Trichostema lanatum Benth., WOOLLY BLUECURLS. Shrub, evergreen, in range 85–170 cm tall; shoots with leaves appearing tufted at nodes due to rapid formation of axillary shoots with leaves, young shoots and reproductive structures conspicuously white-woolly and villous with long, soft hairs and stalked glandular hairs, strongly aromatic. **Stems:** ± cylindric, (4-sided only on very young stems), remaining tomentose on older stems. **Leaves:** opposite decussate, simple, ± sessile, without stipules; petiole indefinite or extremely short; blade linear, on main axis 55–75 mm long, on unexpanded axillary shoots about half that length, when flattened rarely exceeding 6 mm wide, entire but strongly inrolled under (revolute) so leaves appearing only a few mm wide, acute at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, upper surface initially with scattered glandular hairs becoming glabrescent and glossy, lower surface woolly (less so on flat blades) with many glandular hairs. **Inflorescence:** interrupted panicle of paired axillary cymes (verticils), terminal, not leafy, each cyme 1–8-flowered, bracteate, densely covered with woolly hairs and glandular-hairy; peduncle short, axis purple-red, concealed by white shaggy to cobwebby hairs; bract subtending cyme leaflike, lanceolate, to 17 mm long; bractlet subtending pedicel lanceolate to narrowly rhombic-lanceolate, to 10 mm long, green, ± glabrous on inner (upper) surface; pedicel strongly flattened, 1–5 mm long increasing to 2× in fruit, flexible, woolly and with stalked glandular hairs. **Flower:** bisexual, bilateral, 9–11 mm across; **calyx** 5-toothed, 4–6(–8) mm long, green, woolly with dark reddish purple and grayish hairs, glandular with capitate hairs, internally glabrous; tube 2–3 mm long; teeth subequal, triangular-acute, 1.5–3 mm long, dark reddish to black-purple at tip; **corolla** 2-lipped, 5-lobed, with 4 similar upper lobes and a longer and more cupped lower lip, blue-violet to rose-violet (white) aging deep violet, long-tomentose to woolly, internally glabrous; tube narrow, straight, 9–10 mm long, whitish at base, filled with thin nectar; lower lip cupped, 7–9(–12) × 3–4 mm; upper lip lobes 4–5 × 2.5–3 mm; **stamens** 4, fused to midpoint of corolla tube, dimorphic, 2 long and 2 shorter, long-exserted; filaments arched, 25–32(–40) mm, blue-violet; anthers dorsifixed, dithecal, 1.5–2 mm long, deep purplish blue, with sacs spreading and tan connective becoming swollen, longitudinally dehiscent and across the fused face; pollen very pale violet to white; **nectary disc** beneath ovary, domelike, 0.5 mm long, white, producing copious nectar; **pistil** 1; ovary superior, volcanolike and 4-lobed, 0.5 mm long, somewhat concealed by tuft of woolly white hairs at tip, lobes ovoid, ± 0.2 mm long, green, 2-chambered, each lobe with 1 ovule; style attached to ovary base at center of ovary lobes (gynobasic), exserted, 32–37 mm long, unequally 2-branched, the branches stigmatic, tapered to tip and positioned at the same level or to 5 mm beyond long stamens. **Fruits:** nutlets, 1–4, club-shaped oblong, 3–3.5 × 1.2–1.7 mm, with circular lateral-basal scar and typically a prominent ridge above scar, dull brown, shallowly netlike, pubescent except on scar, truncate with longer hairs at tip. Late January–mid-July.

Native. Evergreen shrub of chaparral and coastal sage scrub occurring occasionally throughout the range, especially growing with species of chamise (*Adenostoma*). *Trichostema lanatum* is an aromatic mint having remarkable blue flowers with long-exserted stamens. Its flowers are produced in dense verticils (paired condensed cymes at each node), and its flower buds have brightly colored wool, hence the common name woolly bluecurls. The blue pigment transfers to paper, hence the flower is blue due to a pigment, not merely to reflectance of its surface. One individual of a pure white-flowered

(albino) mutant was discovered by Gibson at Pentachaeta Park in 2004. This species is one of the natives having flowers eagerly visited by hummingbirds seeking the copious, thin nectar stored in the corolla tube. The arching stamens and style are part of a design to enable pollen to be transferred to the stigmas by the pollinator.
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