

Dudleya caespitosa (Haw.) Britt. & Rose, COAST DUDLEYA, SAND-LETTUCE. Perennial herb, leaf-succulent, evergreen, taprooted with thick caudex, rosetted, several-stemmed at base, caespitose, forming a cluster of several rosettes, branching from within the rosette every 3–4 years to form \pm equal decumbent shoots, with erect to ascending axillary inflorescences to 55 cm tall; shoots with terminal rosettes in range 50–80 \times 50–110 mm, having 12–17+ healthy, fully expanded, spreading to ascending leaves, a set of immature leaves in the center, and a set of senescing to dead, shriveled leaves (persisting ca. 3 years) on the under side of the rosette, gray-green, glabrous; taproot shallow, woody and not succulent. **Stems:** below rosettes and visible as old leaves disappear, 2–40 mm thick, virtually without internodes, succulent with water-storing tissues and a cylinder of highly specialized wood, covered with periderm and old leaves. **Leaves:** helically alternate, simple, sessile, without stipules; blade lanceolate to oblong or oblong-oblong, to 50 \times 9–15 mm, to 9 mm thick at base and half as thick at midpoint, entire, acute to acuminate at tip, venation obscure, glaucous but not powdery. **Inflorescence:** cyme, axillary, several arising from lower rosette below healthy leaves, terminal on long peduncle with many succulent bracts (“cauline leaves”) helically alternate in a graded series, many-flowered on terminal cyme branches, 1-sided, at top of peduncle 2–4 \times 2-forked (sometimes 3-forked at base or on lateral branches), major units in range 60–120 \times 60–180 mm when fully expanded, each branch \pm ascending, ultimate branches 3–6, 4–14-flowered, glabrous, distinctly glaucous; peduncle ascending to erect, cylindrical, 270–450 mm long, to 5 mm diameter at base, bracteate, hollow; bracts along peduncle sessile, spreading to reflexed, at peduncle base acuminate-triangular to lanceolate, 9–30 \times 5–6.5 mm decreasing upward, sometimes with base slightly decurrent; ultimate branches to 70 mm long, flexible; bractlet often not subtending pedicel but mostly subopposite pedicel and lower on axis than pedicel, ovate, 1.8–4 \times 1.5–3 mm, thick and fleshy, green and conspicuously glaucous, \pm cordate at base, acute to acuminate at tip; internodes at anthesis 3–4.5 mm long increasing 2 \times in fruit; pedicel erect, 0.7–3 mm long, green and glaucous, not bent in fruit. **Flower:** bisexual, radial, erect, 5–9.5 mm across; **calyx** 5-lobed, cup-shaped, 4–8 mm diameter, fleshy, green, glaucous; tube 1.5–2 mm long; lobes triangular, 2.5–4 \times 2.5–3.3 mm, glossy green beneath surface wax becoming reddish; **corolla** 5-lobed, bright greenish yellow or bright yellow; tube cup-shaped, in range \pm 1 mm long; lobes overlapping, erect but arching outward at tip, ovate, 7–12.8 \times 3.1–4.5 mm, broadly and thickly keeled and becoming orange-red along keel, acute at tip; **stamens** 10 in 2 whorls opposite and alternate with corolla lobes, fused to corolla tube, included, somewhat dimorphic; filaments tapered, 0.3–0.8 mm wide at base, fleshy, light to pale yellow, filaments of outer whorl opposite calyx lobes fused 1 mm below sinuses of corolla, free portion 3–7 mm long, filaments of inner whorl opposite corolla lobes fused to top of corolla tube and appressed to lobe, fused portion 1–2.5 mm long and free portion 2–5 mm long, narrower at base than outer filaments; anthers basifixed (filament tip inserted into a short tube in connective), dithecal, \pm oblong, 1–1.3 \times 0.6 mm, yellow, \pm truncate at base, rounded at tip, longitudinally dehiscent; pollen yellow; **nectaries** 5, opposite petals at bases of pistils, oblong to arching-oblong, \pm 1 \times 0.3–0.4 mm, pale green, elevated \pm 0.25 mm above receptacle; **pistils** 5, slightly fused at base, erect and appressed; ovaries superior, each narrowly fusiform, 5–5.5 \times 1.5–1.6 mm, light green, convex on back and angled on inner face, pie-shaped in \times -

section, tapered to style, each 1-chambered with 30–40 ovules attached to outer side; styles gradually tapered from ovary, 2–2.5 mm long, light green above ovary becoming darker green below stigma; stigma terminal to minutely capitate, ± 0.25 mm, light green, minutely papillate. **Fruits:** follicles, 5, erect, each dehiscent along inner edge, many-seeded, narrowly fusiform-lanceoloid, 8–9 mm long (including persistent style). **Seed:** lanceoloid, $1.1\text{--}1.3 \times 0.4\text{--}0.5$ mm, brown, with ca. 18 longitudinal ribs. Late March–late July.

Native. Succulent perennial herb growing only along the immediate coast just behind dunes from Malibu westward, in community associations with *Abronia umbellata*, *Leptosyne gigantea*, *Croton californicus*, and *Eriogonum parvifolium*. *Dudleya caespitosa* has a fairly distinctive vegetative plant, with a caespitose growth habit having several rosettes of glaucous leaves, but the taxonomic status of these populations may not yet be fully resolved.

B. A. Prigge & A. C. Gibson