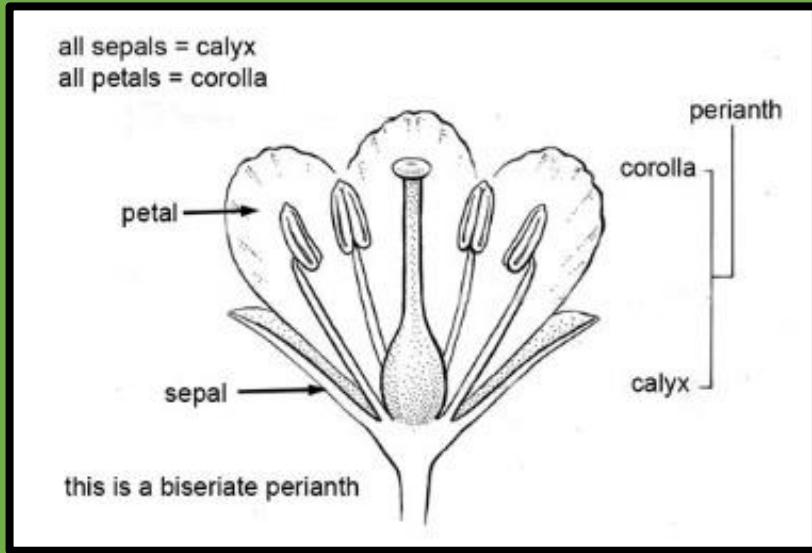


FLOWERING HERBS WITH LAVENDER, BLUE, OR PURPLE PETALS

S. A. Mori, M. Rothman & R.F. Naczi

Last update: 10 July 2018

In this essay, we present common plants with lavender, blue, or purple petals that flower from February to the end of June.



There is often wide variation in color within flowers. For example, a species may have green sepals, yellow petals, white filaments, and orange anthers. For this reason, we have elected to use petal color. Nevertheless, petals may be multi-colored. In that case, we use the dominant color and in some cases, we have treated the species in more than one essay.

Spring and early summer species flowering in the Preserve belong to the Asteraceae (Aster Family), Boraginaceae (Forget-me-not Family), Fabaceae (Pea family), Geraniaceae (Geranium Family), Iridaceae (Iris Family) Plantaginaceae (Plantain Family), Ranunculaceae (Buttercup Family), and Violaceae (Violet Family).

ASTERACEAE: COMMON FLEABANE

(*Erigeron philadelphicus*)



