Eriogonum fasciculatum Benth, var. foliolosum (Nutt.) Abrams, COASTAL CALIFORNIA BUCKWHEAT, LEAFY CALIFORNIA BUCKWHEAT. Shrub, evergreen, several-many-stemmed at base, with erect to spreading branches, in range 30–190 cm tall; shoots with only cauline leaves, herbaceous and woody branches exhibiting long shoot-short shoot organization, with tufted, ascending, leathery leaves (fasciculate) densely crowded on an unexpanded short shoot at each node. Stems: cylindric, greenish or tannish turning reddish, villous-tomentose, splitting with periderm formation: bark fissured and peelable, outer bark gray, inner bark reddish brown. **Leaves:** helically alternate, simple, short-petiolate, without stipules (no ocrea); petiole partially sheathing, triangular, $1-3 \times 1.5-3$ mm long, whitish, 3-veined (lateral veins sometimes obscure), short-ciliate on margins, exposed surface glabrous, concealed surface short-hairy, aging brownish and scarious; blade linear to elliptic-linear or oblanceolate-linear, $6-23 \times 1-3.7$ mm, tapered at base, entire with margins inrolled under (revolute), acute at tip, with only midrib conspicuous and raised on lower surface, upper surface green to gravish green and sparsely to moderately shorthairy (hirtellous) to glabrous, lower surface densely white-tomentose (somewhat obscured by revolute margins). Inflorescence: involucre-enclosed units (cymes) in terminal, umbel-like compound arrays, having 3–5 orders of branching, 30–150+ mm across, branching umbel-like terminating at each fork, many-flowered in dense hemispheroid clusters 12–30 mm across, flowers produced within involucres, each involucre containing 1 cyme, bracteate, sparsely villous (glabrescent) to tomentose; peduncle ascending to erect, 25-150+ mm long; bracts subtending the lowest fork = number of primary rays, leaflike, narrowly elliptic to oblanceolate and petiolate, to 6 mm long; primary rays 2–6, of unequal lengths and diameters, erect to spreading to produce next order of branching, with 1 sessile involucre in fork surrounded by primary rays; bracts at node subtending successive forks (2–)3, basally fused, leaflike reduced upward; secondary rays unequal and < 1/2 as long as peduncle, higher order rays and branchlets successively shorter than preceding branch, at second-order fork and above also each with 1 terminal involucre; bracts subtending involucre narrowly tapered to awl-shaped and sessile. Involucre: subtending cyme sessile (or on a short branchlet), funnel-shaped to bell-shaped, $3-5 \times (1.5-)2-2.5$ mm (spreading in fruit), (10-)17–36-flowered formed and opening during several weeks, with 5(-6) green lobes extending ca. 0.4 mm beyond rim, short-villous to tomentose or glabrescent, 5(-6)-angled with 5(-6) green ribs alternating above midpoint with inversely triangular, white-membranous patches; bractlets subtending pedicel 2, $\pm 1.5-3$ mm long, threadlike to narrow-lanceolate, white, with long, ascending hairs; pedicel at anthesis 3-7 mm long increasing somewhat in fruit, \pm elastic. Flower: bisexual, radial, 3-5.5 mm across, lightly scented; perianth 6-lobed, broadly funnel-shaped; tube inversely conic, 0.5–0.7 mm long, green, with some colorless hairs, internally glabrous and glossy; lobes (tepals) in 2 whorls, \pm monomorphic, \pm obovate, $2-2.9 \times (1-)1.3-1.9$ mm, outer lobes < and wider than inner lobes, white or pinkish with greenish or reddish midstripe, the midstripe lanceolate to narrowly wedge-shaped, wider on outer lobes, lower margins and upper green surfaces short-villous; stamens 9, fused to perianth tube; filaments exserted, spreading, 2.7–3.3 mm long, white, hairy at base; anthers medifixed, dithecal, 0.3-0.7 mm long, dark reddish pink, longitudinally dehiscent; pollen honey-colored or tranlucent yellow-orange; nectary obscure; pistil 1; ovary superior, cylindic-fusiform, 3-angled, $\pm 1.2 \times 0.5$ mm, mostly reddish but greenish at base, 1-chambered with 1 ovule; styles 3, exserted, 2.5–3.5 mm long, initially coiled; stigmas minutely spheric. Fruit: achene (diclesium), lanceoloid, $2.5-3(-4) \times 0.8-1.2$ mm, 3-sided above midpoint, dull or glossy orange-brown to brown and darker at tip, glabrous. Seed: lanceoloid, slightly smaller than fruit, orangish or light brownish orange. January-December.

Native. Evergreen shrub found commonly throughout the range, coastal and inland, especially at sunny sites, where it is a dominant or codominant species in coastal sage scrub communities and, less abundant, in chaparral. *Eriogonum fasciculatum* has long shoot-short shoot organization, with leaves in "fascicles" formed helically alternate along the main shoots, whereas chamise

(*Adenostoma fasciculatum*), a dominant species of chaparral, has fascicled leaves on opposite short shoots. *Eriogonum fasciculatum* typically flowers from early spring through mid-summer, even during drought years, but coastal locations may have some individuals bearing flowers during any week of the year. Within a population there may be only white-flowered individuals, but at many locations white and different shades of pink to rose flowers can be found on adjacent shrubs. The dried flowers tend to remain on the plant, so during fruit formation this buckwheat species has a crop of conspicuous brown "heads."

In range populations typically are variety *foliolosum*, which has inrolled (revolute) leaves, but California buckwheat has been planted in range, and it is likely that the desert form (variety *polifolium*), which tends to lack revolute leaves, will be found, and other varieties are to be expected. Although not observed during the study, historical records indicate that *E. fasciculatum* var. *fasciculatum* also occurs in range, and observers should look for a coastal population having less pubescence, i.e., the stems and inflorescence axes, upper surface of the inrolled blades, and involucre are essentially glabrous and, more importantly, the lobes of the perianth lack hairs. B. A. Prigge & A. C. Gibson