

Viola renifolia Gray
kidney-leaf white violet
Violaceae (Violet Family)

Status: State Sensitive
Rank: G5S2

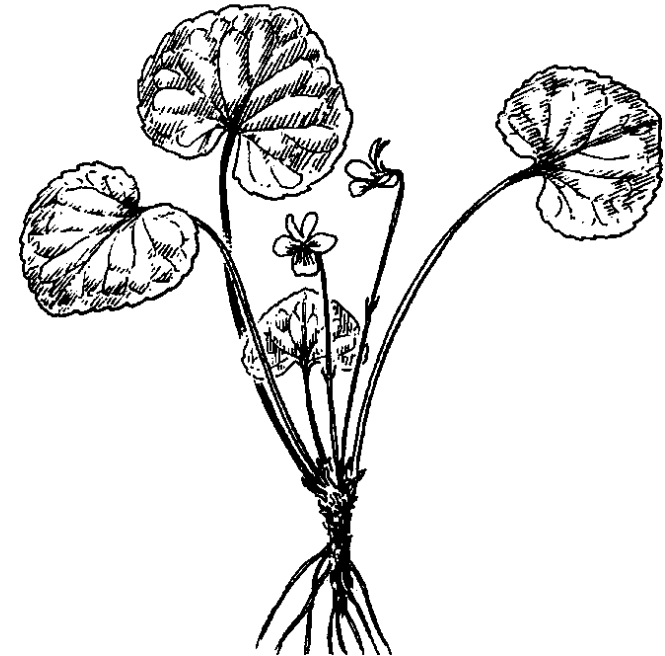
General Description: Adapted from Hitchcock et al. (1961): *Viola renifolia* is a perennial from short ascending rootstocks without horizontal rhizomes or an apparent stem. The leaves are kidney-shaped, indented at the base, $\frac{3}{4}$ to $2\frac{3}{8}$ in. (2-6 cm) broad, and somewhat downy, especially underneath, with a small-toothed margin. The leaves are born on petioles 1 to 6 in. (3-15 cm) long with leafy bracts at the base that are $\frac{1}{8}$ to $\frac{3}{8}$ in. (3-10 mm) long. The flower stalks are usually shorter than the leaves. The beardless white flowers are $\frac{3}{8}$ to $\frac{5}{8}$ in. (10-15 mm) long, and the lower three petals are purple-penciled. The fruit capsules are purplish and the seeds are brown.

Identification Tips: *Viola renifolia* has been found in association with *V. orbiculata*. There are many species of *Viola* that occur in the same counties as *V. renifolia*. Of these, only *V. canadensis*, *V. macloskeyi*, and *V. palustris* also have white flowers. These species can be distinguished from *V. renifolia* by the following. *V. canadensis* has heart-shaped leaves, from petioles that are up to 12 in. (30 cm) long, *V. macloskeyi* has egg-shaped to heart-shaped leaves, from petioles that are $\frac{3}{4}$ to $1\frac{1}{2}$ in. (2-4 cm) long, *V. palustris* has leaves that are heart-shaped to kidney shaped, from petioles that are up to 6 in. (15 cm) long, while *V. renifolia* has round to kidney-shaped leaves from $1\frac{1}{8}$ to 6 in. (3-15 cm) long petioles. Furthermore, the lateral pairs of petals of *V. canadensis* and *V. macloskeyi* are bearded, while those of *V. palustris* are sparsely bearded, and all the petals of *V. renifolia* are beardless. *V. palustris* can be further distinguished from *V. renifolia* by its rhizomatous growth; *V. renifolia* is never rhizomatous. A technical key is recommended for positive identification.

Phenology: This species blooms from June through August. It was observed in bloom at the end of May through July in Washington.

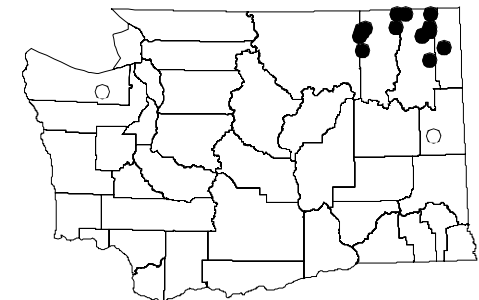
Range: This species is known from British Columbia south to the Rocky Mountains in Colorado, and to the northeastern U.S. It has been found in five counties in Washington: Clallam, Ferry, Stevens, Pend Oreille, and Spokane counties.

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Illustration by Jeanne R. Janish

Known distribution of
Viola renifolia
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat: *Viola renifolia* may be found from lowland coniferous forest to subalpine slopes. In Washington, this species has been found at elevations from 2320 to 3800 feet (705-1160 m). It is generally found in moist, forested sites, and sometimes along ditches or streams. Associated species found in Pend Oreille County include evergreen yellow violet (*Viola orbiculata*), western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), Engelmann spruce (*Picea engelmannii*), lady fern (*Athyrium felix-femina*), wild sarsaparilla (*Aralia nudicaulis*), western foamflower (*Tiarella unifoliata*), long-tail wild ginger (*Asarum caudatum*), bride's-bonnet (*Clintonia uniflora*), American twinflower (*Linnaea borealis*), and fragrant bedstraw (*Galium triflorum*).

Ecology: *Viola renifolia* has been found in areas with some disturbance, but may not be able to tolerate trampling.

State Status Comments: This species is known in Washington from less than twenty occurrences. *Viola renifolia* can no longer be found at some revisited sites.

Inventory Needs: Sites must be revisited often in order to track population health.

Threats and Management Concerns: There is evidence from most sites of cattle trampling. Trampling and grazing may be the greatest threats to this species in Washington.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.

Kartesz, J.T. 2004. *Synthesis of North American Flora*. Phylcosystems Corporation. 1996.