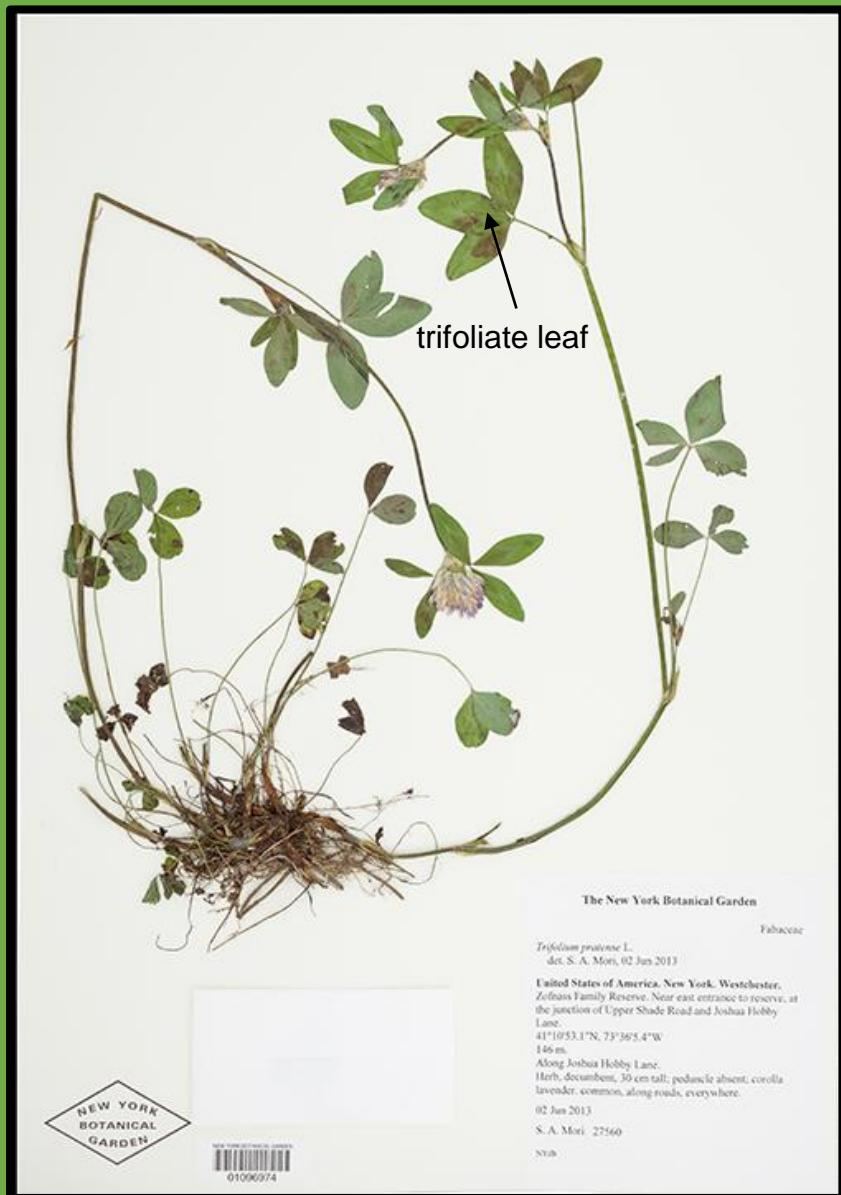
The common fleabane is the first of the four species of this genus to flower in the late spring to early summer. The genus has very narrow phyllaries subtending the narrow ray flowers. In this species, the ray flowers are purple for most of the length and white toward their bases whereas the disk flowers are yellow throughout. The ray flowers are sterile and the disk flowers are fertile. The species are difficult to differentiate from one another. This species has long, white trichomes on the stem and basal leaves.

BORAGINACEAE: TRUE FORGET-ME-NOT (*Myosotis scorpioides*)



This species prefers wet habitats. It is easy to identify by its 5 petals, corolla lobed for most of its length but fused at its base to form a short tube, the presence of yellow appendices at the bases of the corolla lobes, the adnation of 5 stamens on the inside of the corolla tube, and fruits that split into separate nutlets when they are ripe. The abaxial surface of the petals is white and adaxial surface is very light blue.

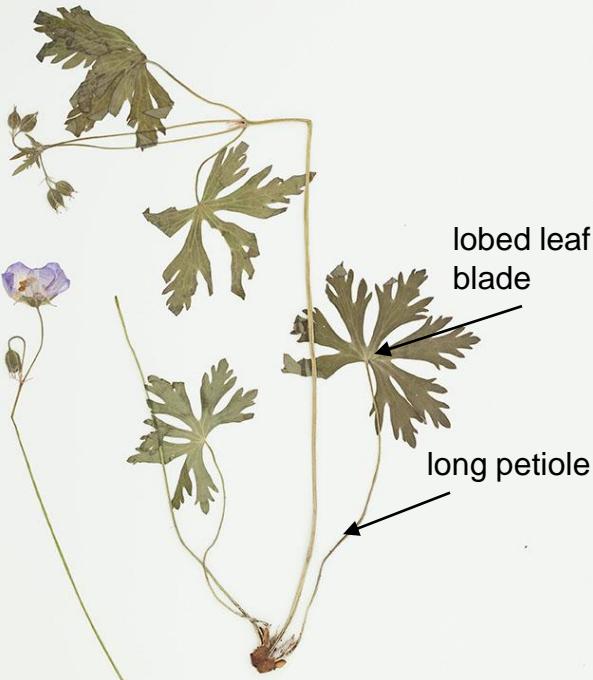
FABACEAE: RED CLOVER (*Trifolium pratense*)



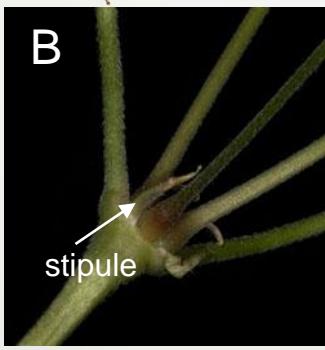
This alien species is common in open grassy areas along roads. It can be identified from other plants in the Preserve by the following set of features: palmately compound leaves with lighter green marks across their width (called chevrons); stipules with dark green vertical lines alternating with thicker and translucent vertical lines; globular inflorescences; and bilaterally symmetrical flowers.

