

Ambrosia chamissonis (Less.) Greene, BEACH-BUR, BEACH BURSAGE. Subshrub, evergreen, deep-taprooted, sprawling and \pm moundlike from deeply buried caudex, < 40 cm tall; monoecious; shoots grayish, densely canescent and with short-stalked glandular hairs concealed by the cover of nonglandular hairs, the nonglandular hairs appressed, the glandular hairs with colorless heads, strongly aromatic. **Stems:** cylindric, striped with inconspicuous ridges, sometimes turning red-purple. **Leaves:** helically alternate and opposite decussate (variable on the same individual), 2–3-pinnately lobed, petiolate and on vigorous shoots with pairs (opposite leaves) connected by 2 low ledges across node, without stipules; petiole shallowly channeled, 8–30 mm long, flattened and expanded at base, green with 3 grayish to reddish strands on lower side and 1 large strand on upper side, strigose and sparsely, minutely glandular-hairy; blade deltate to ovate or lanceolate to elliptic in outline, 17–70 \times 15–65 mm, primary lobes 6–14, lateral lobes mostly opposite or subopposite, typically with a smaller, simpler lobe alternating with larger, more complex lobes; large lobes further lobed, somewhat irregularly so with the trailing edge more lobed than leading edge, ultimate lobes or teeth \pm fleshy and thick, flat to somewhat inrolled to the under side, rounded to obtuse at tip, pinnately veined with principal veins sunken on upper surface, densely hairy. **Inflorescences:** unisexual heads, in terminal arrays with pistillate heads clustered at base and pendent staminate heads above in a racemelike cluster, array spreading to erect, 50–130 mm long (mostly staminate), pistillate portion of 3–7 nodes with sessile to subsessile solitary heads or condensed lateral cymes of 2–11 heads, staminate portion with > 20 nodes having 1 pendent, short-stalked, staminate head per node, staminate head of 11–45 discoid flowers, bracteate, hairy; bract subtending pistillate head 0–1, lobed (lower heads) to highly reduced (upper heads), cupped-oblong to cupped-oblong, ca. 2 \times 0.5 mm, obtuse at tip. **Staminate head: involucre** bowl-like to saucer-shaped, 4–6 mm diameter, phyllaries 10–15 and fused, < 2 mm long, green, acute to rounded at tip, glabrous with scattered short-stalked glandular hairs. **Staminate flower:** radial, ca. 1 mm across, 2–2.5 mm long; **calyx (pappus)** absent; **corolla** (4–)5-lobed, inversely conic, at anthesis pale yellow-transparent to \pm colorless tinged rose along veins below sinuses and on lobe margins; tube ca. 1.5 mm long; lobes deltate; **stamens** 5, fused to base of corolla; filaments ca. 0.75 mm long; anthers fused into cylinder surrounding style, somewhat exerted, basifixed, dithecal, \pm 1.3 mm long, light yellow, cordate at base, with pointed appendages at tip, longitudinally dehiscent; pollen light yellow; **pistil** absent. **Pistillate head:** with 1 flower enclosed within an involucre; **involucre** spinescent, fusiform to pear-shaped, at anthesis ca. 3 mm across, phyllaries 10–26, ascending to suberect and with bases fused, narrowly conic with spine tip, projections ca. 1 mm long, the inner phyllaries forming a short beak, with minute glandular hairs. **Pistillate flower: calyx (pappus)** absent; **corolla** absent; **stamens** absent; **pistil** 1; ovary inferior, fusiform, 3–4.3 mm long, 2-lipped around style base, 1-chambered with 1 ovule; style 2-branched, the branches exerted through short beak, fused at base, 2.5–4 mm long, green, stigmatic. **Fruit:** cypsela, 1 surrounded by hard, burlike involucre; spinescent involucre 5–12 \times 3–10 mm, tan and light brown, spines spreading to recurved, rigid, cylindric, flattened, or slightly grooved on upper side, sharply pointed; cypsela permanently encased by bur, narrowly fusiform, 4–8 \times 0.8–1.3 mm, blackish. Mid-May–early September.

Native. Evergreen subshrub codominant on open sand dunes with *Cakile maritima* on the outer face of that strand community. *Ambrosia chamissonis* is a pioneer species that forms low mounds and becomes several meters across. Roots are anchored in deep, wet sand, and shoot bases are buried by sand, which the plant collects because the canopy causes blowing sand to settle there. *Ambrosia chamissonis* has gray-hairy, deeply lobed leaves, in both opposite and alternate arrangement, which are strongly aromatic. Beach-bur is so-called because the female heads are like burs, actually having just one flower surrounded by an involucre with spiny phyllaries.

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