

Micranthes porsildiana

Saxifragaceae

(Calder & Savile) Elven & D.F. Murray

Synonyms: *Micranthes nelsoniana* ssp. *porsildiana*, *Saxifraga punctata* ssp. *porsildiana*

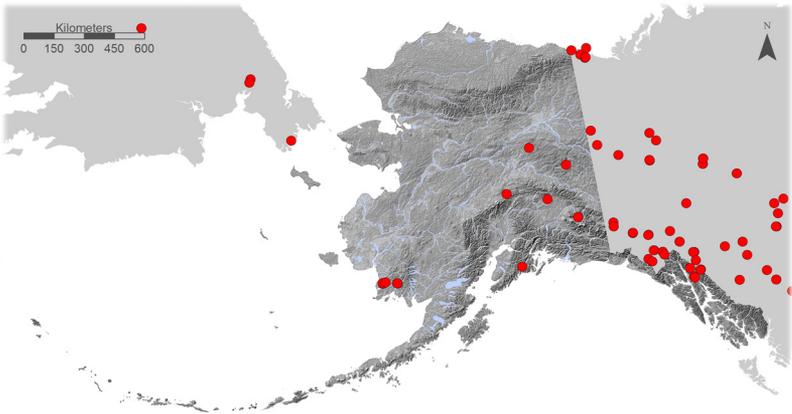
Notes: We consider *Micranthes pacifica* distinct from *Micranthes porsildiana*.

Global Distribution: Siberia and Russian Far East through northwestern North America to Nunavut.

Alaska Distribution: Bering Taiga, Intermontane-Boreal, Alaska Range Transition, Coastal Mountains Transition, Coastal Rainforests.

Ecoregions Occupied: Ahklun Mountains, Alaska Range, Yukon-Tanana Uplands, Wrangell Mountains, Chugach-St. Elias Mountains, Boundary Ranges.

Conservation Status: S3 G4; BLM Watch.



Description^{24, 25, 53, 127}

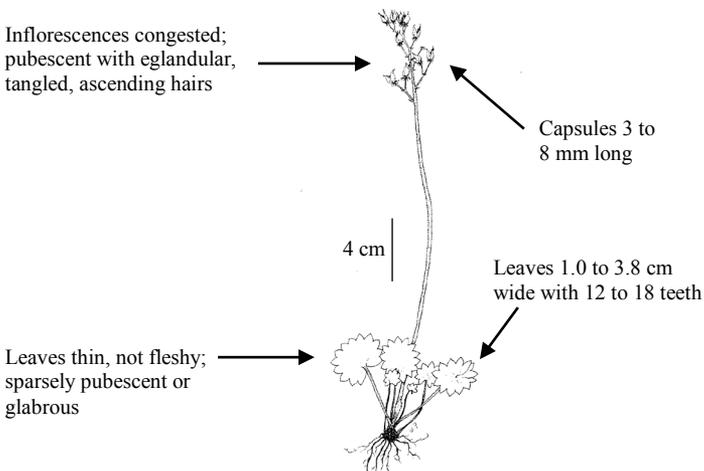


Illustration by Valerie Ford, courtesy of Canadian Science Publishing

Micranthes porsildiana

- General:** Perennial herb from thin rhizome; scapes 5 to 35 cm tall, glabrous or sparsely pubescent at base or sparsely pubescent above with eglandular hairs.
- Leaves:** Petioles rounded, 3 to 30 cm long; basal leaves kidney-shaped to round, 1.0 to 3.8 cm wide, 12- to 18-toothed, thin (not fleshy), often sparsely pubescent, sometimes glabrous; stem leaves absent.
- Flowers:** Inflorescences congested, pubescent with tangled, ascending hairs; sepals reflexed, ovate, shorter than petals; petals white to pink, ovate to oblong, 2.5 to 4.5 mm long.
- Fruits:** Capsules green to purple, 3 to 8 mm long, tips spreading to bent.



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Ecology

- Elevation:** Known from 40 to 2,050 m in Alaska; up to 2,500 m elsewhere in North America.¹²⁷
- Landform:** Rock outcrops, alpine slopes, alpine ridges, rocky seeps, stream banks; occurs obligately in late-melting snow areas in Chukotka Peninsula.¹²⁸
- Soil Type:** Mineral soil, scree, rock; known to occur on both ultramafic and acidic substrates.
- Moisture regime:** Wet to moist.
- Slope:** Slopes up to at least 40°.

Micranthes porsildiana

- Aspect:** No particular aspect.
- Vegetation type:** Sparsely vegetated, alpine tundra.
- Associated species:** *Cardamine purpurea*, *Chamerion latifolium*, *Cherleria dicranoides*, *Eritrichium aretioides* ssp. *chamissonis*, *Geum glaciale*, *Micranthes unalascensis*, *Minuartia arctica*, *Minuartia elegans*, *Saxifraga hirculus*, *Saxifraga serpyllifolia*, *Saxifraga setigera*, *Silene soczavana*.
- Longevity:** Perennial, longevity unknown.
- Phenology:** Fruiting early July through August.
- Population estimate:** There are 13 known occurrences in Alaska; at least one population is locally common.

Similar Species^{24, 25, 53, 127}

Micranthes porsildiana has been treated as a subspecies or variety of *Micranthes nelsoniana* by some authors, and it is easily confused with all taxa in the *Micranthes nelsoniana* complex. Brouillet and Elvander (2009) synonymized *Micranthes nelsoniana* var. *pacifica* with *Micranthes nelsoniana* var. *porsildiana*;¹²⁷ however, they are treated here as two distinct species since the two taxa are distinguishable with no intermediates when occurring together.⁴² The table below shows the differences in morphology that distinguish *Micranthes porsildiana* from similar species in the *Micranthes nelsoniana* complex that occur in Alaska.

Species	Leaf Hairs	Leaves	Inflorescence	Capsule
<i>Micranthes porsildiana</i>	Glabrous or sparsely pubescent	1.0 to 3.8 cm wide with 12 to 18 teeth; thin	Hairs ascending, eglandular	3 to 8 mm long; Cleft roughly ² / ₅ to ³ / ₄ of length
<i>Micranthes pacifica</i>	Slightly ciliate margins and slightly stiff-pubescent near petioles	2.3 to 7.7 cm wide with 12 to 18 teeth; thin	Hairs ascending, eglandular	3 to 8 mm long; Cleft roughly ¹ / ₄ to ³ / ₅ of length
<i>Micranthes nelsoniana</i> ssp. <i>insularis</i>	Leaves usually glabrous	12 to 18 teeth; thick, fleshy	Hairs ascending, eglandular	3 to 8 mm long
<i>Micranthes nelsoniana</i> ssp. <i>nelsoniana</i>	Pubescent on both sides	2.0 to 5.0 cm wide with 15 to 21 teeth; slightly fleshy	Purple- or brown-tipped glandular hairs	3 to 8 mm long
<i>Micranthes charlottae</i>	Leaves usually glabrous	6 to 12 teeth	Hairs ascending, eglandular	6 to 12 mm long