GERANIACEAE: WILD GERANIUM (*Geranium maculatum*)

A



B



The New York Botanical Garden

Geraniaceae

Geranium maculatum L.

det. S. A. Mori, 17 May 2015

United States of America, New York, Westchester.
Pound Ridge, Northwestern corner of the Western Loop,
Westchester Wilderness Walk/Zofnass Family Preserve.
41°10'31.9"N, 73°36'12.8"W

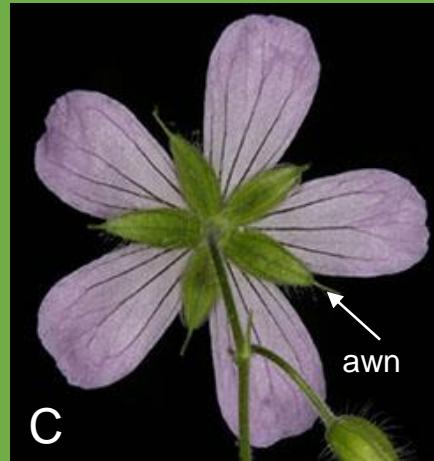
142 m.

At edge of deciduous forest.
Herb, ca. 20 cm tall. Rhizome orange. Calyx green, petals
lavender, veins darker lavender.
N.V. wild geranium [English]

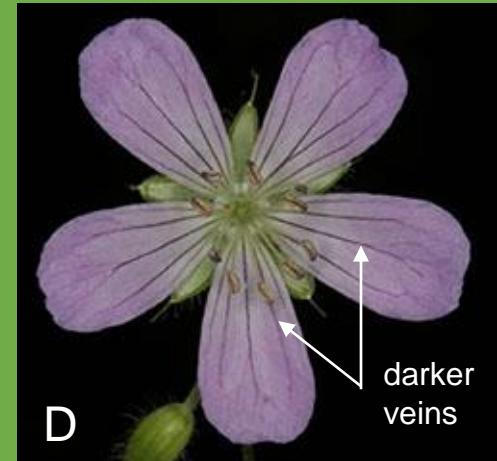
17 May 2015

S. A. Mori, M. Rothman 27916

NYbg



C



D

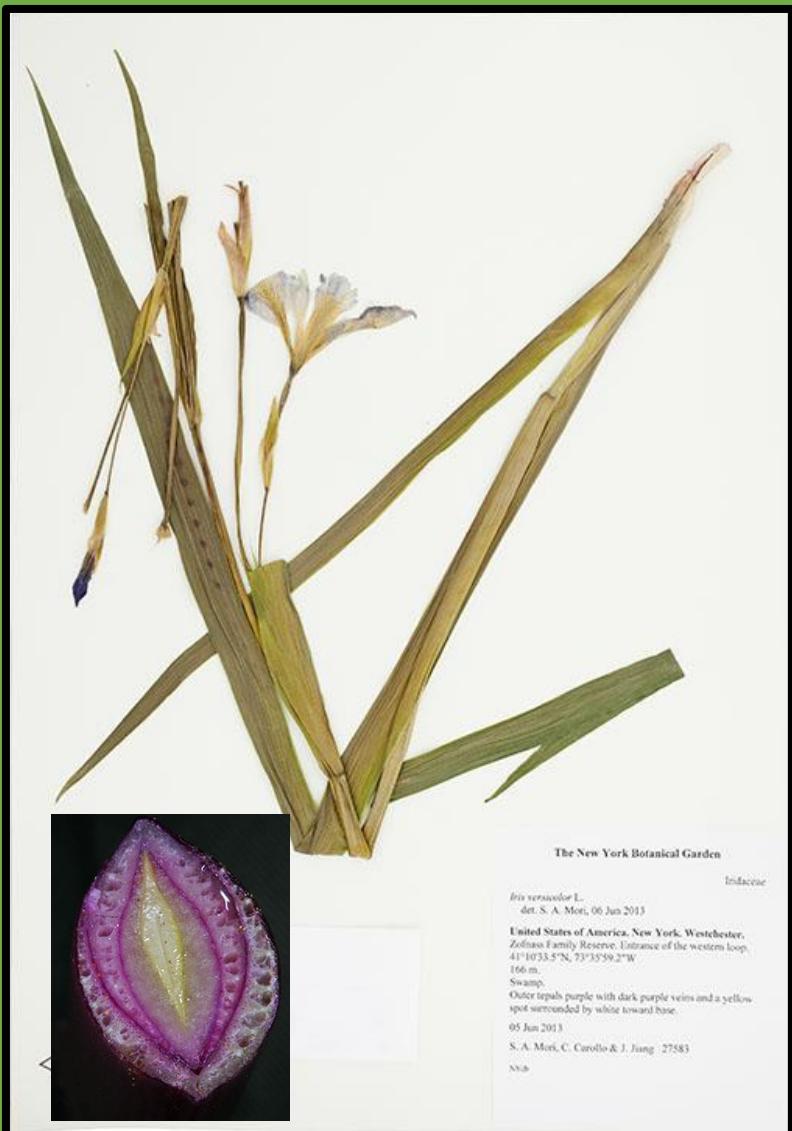
This species is easy to recognize by its deeply lobed leaves on long petioles (A), linear stipules (B), sepals with awned apices (C), and petals with darker lavender/darker colored veins (D). In the Preserve, wild geraniums are usually found in open areas such as along roads. The fruits, shown in the next slide, are different than those of any other species of flowering plants in the Preserve.

