

Calocedrus decurrens (Torrey) Florin, INCENSE CEDAR. Tree, evergreen, scale-leaved, 1-trunked, with spreading, flexible branches, narrowly conic, in range to 5 m tall (not yet reproductive); monoecious; shoots 3–4 mm across, same on upper and lower sides, strongly 2-dimensional (plagiotrophic) with green branchlets in flat, fan-shaped sprays, bright green with gray-green stripes and flecks, glabrous, having resin in resin ducts but lacking raised secretory structures on shoots, aromatic when crushed. **Stems:** hidden on green shoots (covered by decurrent leaf bases fused to stem), stem segments with internodes alternating from very short to long, the long internodes 2–17 mm long; behind green shoots young woody stems with smooth, brown periderm after leaves from upper and lower sides (facial leaves) and later 2 side leaves (lateral leaves) abscise; bark on large branches with abscising flakes, trunk bark fibrous and somewhat peeling in thick strips, furrowed and deeply ridged, grayish brown and inner bark cinnamon brown. **Leaves:** opposite decussate but appearing to be in whorls of 4, in 4 vertical rows (4-ranked), dimorphic, simple with decurrent bases = length of long internode, sessile and tightly appressed, without stipules; of facial leaves decurrent base narrowly wedge-shaped, free blade scalelike and deltate to 5-sided, 1–1.4 mm long, minutely toothed on upper margins, venation obscure; of lateral decurrent bases overlapping bases of facial pair, linear and round-keeled, free blade ascending and narrowly triangular, 1.5–4 mm long, entire, pointed at tip, venation obscure. **Cones:** unisexual, terminal and sessile on green shoots with short internodes, dimorphic. **Pollen cone:** spikelike, on lower side of plagiotrophic branchlets, \pm 4-sided oblong-ovate, $3\text{--}4 \times 1\text{--}1.5$ mm, pale brown, blunt at tip, of 6–8 nodes of opposite decussate, overlapping microsporophylls, fragile and easily dislodged, abscised after discharging pollen; microsporophylls umbrellalike (peltate) with \pm broadly ovate papery scale, the scale 1–1.4 mm long, obtuse at tip and corners with scarious, minutely jagged margin, each with 4 spheroid pollen sacs; pollen light yellow. **Seed cone:** on outer edges of branchlets, of (4–)6 opposite decussate scales but only 1 pair (or only 1 scale, the median one) fertile; at pollination 3 mm across, scales thick below midpoint, greenish to flesh-colored and glaucous, lower sterile scales ovate, ± 2.7 mm long, fertile scales potentially with 2 female sporangia on upper surface and spreading at pollination, deltate-ovate, 2 mm long, thick below midpoint, upper sterile scale pyramidal, 1 mm long, also having 2 undeveloped scales at growing tip; cone 1–4-seeded (maximum 2 per fertile scale), when closed oblong-ovate, 15–30 mm long, brown, when releasing seeds becoming narrowly ovate with upper 2 sterile scales erect and the fertile scales widely spreading to recurved. **Seed:** winged, $15\text{--}21 \times 6.5\text{--}7.5$ mm; seed body $4.5\text{--}6 \times 0.5\text{--}0.7$ mm, tannish, wings light brown to yellowish brown. Mid-March–April.

Waif (native). Evergreen gymnosperm cultivated in rustic communities (SMM) but with known escapes at least along Bulldog Road on Malibu Creek State Park in shaded southern oak woodland, near where a culvert was constructed. *Calocedrus decurrens*, incense cedar, has distinctive, flattened green shoots three to four millimeters wide, with a repeating pattern of four leaves in a curious geometric design that hides the stem with green leaf tissue. To date specimens in the wild have not yet produced cones, but they will form cones when they become tall enough.

B. A. Prigge & A. C. Gibson