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Wild Geranium, Geranium maculatum, 2020 Virginia Wildflower of the Year

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Recommended Citation

Hayden, W. John. "Wild Geranium, Geranium maculatum, 2020 Virginia Wildflower of the Year." Virginia Native Plant Society Wildflower of the Year Brochure (2020): 1-2.

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Geranium maculatum

Wild Geranium is a woodland perennial herb. Plants emerge from stout, shallow, rhizomes bearing knobby leaf scars and thin roots. Aerial stems attain heights of 2 to 7 dm; stem hairiness ranges from a few scattered trichomes to densely pubescent. Leaves are crowded basally, but well separated and opposite on flowering stems. Overall leaf shape is more or less polygonal but also deeply palmately lobed; leaf size ranges from 5 to 15 mm in diameter; lobes per leaf number from 3 to 7 with 5 being most common; leaf lobes are narrowed (cuneate) basally and become wider toward their segmented or toothed extremities. Petiole length decreases with leaf position; basal leaf petioles range up to 12 cm long whereas leaves below flowering peduncles are nearly sessile; leaf blades of basal and stem leaves, however, are similar. The narrow stipules are 5 to 12 mm long. Inflorescences are cymes bearing a few radially symmetrical 5-merous flowers. Some plants produce bisexual flowers; others produce pistillate flowers only. The 5 sepals have slender-tips, are about 1 cm long, and are sparsely pubescent, but ciliate along the margins. The 5 petals are rose-purple, rarely white, about 12 to 20 mm long and 10 mm wide, larger petal dimensions are found in bisexual flowers, smaller in pistillate flowers. The 10 stamens are about one-third as long as the petals and fully fertile in bisexual flowers; anthers of pistillate flowers are rudimentary and



non-functional. The ovaries are 5-lobed, topped with columnar styles that are 2 to 3 mm long at flowering stage; stigmas bear 5 star-like branches. As fruits develop, styles elongate roughly 10 times their length at flowering stage. Fruit dehiscence is complicated: the seed-bearing basal portions separate from each other but remain attached by their styles; dehiscence is sufficiently rapid to fling the single seed present in each carpel a short distance away from the parent plant.

Name and Relationships

Geranium maculatum was named by Linnaeus in This monumental Species Plantarum, published in 1753. Geranium has long served as the type genus of Geraniaceae. The genus and family name are derived from the Greek word geranos, crane, in reference to the elongate fruiting styles common throughout the family. English common names like Cranesbill and Storksbill for relatives of Wild Geranium similarly refer to their elongate fruiting-stage styles. The species portion of the binomial, maculatum, means spotted, perhaps a reference to slight irregularities in petal pigmentation sometimes observed in this species.

In the Garden

Wild Geranium is an excellent garden plant, fitting well with mixed perennials in light shade or naturalistic woodland settings. It is tolerant of a wide variety of soil types and soil pH. Cultivated plants benefit from supplemental water in dry spells, without which aerial stems may senesce and die to the ground. Propagation can be accomplished by division and by seed. Divide rhizomes in spring or fall by severing its segments and planting the pieces about one inch deep. Diligence will be required to collect mature seeds before they are ballistically dispersed. Seeds may be sown outdoors as soon as they are collected or in seed flats for controlled cold stratification. Germination may be erratic; some seeds may not sprout until after a second winter or cold treatment.



In the Wild

Geranium maculatum is widespread in eastern North America from Maine to Minnesota and south to Georgia and Arkansas; it is uncommon to absent in the Atlantic or Gulf coastal plain regions of coastal states from Virginia to Mississippi. Wild Geranium favors upland forests and well-drained portions of floodplain forests.

Human Uses

Native Americans used Wild Geranium to treat a variety of disorders and commercial preparations of the plant, usually derived from roots and/or rhizomes, are available today as herbal or alternative medicines. Medicinal qualities can be attributed to presence of gallic acid and tannins that provide astringent and bacteriostatic

effects. Root and rhizome preparations have been taken internally to treat gastrointestinal distress, applied topically as an eyewash, or as an ingredient in compression dressings for wounds. Virginia Native Plant Society makes no endorsement of the traditional medicinal was assistant and the society makes as a society makes no endorsement of the traditional medicinal was as a society makes no endorsement of the traditional medicinal was as a society makes no endorsement of the traditional medicinal was as a society makes no endorsement of the traditional medicinal wa

of the traditional medicinal uses of Wild Geranium.



Conservation Status

Onservation status of Wild Geranium is secure.

Nevertheless, like so much of the natural world, individual populations are subject to the habitat destruction characteristic of the ever-expanding human footprint.



Where to See It

In Virginia, *Geranium maculatum* is especially common in the mountains and piedmont. When present in the Coastal Plain, it is usually found on calcareous soils. Plants may be found in flower from April to June.



From the Digital Atlas of the Virginia Flora, vaplantatlas.org



Gardeners should not collect Wild Geranium in the wild and should be certain that all native plants purchased for home gardens have been nursery-propagated, not wild-collected. For retail sources of nursery-propagated plants and responsibly collected seeds, visit www.vnps.org, e-mail info@vnps.org, or call 540-837-1600. To see and learn more about interesting species of plants native to Virginia, visit www.vnps.org and contact your chapter of VNPS (details on the website) for times and dates of programs and wildflower walks in your area.

Virginia Native Plant Society Blandy Experimental Farm 400 Blandy Farm Lane, Unit 2 Boyce, VA 22620

Text by W. John Hayden, VNPS Botany Chair Color illustration by Betty Gatewood Pen-and-ink illustrations by Nicky Staunton Color photos by W. John Hayden Layout by Nancy Sorrells

Wild Geranium

Geranium maculatum



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