

***Saxifraga tischii* Skelly**
Tisch's saxifrage
Saxifragaceae (Saxifrage Family)

Status: State Review Group 1
Rank: G1?S1?

General Description: Adapted from Skelly (1988): *Saxifraga tischii* is a small, perennial herb 1-3/8 to 5 in. (3.5-12.5 cm) tall arising from a short rhizome with a rosette-shaped base. The leaf blades are 3/16 to 11/16 in. (5.5-17 mm) long and 1/8 to 3/8 in. (3.5-10 mm) wide. The leaf shape is highly variable. The leaves are generally hairless above, and brown-wooly and purple tinted below. The leaf margins have rounded teeth. The petioles have long soft hairs on the margins. The flowering stem is 1-3/8 to 3 in. (3.5-7.5 cm) tall, elongating to 5 in. (12.5 cm) when in fruit. The stem is purplish, glandular-hairy, and leafless, although it does have leafy bracts beneath the inflorescence. The inflorescence is somewhat flat-topped and has 5-10 greenish-purple flowers. The leafy bracts beneath the petals are purplish, minutely hairy, with 3-nerved lobes that are ovate to lanceolate and less than 1/16 in. (1-2 mm) long. The 5-6 purple-green petals are single-veined and persistent through fruiting. The fruit is purplish, hairless, and about 1/8 in. (2.3-3.5 mm) long.

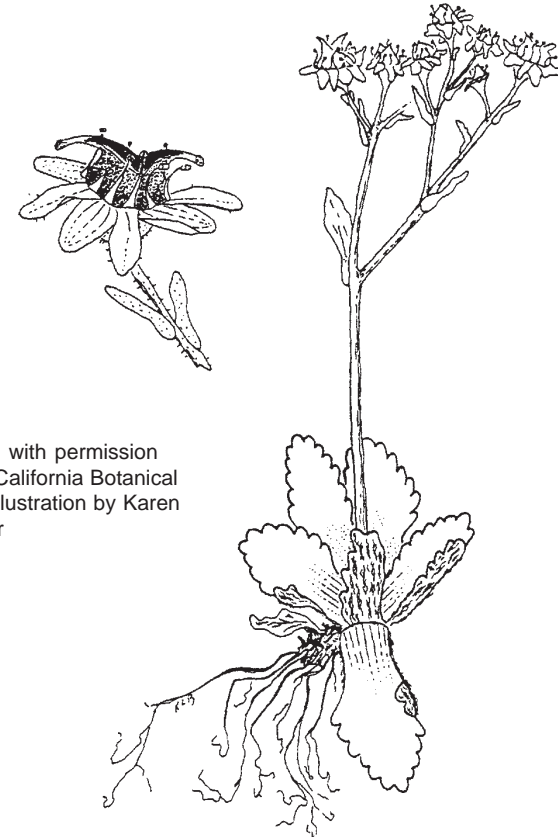
Identification Tips: There are many other species of *Saxifraga* that occur in the Olympic Mountains, but most of the other species have white flowers, although some are greenish or tinged with purple. The petals of the white-flowered species are often notched at the tip and they have no marginal cilia; those of *S. tischii* are not apically notched and usually have 1-7 asymmetrically distributed marginal cilia. It looks as if *S. tischii* has no petals. However, the petals are always there but semi-microscopic; a 10-power hand lens is extremely helpful in identifying this species. No others have purple leaves or flowers that persist.

Phenology: This species flowers from June to August.

Range: *Saxifraga tischii* is endemic to the Olympic Mountains and the interior of Vancouver Island, British Columbia. It has been observed in Clallam and Jefferson counties in Washington.

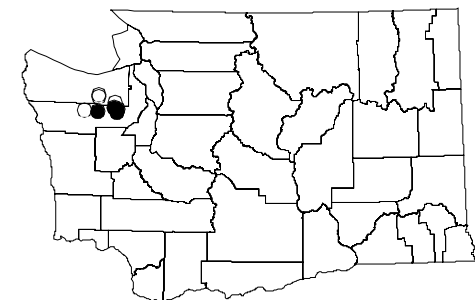
Habitat: This species grows on ledges and in rock crevices at subalpine and alpine levels from 4500 to 7900 feet (1375-2400 m). Associated species include Drummond's thimbleweed (*Anemone drummondii* var. *drummondii*), nard sedge (*Carex nardina*), brittle

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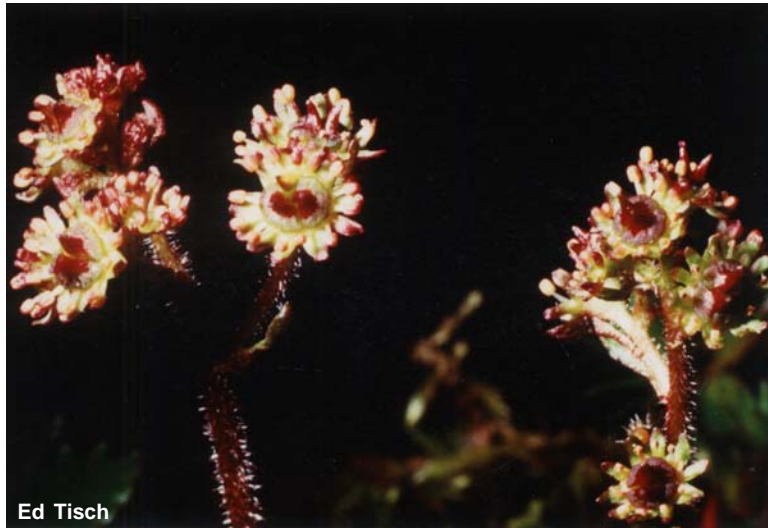
Known distribution
of *Saxifraga tischii*
in Washington



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

Saxifraga tischii

Tisch's saxifrage



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bladder fern (*Cystopteris fragilis*), cliff dwarf primrose (*Douglasia laevigata* var. *ciliolata*), lance-leaved draba (*Draba lonchocarpa* var. *lonchocarpa*), spiked wood-rush (*Luzula spicata*), tufted alpine saxifrage (*Saxifraga caespitosa* var. *emarginata*), and Olympic violet (*Viola flettii*).

Ecology: *Saxifraga tischii* grows on a variety of rocky substrates. The plants occupy shallow, well-drained soil pockets on north to northeasterly aspects, often in cirques near persistent snow patches.

State Status Comments: This species is endemic to the Olympic Mountains, and an extremely limited global range. It is also not locally abundant. Not much is known about threats or the degree of its rarity in the state at this time.

Inventory Needs: Appropriate habitat in the Olympic Mountains needs to be investigated.

Threats and Management Concerns: The greatest threats to *Saxifraga tischii* are catastrophic stochastic events.

Comments: Hitchcock et al. (1961) discusses a purple-petaled *Saxifraga* from the Olympics and vicinity, referring to them as *S. occidentalis* Wats. var. *rufidula* Small. However, these collections were later determined by Skelly (1988) to be a distinct species, *S. tischii*.

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.

Skelly, R.J. 1988. A new species of *Saxifraga* (Saxifragaceae) from the Olympic Mountains, Washington, and Vancouver Island, British Columbia. *Madrono* 35:2, 126-131.

Tisch, Ed. 2005. Letter to WNHP

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