Polystichum californicum (D.C. Eaton) Diels

California swordfern Dryopteridaceae - wood fern family status: State Threatened, BLM strategic rank: G4 / S1S2

General Description: Perennial evergreen fern. Leaves of one type, arching or erect, 2-8 dm long. Petioles 1/5-1/3 the length of the leaf, with light brown scales. Stem lacking bulblets at upper pinnae bases. Blade lanceolate to linear-lanceolate, 1-pinnate-pinnatifid. Pinnae approximately 20-45 on each side of the main stem, 2-10 cm long, oblong, lanceolate or curved, shallowly to deeply divided, with an enlarged basal lobe; margins finely toothed to spiny with ascending teeth. Small hairs dense on the lower pinnae surfaces, sparse on the upper surfaces.

Reproductive Characteristics: Sori round, in a row between the midrib and the margins. Indusia ciliate, stalk attached to middle of lower surface. Spores brown. Identifiable year-round.

Identification Tips: *P. californicum* is similar to *P. munitum*, *P. scopulinum*, and *P. andersonii*; identification is complicated by the frequent presence of hybrids. *P. munitum* is 1-pinnate; pinnae are undivided but have finely toothed to spiny margins. *P. scopulinum* leaves are usually less than 3 dm long. *P. andersonii* is distinguished by the presence of scaly bulblets on the upper 1/3 of the blade, at the junction between stem and pinnae bases.

Range: Southern B.C. to CA, generally west of the Cascade crest.

Habitat/Ecology: Throughout its range, this fern grows in a wide variety of habitats, including slopes, dry rocky terrain, stream banks, vertical cliffs, rock crevices, moist sites, shaded sites, partial shade, or open areas. It is commonly found in the lowlands from the coast to middle elevations in the mountains, but it has not been found in heavily saturated conditions or at high elevations. All WA populations grow in crevices of cliffs or rock outcrops, at elevations of 240 to 300 m (800-1000 ft).

Comments: Threats include trampling, collection by hikers, timber harvest, and herbicide use. This species is also rare in OR.

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