GERANIACEAE: WILD GERANIUM (*Geranium maculatum*)



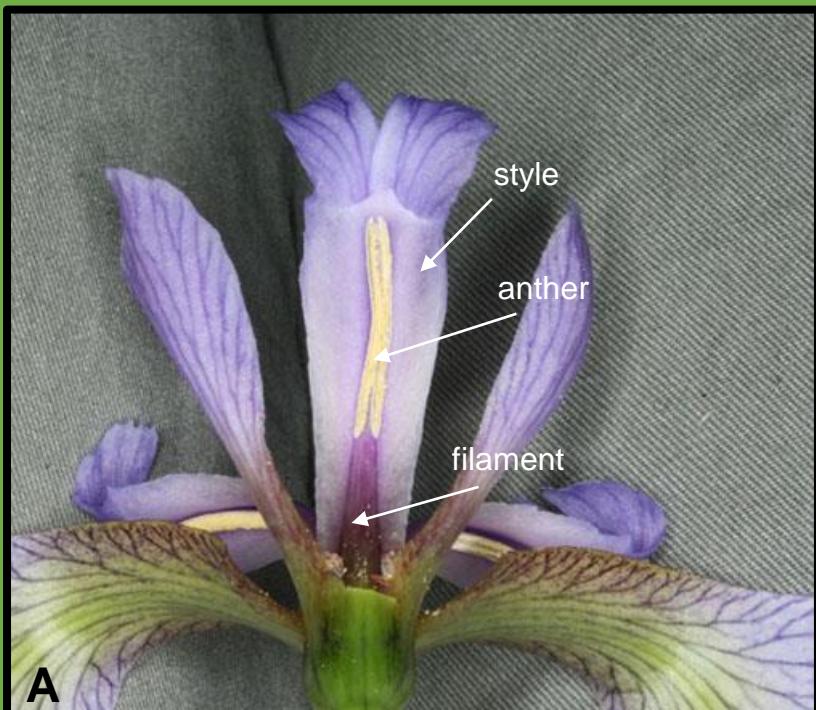
The fruits of wild geranium are capsules with five locules (= chambers). When the fruits are ripe they split into five valves that coil upwards. At maturity, the seeds are ejected a short distance from the plant. This image is of an unknown species of *Geranium* which has the same fruit type as *G. maculatum*.

