## **Pellaea brachyptera** (T. Moore) Baker

Sierra cliffbrake

Pteridaceae - maidenhair fern family status: State Sensitive, BLM sensitive, USFS sensitive rank: G4G5 / S2

**General Description:** A dapted from Flora of North America (1993+) and Munz (1970): Evergreen fern; stems stout, compact, ascending, 5-10 mm diameter, with bicolored, needle-shaped scales. Leaves of one type, 8-40 cm long, clustered on the stem. Petioles 4-20 cm long, dark brown or purplish brown, smooth, lustrous, without prominent crosswise grooves. Blade linear-oblong, 2-pinnate, dull grayish green, 4-21 x 1-4 cm, composed of 5-11 linear ultimate segments that are 5-20 mm long, leathery, hairless.

**Reproductive Characteristics:** Margins in the fertile segments strongly rolled backwards, covering greater than 1/2 of the undersurface, concealing the sporangia. Identifiable throughout the year.

**Identification Tips:** This species is not in Hitchcock & Cronquist (1973). *Pellaea breweri* has petioles with prominent crosswise grooves (articulation lines) near the base of the leaves. The leaves break off easily along these grooves, leaving the compact stems covered with persistent petiole bases. Additionally, the stem scales of *P. breweri* are uniformly reddish brown, and the base of the blade is pinnate-pinnatifid with deeply lobed, mitten-shaped pinnae.

Range: Northern CA to southwestern OR; disjunct in WA.

Habitat/Ecology: A rid sites with little vegetation, including open south-facing and west-facing slopes, in rocky soil, around the bases of boulders, and in sparse coniferous stands. Elevations in WA: 300-1100 m (1100-3500 ft). Associated species include ponderosa pine (Pinus ponderosa), Douglas-fir (Pseudotsuga menziesii), bitterbrush (Purshia tridentata), bluebunch wheatgrass (Pseudoroegneria spicata), Sandberg bluegrass (Poa secunda), cheatgrass (Bromus tectorum), spring draba (Draba verna), Wallace's spikemoss (Selaginella wallacei), arrowleaf balsamroot (Balsamorhiza sagittata), rat-tail fescue (Vulpia myuros) and silky lupine (Lupinus sericeus). Fire is not likely to carry through the rocky, sparsely vegetated sites.

**Comments:** *P. brachyptera* is known from a few sites in a small area in WA. Threats include habitat degradation from horse grazing and invasion of weedy plant species.

**References:** Alverson & Arnett 1986; Flora of North America 1993+, vol. 2; Hickman 1993; Lellinger 1985; Munz & Keck 1970; Tryon 1957.





photo by Joe Arnett



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