

*Lomatium* Raf. DESERT PARSLEY

*Lomatium lucidum* (Torrey & A. Gray) Jepson, SHINY LOMATIUM, SHINY BISCUITROOT. Perennial herb, taprooted, rosetted, several-stemmed at base, branches from base spreading to ascending and often terminating in an inflorescence, in range < 50 cm tall; monoecious; shoots with basal leaves and some cauline leaves but most leaves clustered at base, the leaves greatly wavy (not stiffly crisped), glabrous, when crushed with aroma slightly like celery (*Apium*). **Stems:** cylindrical, < 6 mm diameter, often hidden by leaf sheaths, pale green to green, glaucous white in places but wax soon worn off, serving as peduncle above leaves; long internodes hollow. **Leaves:** helically alternate, 1–2-pinnately 3-foliolate, 70–140 mm long, petiolate, without stipules; petiole 25–85 mm long, with sheathlike base encircling stem, green with many purplish, flattish ridges (= strands of collenchyma), the sheath 12–20 mm long and nearly as wide, with many parallel ridges, distinctly hollow; rachis ± cylindrical with a narrow groove or channeled, to 60 mm long; petiolules of primary leaflets 0–50 mm long (sessile if a 2-compound leaf); rachis > petiolule; blades of primary leaflet shallowly to deeply 2–3-lobed and coarsely and sharply dentate on margins, dark green and somewhat glaucous; blade of terminal leaflet ± heart-shaped to ovate or roundish in outline, 15–55 × 15–50 mm, sometimes length < width, thin and not leathery, mostly symmetrically 3-lobed, tapered to cordate at base, marginal teeth often 2 mm long; blades of lateral leaflets asymmetric, to 40 × 40 mm, shallowly to deeply 2–3-lobed or unlobed, palmately veined with veins conspicuous but only slightly raised on lower surface. **Inflorescence:** compound umbel, terminal, hemispheric, at anthesis 50–60(–70) mm across, many-flowered, of 10–22 umbellets, umbellets 9–13 mm across before pedicels elongate, each umbellet 12+-flowered, with central staminate flowers and ± marginal pistillate flowers or having only staminate flowers, glabrous; peduncle 150–300+ mm long, often appearing purple with many purple, low ridges; **involucre** absent; primary rays at anthesis subequal, spreading to ascending, to ca. 20 mm long increasing mostly 2.5–3.5× in fruit, like peduncle but thinner, typically dark purple around bases of rays in fruit; involucre of bractlets subtending only pedicels of outer 2–12 flowers, fused at bases or free, unequal, linear-lanceolate to narrowly elliptic and long-tapered, 1.3–6.3 × 0.4–1 mm, ± evenly spaced when many, green, with narrow membranous margin at base, the longest bractlets sometimes lobed above midpoint or some with several teeth, 1-veined or 3-veined, the veins often purple; pedicel at anthesis 2–2.5 mm long increasing to 12 mm and becoming dark purple in fruit. **Flowers:** unisexual. **Staminate flower:** radial, 2 mm across; **sepals** 5, spreading, minutely awl-shaped, < 0.5 mm long, within flower varying in length, greenish, persistent; **petals** 5, oval in natural outline, ovate to obovate with long-acuminate tip permanently looped inward, almost to base, typically narrow and 2-forked at tip, 1.3–1.8 × 0.8–1 mm long including tip 0.3–0.7 mm long, in range light green to yellowish green often with purplish midstripe, with midridge on upper (inner) surface, glabrous; **stamens** 5, free, looped inward prior to anthesis but ascending at anthesis; filaments ± 2 mm long, pale green; anthers dorsifixed, dithecal, ± 0.7 mm long, light yellow to yellow-green, longitudinally dehiscent; pollen whitish to pale yellow; **pistil** aborted but having a 2-lobed, diminutive platform (stylopodium, styler tissue) and center and with 2 reduced styles, stylopodium shallowly lobed, creamy white, persistent. **Pistillate flower:** bilateral, 3 mm across; **sepals** 5, spreading, awl-shaped, to 1.2 mm long,

within flower varying in length, greenish aging purple; **petals** 5, oval in natural outline, ovate to obovate with long-acuminate tip permanently looped inward almost to base, typically narrow and 2-forked at tip,  $1.3\text{--}1.8 \times 0.8\text{--}1$  mm long including  $0.3\text{--}0.7$  mm long tip, in range light green to yellowish green often with purplish midstripe, ridged medially on inner surface, glabrous; **stamens** absent; **pistil** 1; ovary inferior with a 2-lobed platform (stylopodium, stylar tissue) on top, compressed bell-shaped,  $1.7\text{--}2$  mm long, the wide axis radiating from center of umbellet, green, inconspicuously ribbed, glabrous, stylopodium shallowly lobed, greenish, not persistent, 2-chambered, each chamber with 1 ovule; styles 2, conspicuously recurved,  $2.5\text{--}2.8$  mm long, greenish; stigma slightly expanded laterally, outwardly bent  $\pm 90^\circ$  or more, acute at tip. **Fruit:** schizocarp, of 2 dry, 1-seeded halves (mericarps), intact circular to rounded-oblong in outline,  $10\text{--}13 \times 7\text{--}11$  mm, occasionally length  $\leq$  width, notched at top and bottom; mericarps with marginal veins conspicuously winged and thinly spongy, central veins weakly ribbed, central body lenticular, wings on drying becoming stiff, concave, and light tan on inner face, convex and purplish on outer face; in umbellet pedicels with dead staminate flowers and unfertilized pistillate flowers persisting among developing fruits. Late February–early May.

Native. Perennial herb occurring in chaparral, especially characteristic of rocky terrain and emerging after burns in full sun. *Lomatium lucidum* is one of the local umbellifers lacking an involucre beneath the primary rays. Our populations have pistillate flowers on the margins of umbellets but mostly staminate flowers, and in range the petals are greenish, not yellow, as described elsewhere.

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