Cryptogramma stelleri (S.G. Gmel.) Prantl

Steller's rockbrake

Pteridaceae - maidenhair fern family status: State Sensitive, BLM sensitive, USFS sensitive

rank: G5 / S1S2

General Description: Delicate fern with a slender creeping rhizome, 1-1.5 mm diameter. Leaves of both fertile and sterile types, scattered along the rhizome, dying by late summer. Petioles dark brown or purple at least toward the base, usually greenish or light brown toward the top, mostly 2.5-5 cm long, hairless, the fertile ones a little longer than the sterile ones. Sterile leaves erect, 3-15 x 2-5 cm; blade broadly lanceolate to ovate-lanceolate, pinnate-pinnatifid or 2-pinnate. Pinnules merging, ovate-lanceolate to fan-shaped to ovate, toothed or shallowly lobed toward the tip, soft (not leathery), 5-15 x 3-10 mm wide.

Reproductive Characteristics: Fertile leaves erect, 5-20 cm long; blades pinnate-pinnatifid or 2-pinnate. Pinnules horizontal to ascending, often only partially differentiated from sterile leaves, generally longer, narrower, lanceolate to linear, 8-25 x 2-4 mm; margins reflexed, forming false indusia. Sporangia often in discrete sori. Identifiable June to August.

Identification Tips: *C. stelleri* is distinguished by its ephemeral dimorphic leaves, which are scattered on elongate, slender rhizomes. The leaves of other Cryptogramma species are present throughout the growing season and densely tufted on short, much branched rhizomes 4-20 mm in diameter.

Range: Western N.A. from central AK, Yukon, N.W.T., south to OR, NV, UT, and CO; eastern N.A. from Ontario to Newfoundland, south to WV, IL, IA. Also in Europe and Asia.

Habitat/Ecology: Moist, shaded cliffs and ledges, calcareous rock outcrops, and wooded slopes at middle and upper altitudes in the mountains. In WA it grows in rock crevices on limestone cliffs at 600-1830 m (2000-6000 ft). Associated species include western redcedar (Thuja plicata), Rocky Mountain maple (Acer glabrum), wood saxifrage (Saxifraga mertensiana), brittle bladder-fern (Cystopteris fragilis), and mosses.

Comments: Known from fewer than 10 occurrences in WA. It is rare in several states and Canadian provinces.

References: Flora of North America 1993+, vol. 2.





Illustration by Jeanne R. Janish, ©1969 University of Washington Press



photo by Joe Arnett