

The



Leaflet

SPECIAL VIOLETS EDITION SPRING 2023

Some Native Violets Common to Virginia by Susan Violet Hayes



Family: Violaceae Genus: *Viola*

Viola, commonly referred to by the French word “violet”, are an easily found native plant. There are more than 80 species of *Viola* in North America, most of which are native, and more than 600 species throughout the world. There has been much interbreeding/adapting between species over time which can make identification difficult at times.

This article focuses on an overview of some of the native species commonly found in Virginia.

Violets are perennials that go dormant in the winter. Because they are small, most are no more than six inches tall, and ubiquitous, violets are often overlooked or dismissed as weeds (whole different article); however, this tiny native is a valuable food source for over 400 wildlife species.

Violets spread by seed and have three different seed dispersal systems depending on species – ballistic dispersal, ant dispersal, and a combination ballistic and ant dispersal.

The stalks of ballistic dispersal species tend to be long and erect to keep the fruits well above the leaves. The seeds are small and can be dispersed as far 15 feet away.

Violets that rely on ant dispersal have shorter stalks that are low to the ground, typically described as “stemless” violets. Stemless violets typically have the fruit drooping/nodding to the ground, with larger seeds that fall directly below the plant to facilitate access to passing ants.

Violet seeds are coated with a fleshy structure that is rich in lipids (in botany this is called elaiosome) that can attract ants to disperse seeds. As a result, ballistic dispersed seeds are often further dispersed by ants.

Most violets produce both open flowers and small, bud-like flowers that may never fully open. In botany these flowers are referred to as “chasmogamous” and “cleistogamous.” Both types of flowers produce seeds and provide nourishment to wildlife.

The timing of emergence is dependent on soil temperatures and is typically in the early spring. Violets always emerge before trees leaf out, and they reach maturity before the tree canopy closes.

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The Virginia Native Plant Society (VNPS), founded as the Virginia Wildflower Society in 1982, is a non-profit organization of people who share an interest in Virginia's wild plants and habitats and a concern for their protection.

The Piedmont Chapter is a sub-group of VNPS in the northern part of Virginia east of the Blue Ridge Mountains. It includes Loudoun, Fauquier, Culpeper, Rappahannock, Warren, Clarke, and Frederick counties.

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The Leaflet can be seen online in color at
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Some Native Violets Common to Virginia (continued)

In the fall, the leaves turn yellow and die back due to changes in temperature and water conditions that put stress on the plant. In times of drought, violets die back earlier in the season and more quickly.

Overall, violets are resistant to most insects and diseases; however, when over stressed can be susceptible to fungal infections, snails, and slugs.

Violets are a vigorous and forgiving plant which makes it an excellent choice for groundcover. Whenever possible, I use them as green mulch in my planting beds as their foliage provides lush protection for neighboring plant roots without out-competing them.

Violets have long been cultivated for their beauty and resilience, as well as culinary and medicinal uses. In 16th and 17th century England, violets were often referred to as “heartsease” in reference to their use in tinctures to reduce the discomfort of angina.

***Viola canadensis* – Canada Violet**

Canada Violets are unusually tall, typically 8-16 inches. Common in the mountain and piedmont regions, Canada Violets are typically found in rich cove forests.

The flowers are typically white with a yellow center, purple veins (nectar guides), purple on the back, and sometimes purple at the edge of the petal.

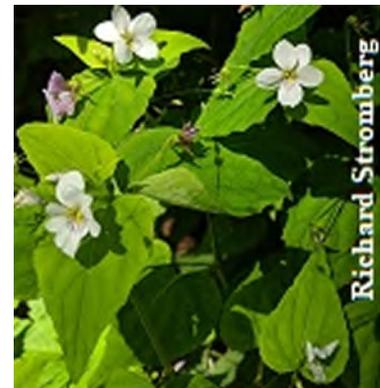
The leaves are heart-shaped with an exaggerated tip and gently serrated edges.

The flowers have a sweet scent that guides pollinators to visit the blooms to aid in cross-pollination. Canada Violets are also capable of self-pollination, as are most violets. The seeds spread through ballistic disbursement.

