Opuntia oricola Philbrick, CHAPARRAL PRICKLY PEAR. Shrub, stem-succulent, spinescent, clonal, forming individual plants and thickets via rooted stem segments of broken branches, fibrous-rooted, 1–several-stemmed at base, green-stemmed, irregularly branched, ascending to erect (= tall plants) or spreading to decumbent (= thickets), in range 90–190 cm tall; shoot = a series of flattened, photosynthetic stem segments (cladodes, also called pads or joints), narrowly constricted between segments not readily breaking apart, cladodes with helically arranged short shoots (from axillary buds) bearing clusters of radiating leaf spines (areoles) on pads at all nodes on the stem surface; major upright stem somewhat woody, trunk to 300 mm long; adventitious roots never from nodes. **Stems:** cladodes in outline subroundish to obovate (elliptic), 160–260 × 100–200 mm, typically 10–15 mm thick at midpoint, with helically arranged, low tubercles (≈ modified leaf bases) and associated spine-bearing areoles in the axils; tubercles ± domelike on new cladodes become ± flattened, dark green, photosynthetic, glabrous; flesh (cortex and pith) watery and mucilaginous; areoles round to oblong, in range 3–5 mm across, covered with tannish woolly hair aging brown. **Leaves:** helically alternate, simple, sessile, without stipules, dimorphic; photosynthetic cauline leaves short-lived on newly emerging shoots, narrowly conic compressed somewhat on surface next to stem, 5–7 × 2 mm, fleshy, green and purplish, short-pointed at tip, arching toward cladode tip, abscising during shoot expansion and absent when cladode < 1/3 mature size; leaf spines on areoles (= modified leaf) of two types, persistent and radial spines + deciduous glochids, not photosynthetic; radial spines (i.e., > 9 mm long) (5–)7–8(–13) per areole, unequal, linear, the longest in range typically 20–32 mm long, slender, straight to somewhat curved, angular flattened in ×-section, sharp-pointed, translucent yellow turning red-brown to brown and soon aging gray, lacking spine sheath; deciduous spines (glochids) barbed at tip, irritating in skin, formed in a dense, erect cluster at upper edge of areole, in range typically 2.5–3 mm long, orangish. **Inflorescence:** flowers solitary (areole dies after flowering), sessile, with ovary covered with stem tissue hence having tubercles and spine-bearing areoles and short-lived, narrowly conic cauline leaves. **Flower:** bisexual, radial, 30–70 mm across; **perianth** of > 20 segments; segments free, helically alternate, overlapping, unequal in a graded series, the outermost segment several mm long, greenish with rose, short, the longest inner segments obovate, 32–36 × to 15 mm, yellow but blushed rose from the back surface and aging orangish; perianth abscising from immature fruit as a unit with stamens forming a deep inverted deltoid depression; **stamens** > 200, free, formed on a steeply sloped axis, at anthesis erect but when touched responding and quickly tilting toward style; filaments slender, linear, of the outermost stamens 11–12 mm long gradually reduced to 4.5–5 mm of the innermost stamens, the longest orange-yellow, paler toward center; anthers dorsifixed, dithecal, 2.3–3 mm long, lighter in color than filaments, pale orange-yellow, longitudinally dehiscent; pollen pale orange-yellow; **pistil** 1; ovary inferior, embedded in receptacle (stem tissue), inversely conic, 21–25 mm wide, relatively smooth with tubercles ± absent, briefly bearing ephemeral, rose-purple conic leaves (photosynthetic) like stems to 7 mm long, areoles ± round, hairs projecting, with glochids and fine deciduous spines weakly attached at base; 1-chambered with many ovules attached to outer margin, chamber narrowly inversely triangular in longitudinal section, ovary wall thick and mucilaginous; style thick, inversely club-shaped, 19–20 × 6–6.5 mm (below stigma), crimson red to deep rose, surrounded by sunken nectary chamber; stigmas exserted to 6 mm above central

anthers, = 10–11(–12) fleshy, fingerlike to tonguelike lobes 5–6 mm long, incurved, green, papillate with a colorless hair projecting near tip. **Fruit:** berry, several–many-seeded, obovoid to barrel-shaped, in range 33–42 mm long, purple, with clusters of tannish glochids and darker deciduous spines to 15 mm long; fruit wall thick, 5–7 mm; pulp watery, watermelon-colored to yellowish around seeds in oval-shaped chamber. **Seed:** ± roundish in outline, 3.5–4 mm, bony, central portion heart-shaped, gray, encircling girdle dark orange-brown, protruding to 0.4 mm. Mid-May–mid-August.

Native. Stem-succulent shrub with cladodes, a naturally occurring triploid platyopuntia found as scattered small populations along the Malibu coastline growing with *O. littoralis*, from western Wildwood Regional Park westward along the Conejo Grade, and also in a large population on the northwestern edge of the range in Ventura County near the campus of California State University, Channel Islands. *Opuntia oricola* grows taller than the more common, thicket-forming platyopuntias but co-occurs with them, so that care must be taken to observe the necessary suite of characteristics needed to identify each individual correctly. In *O. oricola*, developing cladodes have slender, translucent yellow spines aging brown and then gray (not whitish), and on mature cladodes the longest spines rarely exceed twenty-eight millimetes in length. The photosynthetic leaves are very short-lived in this species. Styles are either bright red or deep rose with ten to eleven green, incurved stigma lobes (pull out the style to observe), and filaments of the outermost stamens are orange-yellow. After abscising all flower parts above the ovary, a deep, inverted deltoid depression can be observed, whereas a few months later the ovary of *O. oricola* has swollen and may become barrel-shaped to subspheroid without the deep depression, or, alternatively, the depression my persist and be 15 mm deep. Seeds are gray and have a narrow, arilloid girdle. Fruits of *O. oricola* are relatively firm rather than juicy, having a thick wall, and sometimes only the surface is pigmented purple; the juicy tissue within the chamber tends to have very little pigmentation, so that the pulp in never purple, as in many opuntias.

Our largest population of *O. oricola* was badly scorched by wildfire in 2007. Of all opuntioids in range, flowers of this taxon are most heavily populated by pollinating beetles. In Ventura County, both coastal and inland sites appear to have hybrid swarms involving *O. oricola* as one of the parents, and hybrids exhibit a blend of characters of both parents, and often more of one versus the other depending on parentage, so that individuals closer to *O. oricola* are best recognized by being comparatively tall and having more of its characteristic spination on cladodes and fruits.
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