IRIDACEAE: NORTHERN BLUE IRIS (*Iris versicolor*)

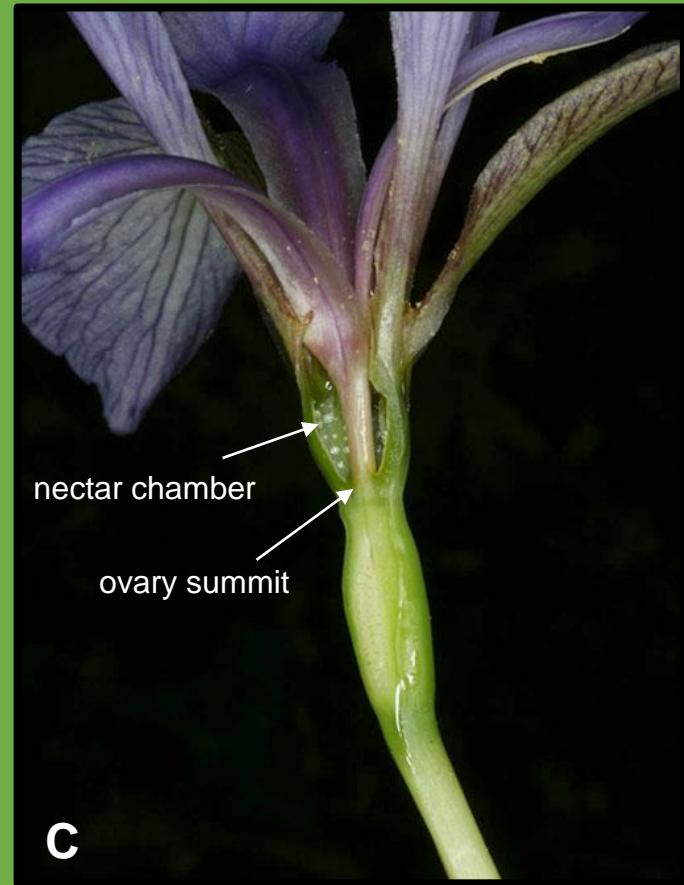


This native species is found only in wet habitats in the Preserve. It is easy to identify by its long, narrow leaves which are doubled over and flattened at the bases (see inset showing leaf cross-sections) and its very large and showy flowers with inferior ovaries. The 3 sepals (called "falls") are showy and arched downward, and serve as landing platforms for pollinators. The 3 petals (called "standards") are erect, and help to attract pollinators. The stigma is divided into three showy branches each of which covers one of the 3 stamens. When a pollinator (usually bees) enters a flower *Iris* pollen from other plants is scraped onto the stigma by the stigmatic lip as the pollinator penetrates the perianth tube to collect nectar.

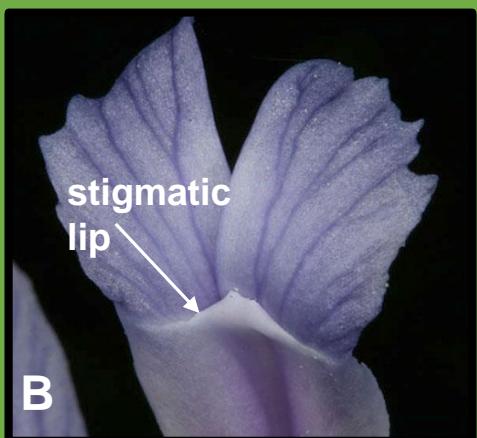
IRIDACEAE: NORTHERN BLUE IRIS (*Iris versicolor*)