The flowers appear in April-July and sometime again in August-September. The fruits appear in May-August.

A broad range of wildlife relies on the Canada Violet as a food source including bumblebees, solitary bees, hoverflies, skipper butterflies, wild turkeys, mourning doves, white footed mice, and other small mammals.

The Canada Violet was widely cultivated for perfume through the 19th century. In the 20th century the chemical compound that is responsible for the scent was isolated and synthesized for mass production.



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Some Native Violets Common to Virginia (continued)

Viola cucullata – Marsh Violet, Blue Marsh Violet, Hooded Violet

The Blue Marsh Violet is a stemless violet found throughout Virginia and the mid-Atlantic, from the mountains to the coast. Typically found in bogs, swamps and moist meadows, this violet thrives in deep shade to dappled sunlight. It can get stressed in more than six hours of direct sunlight.

The Blue Marsh Violet's self-sowing habit can make it a useful ground cover in shady, moist areas and it is at home in clay, loam, and sandy soils.



The Blue Marsh Violet has a small basal rosette of serrated, medium green, heart-shaped leaves. The plant is approximately 6 inches high and typically blooms in April to May. In cool springs the flowers can appear as late as early June. The flowers can be medium to deep blue or white depending on soil conditions.

Blue Marsh Violets have been traditionally used in herbal medicine and have been used in research for treatment for certain cancers.

All parts of this plant are edible. The leaves are rich in Vitamins A and C and may be added to spring salads.

Blue Marsh Violets are a food source for native songbirds and small mammals. In particular, this plant supports Fritillary butterfly larvae.

Viola hastata Michx. – Halberdleaf Yellow Violet

Halberdleaf Yellow Violets are typically found in the rich deciduous forests of the mountain region, including acidic cove forests, oak-hickory forests, and river bluff forests.

Halberdleaf Yellow Violets have white, fleshy rhizomes and cordate/hastate arrow-shaped leaves that are usually variegated. The flowers appear in March-May, and the fruit in April-July.

The fruit is a food source for native songbirds, butterflies, and small mammals.

Halberdleaf Yellow Violets are a host plant for caterpillars of the butterfly genus *Argynnis*.

Halberdleaf Yellow Violets can be mildly purgative/cathartic and have been used in herbal medicine as a gentle laxative.

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Some Native Violets Common to Virginia (continued)

Viola pedata – Bird’s-foot Violet

Bird’s-foot Violets are found throughout Virginia in rocky barrens, pine woods, sandy prairies, and dry, forested slopes. These stemless violets thrive in dry-to-moist loamy and sandy soils. They do not tolerate extended periods of wet feet.

This violet requires well drained acidic soil and full sun. It will tolerate part shade if the soil is not too moist.

This violet is a great choice for rock gardens and pathways in optimum conditions. Bird’s-foot Violet is susceptible to crown rot if the drainage is poor.

Bird’s-foot Violets can vary in color and occur in many shades of



purple/blue and white, often bi-colored, but can be all one color.

These violets are distinctive by their multi-lobed leaves of silvery green that resemble a bird’s foot.

Bird’s-foot violets are a host plant for many butterflies and moths, particularly the Fritillary genus. It also supports specialized bees of the *Andrena* genus. The fruit are a food source for birds and small mammals.

The flowers appear in March-June and occasionally again in the fall.



Viola pubescens var. *pubescens* V. *Pennsylvanica* – Downy Yellow Violet, Hairy Yellow Violet, Common Yellow Violet

The Downy Yellow Violet can be found throughout the Piedmont and Mountain regions, mostly in moist or dry deciduous forests and woodlands. They thrive in shade or dappled sun and loamy soil, require good drainage and dry periods. Unlike most violets, this species has a high flammability rating.

This violet does not tolerate mowing and will disappear from mowed areas. It can be used as a ground cover in shady areas and can be an excellent companion plant for Trilliums.

The plant has light-to-medium green alternating, heart-shaped leaves with a serrated edge. The flowers are consistently yellow, with plum-purple nectar veins on the lowest petal.

