

Notholaena californica D. C. Eaton, CALIFORNIA CLOAK FERN. Perennial herb, evergreen, sclerophyllous, rhizomatous, fibrous-rooted, rosetted, compact with ascending leaves, in range < 15 cm tall; shoots having blades with thick-based, white hairs aging as stumps and releasing a powderlike coating (farinose); young fiddleheads at plant base, ± 2.5 mm across, dark-pigmented with scales typically shed early; rhizomes shallow, creeping and horizontal or ascending, to 20 mm long, branched, with scaly at tips, the scales strongly appressed, narrowly triangular-acuminate, $1.3\text{--}3.8 \times 0.2\text{--}0.5$ mm, glossy dark brownish to nearly black, rigid, toothed or barbed and sometimes narrowly colorless on margins, tapered to a bristly tip, persistent. **Leaves (fronds):** helically alternate, typically odd-3-pinnately compound and dissected with 3–9 opposite pairs of primary leaflets, petiolate; petiole (stipe) cylindric, 25–115 mm long, dark brown, often somewhat farinose along axis, sparsely scaly or not at base, the scales narrowly triangular-acuminate, $2.5\text{--}3.3 \times 0.4\text{--}0.7$ mm, brown to dark brown and toothed (lower scales) to membranous and \pm entire (upper scales); blade broadly pentagonal in outline, in range $15\text{--}55 \times 15\text{--}45$ mm < petiole, 3-pinnately compound at base grading to 1-pinnate or pinnately dissected approaching tip; rachis shallowly channeled, brown but green on upper side approaching tip, farinose; primary leaflet asymmetrically lanceolate, to 30 mm long at base gradually decreasing upward, with secondary leaflets on trailing side typically > secondary leaflets on leading side, basal leaflet 2-pinnately compound grading to others less compound; axis channeled, brown on lower side and green on upper side, farinose; secondary leaflets opposite to sometimes alternate, lanceolate, 2–10 mm long but the lowest leaflets to 5 mm > others, axis channeled, brown on lower side and green on upper side, farinose; ultimate segments sessile to subsessile, free or fused to axis, ovate to oblong, $1.5\text{--}3.5 \times 1\text{--}2.3$ mm, dull green, inrolled to lower side (revolute) forming a false indusium partially concealing sporangia on lower surface, upper surface with persistent bases of scattered hairs appearing sparsely to moderately white-farinose, lower surface densely farinose. **Sporangia:** on lower surface, spheroid, 0.25–0.35 mm, brown with ringlike dehiscence mechanism (annulus) a darker ring, \pm sessile with stalk ca. 0.1 mm long; 32-spored. Sporulation late December–April.

Native. Perennial herb seldom encountered in central to western SMM and northeastern SH on dry slopes growing along the edges of sandstone boulders and also on weathered volcanic rubble. *Notholaena californica* is a fern having the sporangia protected by the inrolled (revolute) margins of the blade lobes. This species has unusual short hairs; this hair form has a thick base with a thin-walled upper portion that produces a chemical, released as an exudate from the old, damaged hair. All individuals in range have white hairs and exudate, a characteristic of subsp. *leucophylla* Windham, if recognized.

B. A. Prigge & A. C. Gibson