

Kingdom Plantae

└─ **Phylum** Anthophyta

└─ **Class** Dicots (Dicotyledoneae)

└─ **Order** Violales

└─ **Family** Violaceae (Violet Family)

Synonyms

Viola brittoniana var. *brittoniana*

Viola brittoniana var. *pectinata* ((Bickn.) Alexander)

Viola palmata (L.)

Additional Resources

Links

American Violet Society -Dichotomous Key

http://americanvioletsociety.org/Violet_Keys/Web_Based_Dichotomous_Key.htm

USDA Plants Database

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

Nearctica - Eastern Wildflowers

<http://www.nearctica.com/flowers/viola/Vbritton.htm>

Google Images

<http://images.google.com/images?q=VIOLA+BRITTONIANA>

NatureServe Explorer

<http://natureserve.org/explorer/servlet/NatureServe?searchName=VIOLA+BRITTONIANA>

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This project is made possible with funding from:

- New York State Department of Environmental Conservation Hudson River Estuary Program
- Division of Lands & Forests, Department of Environmental Conservation
- New York State Office of Parks, Recreation and Historic Preservation

Information for this guide was last updated on Aug 15, 2017

This guide was authored by