In the late 19th century this species was used for perfume and for breath mints. The flowers are edible in limited quantities. Downy Yellow Violets have a mild laxative effect similar to Halberdleaf Violets.



Downy Yellow Violets are a host plant for many butterflies and moths, particularly the Fritillary genus. It also supports specialized bees of the *Andrena* genus. The fruit are a food source for birds and small mammals. (continued on page 5)





Viola sororia *V. papilionacea* – Common Blue Violet, Woolly Blue Violet

The Common Blue Violet is the most common violet in Virginia, and in the eastern U.S. This stemless violet thrives in clay and loamy soils and is indifferent to light conditions.

The Common Blue Violet has a small basal rosette of leaves with flowers on long stems in February-May and flushes out broad glossy heart-shaped leaves on long, graceful stems.

This species may be susceptible to Red Spider Mites, Violet Gall Midges, and powdery mildew if stressed.

All parts of this plant are edible. The leaves are rich in Vitamins A,



K, and C and may be added to spring salads or cooked like spinach. The flowers may be added to salads or crystalized to decorate spring deserts.

The dark spiny larvae/caterpillars of Fritillary butterflies feed on the leaves, resulting in irregular holes (this is a good thing, please don't douse them with insecticide). The caterpillars feed at night to reduce the unwanted attention of birds which may eat them. This plant is an important food source for a large range of butterflies, specialized bees, song birds, small and large mammals.

Viola striata – Striped Cream Violet, Creamy Violet



The Striped Cream Violet is common throughout Virginia and thrives in moist, rich loamy soil and dappled sunlight. This violet is typically found in alluvial woods, swamps, and along stream banks.

The flowers appear in April-June and may be cream or blue.

The top petals of the Striped Cream Violet are usually rounded, while the lateral petals are bearded. The nectar veins are deep purple.

Striped cream violets are a host plant for many butterflies and moths, particularly the Fritillary genus. It also supports specialized bees of the *Andrena* genus. Fruit is a food source for birds and small mammals.

This violet species is generally easy to cultivate in beds and tolerates occasional flooding. It does not tolerate mowing and will not survive in a lawn.





Identifying Violets in the VNPS Piedmont Chapter Area by Richard Stromberg

Below are two tables that I hope will help you distinguish the Violets that grow naturally in the Piedmont Chapter Area (Counties of Clarke, Culpeper, Fauquier, Frederick, Loudoun, Rappahannock, and Warren and the City of Winchester). The first table describes species that have leaves on the stems that bear flowers. The second table describes species that have flowers that grow directly from the ground with no leaves on their stems.

Stemmed/Caulescent <i>Viola</i> species—leaves on the flower stem			
Species	Common Name	Flower	Leaf
<i>arvensis</i>	European Wild Pansy [not native]		
<i>bicolor</i>	Wild Pansy		
<i>canadensis</i>	Canada [flowers with yellow throat; backs of petals violet; small, thin stipules]		
<i>striata</i>	Cream/Striped [flower throat and back of petals white; large, toothed stipules]		
<i>pubescens</i>	Downy Yellow [hairy on stem and underneath leaves]		
<i>pennsylvanica</i>	Smooth Yellow [nearly smooth]		

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Identifying Violets in the VNPS Piedmont Chapter Area (continued)

Stemless/Acaulescent <i>Viola</i> species—no leaves on the flower stem			
Species	Common Name	Flower	Leaf
<i>sororia</i>	Common Blue [lower petal smooth; side petal hairs long and slender]		
<i>cucullata</i>	Marsh Blue [flowers long-stalked; side petal hairs short and thick, swollen at the tip]		
<i>affinis</i>	Le Conte's/Sand [lower petal tufted inside]		
<i>hirsutula</i>	Southern Wood		
<i>sagittata</i>	Arrow Leaved		
<i>palmata</i>	Wood Blue		
<i>pedata</i>	Bird's-foot		
<i>blanda</i>	Sweet White [leaf and flower stems are red]		

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Curlyheads (*Clematis ochroleuca*)

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Confederate Violet (*Viola sororia* formerly *priceana*)

Richard Stromberg