

Abronia umbellata Lam. var. *umbellata*, BEACH SAND-VERBENA. Annual, taprooted, several-stemmed at base, mat-forming, prostrate and often with buried stems, commonly spreading > 100 cm from base, < 25 cm tall; shoots branching unequally at nodes, with 2 blade sizes per node (anisophyllous), with ascending leaves and inflorescences, glandular-hairy and having loosely adherent sand grains but not viscid; lacking adventitious nodal roots on sand-buried stems. **Stems:** cylindric, to 7 mm diameter, tough, green, pink, or purplish, internodes 10–75 mm long. **Leaves:** opposite decussate, simple, petiolate, without stipules; petiole cylindric, 10–60 mm long; blade elliptic or oval to ovate or obovate, 15–60(–70) × 8–35(–50) mm, somewhat fleshy, 1–1.7 mm thick, dark green and sometimes glaucous, oblique at base, entire and slightly wavy on margins, rounded or obtuse at tip, pinnately veined, evenly glandular-puberulent. **Inflorescence:** headlike, axillary, only 1 per node, hemispheric and umbel-like, in range 25–30 mm across, 10–27-flowered, flowers sessile subtended by an involucre, all flowers open ± at same time, glandular-hairy but not viscid; peduncle erect, 30–80 mm long increasing 2× in fruit, > subtending petiole, magenta purple, glandular-hairy; **involucre** of 5 helically alternate bracts, bracts appressed in bud and spreading at anthesis, lanceolate to ovate, 5–8 × 3–5 mm (if 6, the innermost bract linear and more narrow), magenta to green, glandular-hairy, persistent. **Flower:** bisexual, radial, 10–12(–16) mm across, 12–18 mm long; **perianth (calyx)** corollalike, 5-lobed, narrowly trumpet-shaped (salverform), the base 2–3 × 1.5–2.7 mm, 2–5-angled or 2–5-winged, deep fuchsia to brownish magenta purple (green), hairy; tube ± cylindric to 5-angled, 9–13 mm long, magenta purple at base and greenish above, hairy; lobes conspicuously 2-lobed to heart-shaped, 4–6.5 mm wide, with spreading margins, light to bright lavender or magenta to fuchsia with white (yellowish) center, glabrous; **stamens** 5, fused at base to form a cup and fused to the perianth tube over most of its length, included; filament cup ca. 0.7 mm long around ovary, then free for ca. 1 mm, fused between 1/3 and 3/4 distance along perianth tube, free for 0.5–1 mm below anther; anthers dorsifixed, dithecal, 0.9–1.5 mm long, brilliant yellow, longitudinally dehiscent; pollen vivid yellow (slightly darker); **pistil** 1; ovary superior but appearing inferior because having thick perianth tissue surrounding ovary, ovoid to club-shaped, ± 1 × 0.5 mm, 1-chambered with 1 ovule; style included, 4–7.5 mm long, rising to midpoint of perianth tube, light pink; stigma on slightly widened end of style, 2–2.5 mm long, whitish. **Fruits:** achenelike anthocarps in headlike cluster (diclesium); anthocarp 1-seeded, turbinlike in outline and heart-shaped in longisection, 7–10 × 8.5–12 mm, tan, slightly beaked, (2–)3–5-winged; wings derived from base of perianth, thin when dry, unequal, lobelike, broadly tapered at base, rounded to truncate at top, glandular-hairy becoming ± glabrescent, weakly veined. **Seed:** ± narrowly ellipsoid, 3.2–3.5 × 1.1–1.3 mm, grayish brown, hilum lateral at base; funiculus ca. 0.7 mm long, pinkish, with persistent filament base. Early December–mid-September.

Native. A relatively common, trailing annual growing on sand of stabilized backdunes, coastal bluffs, and disturbed sandy areas mostly within sight of the ocean. When the two species of sand-verbena are growing together, e.g., at Leo Carrillo State Beach, one can easily tell them apart because the plant *Abronia maritima* is sticky (viscid) and has thick, fleshy, rigidly erect leaves, whereas *A. umbellata* is not viscid and the leaves are darker, thinner, and more flexible. Moreover, the annual species does not form adventitious roots

along the shoots. In flower, the differences are clear between the lavender to magenta with white center flowers of *A. umbellata* versus dark red-purple of the other species. Some authors treat this as a subspecies rather than as a variety. Hybrids between the two species may occur but have not been vouchered in range.

B. A. Prigge & A. C. Gibson