A



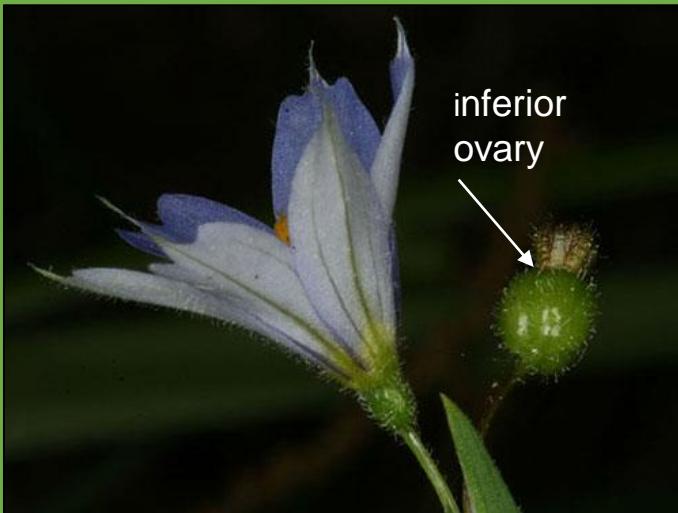
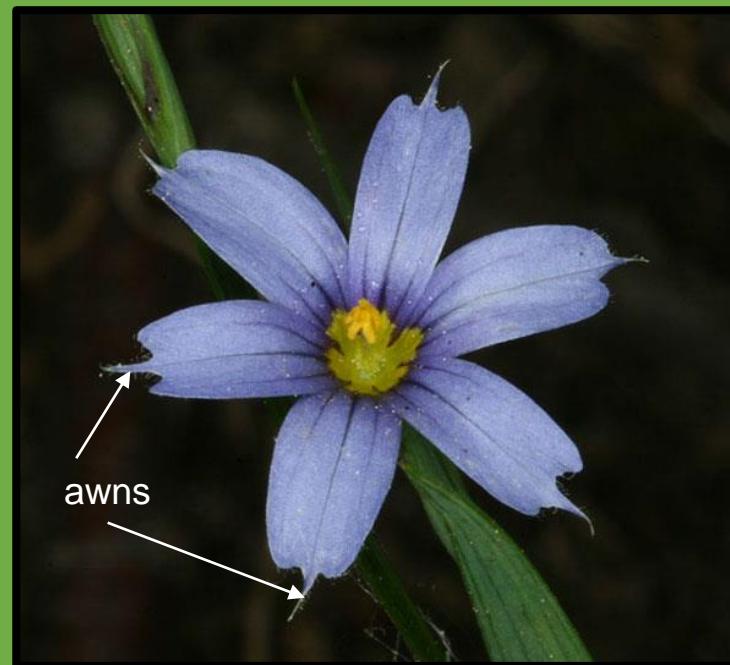
C



B

Irises have complex flowers. A . One of the 3 stamens per flower is shown. B. Apex of one of the three stigmas. The lip scrapes pollen from pollinators as they move into the flower to collect nectar. C. The nectar chamber evolved by the fusion of sepals and petals. When the pollinator leaves the flower it does not deposit pollen on the fertile side of the stigmatic lip.

IRIDACEAE: NARROW-LEAVED BLUE-EYED GRASS (*Sisyrinchium angustifolium*)



This native species grows in the open grassy area along the Joshua Hobby Lane. This species is easy to identify by its long, narrow leaves (similar to those of *Iris*); awns at the apices of the petals and discolored petal color (the abaxial side is light blue and the adaxial side is deep blue).

LAMIACEAE: GROUND IVY (*Glechoma hederacea*)



This alien species is often found in open, grassy areas. It is identified by the following characters: reniform leaves with crenate margins that emit a strong aroma when crushed. The flowers are zygomorphic, with petals fused toward the base and lobed toward the apex and the stamens are adnate to the corolla tube. The lip of the flower is bearded and has dark lavender, irregular blotches.

PLANTAGINACEAE: COMMON SPEEDWELL (*Veronica officinalis*)



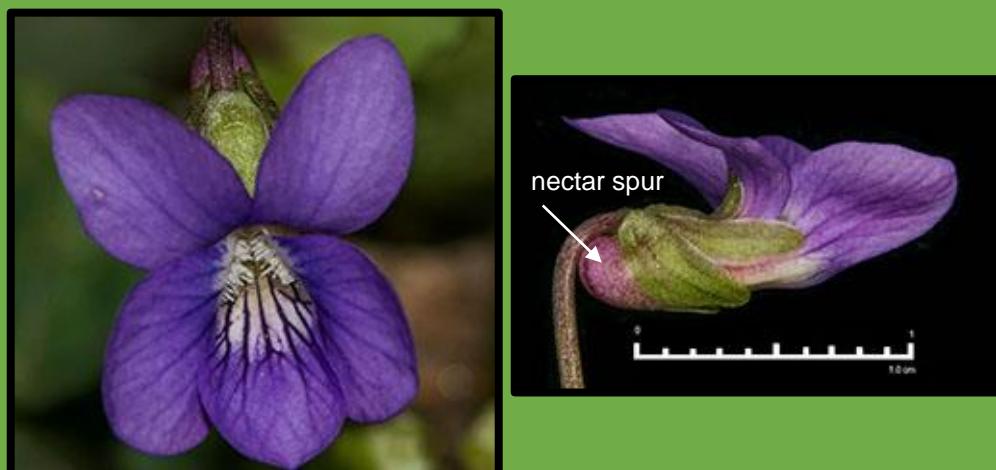
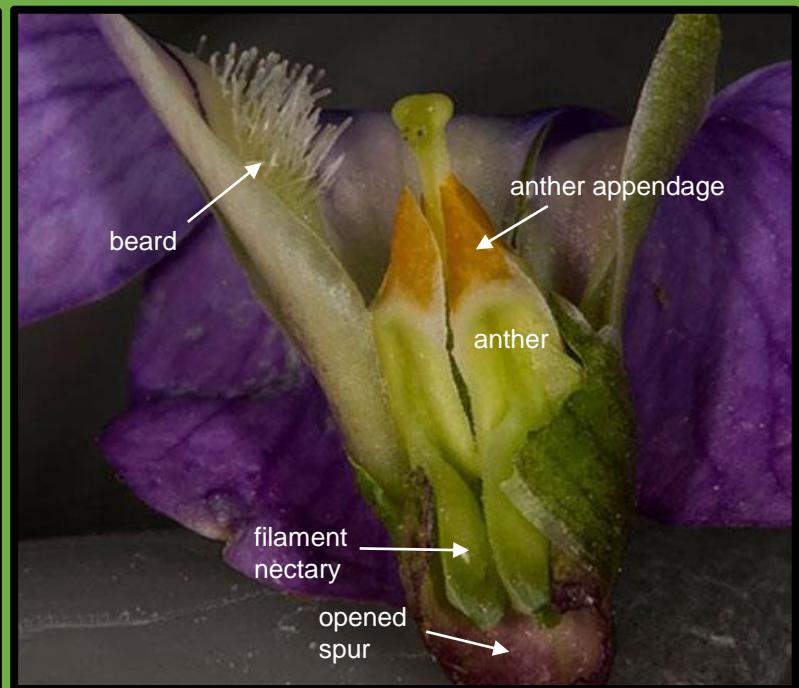
This alien species is found in a wide variety of open habitats. It is easy to identify to genus by its decumbent habit, slightly zygomorphic flowers with two stamens, and heart-shaped fruits. Identification of species is much more difficult.

RANUNCULACEAE: ROUND-LOBED HEPATICA (*Hepatica americana*)



The 3-parted leaves with rounded apices make this early spring flowerer easy to identify. The petals can be pink, purple, blue, or white. Some authors place this species in *Anemone* but Werier (2017) suggests that *Hepatica americana* is the correct name of the species. Although the round-lobed hepatica can be found in abundance in other areas, we have only found it once in the Preserve. Images from other areas by C. Gracie.

VIOLACEAE: COMMON VIOLET (*Viola sororia*)



Violets are easy to identify to genus because of their combination of bilaterally symmetrical (= zygomorphic) flowers, anthers with apical appendages, two modified filaments that produce nectar, and nectar spurs. Two of the six species in the Preserve have white petals while the other four possess purple petals. Species with yellow petals are also common elsewhere but we have not documented them in the Preserve. See the checklist to access images of the other species.

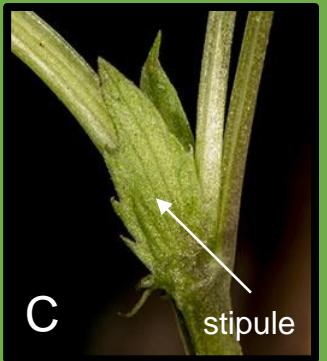
VIOLACEAE: AMERICAN DOG VIOLET (*Viola labradorica*)



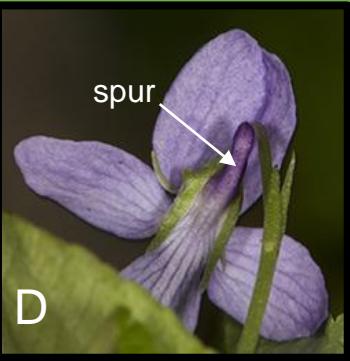
A



B



C



D

- A. This species is a stemmed violet, i.e., the flowers arise from stems above the ground not from underground rhizomes.
- B. The upper petals are oriented directly above the lower petal.
- C. Stipules possess well-defined marginal teeth.
- D. Basal view of a nectar spur.

See images of other species of *Viola* in the checklist of species.