

Lactuca serriola L., PRICKLY LETTUCE, COMPASS PLANT. Annual, somewhat spinescent, taprooted, rosetted, 1(–several)-stemmed at base, unbranched below inflorescence or old plants branched from base, ± highly branched in inflorescence, erect, 15–210 cm tall; shoots with basal leaves and ascending to erect cauline leaves, especially basal leaves dead at flowering, leaves rough and prickly, often grayish green and ± glaucous; latex milky, copious. **Stems:** inconspicuously ridged, to 15 mm diameter, with 2 faint ridges descending from each leaf (sometimes aging as a shallow groove), soon becoming light silver-gray, glabrous or commonly bearing broad-based, radiating prickles (bristles) to 3 mm long; solid. **Leaves:** helically alternate, unlobed or pinnately lobed with 1–3 pairs of lateral lobes, sessile and clasping, stipules absent; blade oblanceolate to obovate (lower leaves) and oblanceolate or oblong to lanceolate (upper leaves), 15–195 × 3–75 mm, clasping with equal or unequal basal lobes to 25 mm long, lateral lobes alternate to subopposite, spreading or somewhat backward-pointing and acute to acuminate at tips, sinuses broad and roundish and typically not reaching midrib, terminal lobe 10–20 mm long, conspicuously toothed with 1–5 small, closely spaced teeth between larger teeth on margins, sometimes ± crisped, the teeth with bristlelike points, pinnately veined with only whitish midrib raised on both surfaces, rough and bristly-hispid to relatively smooth with prickles limited to lower midrib, especially lower surface bristly with abundant prickles along midrib or also principal veins. **Inflorescence:** heads, terminal and axillary, in open, paniclelike arrays, array often forming a spreading lateral branch at each node and secondary (third) axes similarly branched, branchlets cymelike with 1–several heads, head ligulate, 9–11 mm across, of 12–24 flowers, light yellow with darker center, open several hours in morning and withering usually before noon, bracteate, glabrous; bract subtending lateral branch of terminal array appressed, heart-shaped to awl-shaped, to 9 mm long decreasing upward, clasping > 1/2 axis, glaucous, bract subtending axillary array leaflike (= upper cauline leaf); peduncle slender, mostly 3–12 mm long, with small, awl-shaped bracts along axis (= bracts subtending future peduncles); bracts subtending head ca. 8 in 2 series (calculus), narrowly ovate or triangular and lobed at base, acute and glabrous at tip; **involucre** cylindric becoming narrowly conic in fruit (afternoon), 8–13 × 8–10(–14) mm, phyllaries ca. 8 in 2 graded series, narrowly lanceolate or sometimes narrowly oblanceolate and rounded to tapered at base, 3–13 × 1.2–2 mm, tapered to a narrowly rounded, puberulent tip, green, glaucous, often tinged purplish red at tips and along midline, with thin white margins, finely papillate on outer surface (especially near tip), venation inconspicuous; receptacle flat, without bractlets (paleae), slightly and narrowly ridged between ovaries. **Flower:** bisexual, bilateral, ± 1.5 mm across; **calyx (pappus)** of 80–110 capillary bristles, soft and silky white; **corolla** 4–5-toothed, 8.1–9.3 mm long; tube cylindric, 2.9–5 mm long, pale yellow to whitish; throat ca. 0.2 mm long, white-pubescent to short-tomentose; limb strap-shaped, 5–6 × 1.2–1.7 mm, light yellow to pale yellow sometimes with pink stripes on lower surface, glabrous, teeth shallow; **stamens** 5, fused to corolla throat; filaments 0.4–0.6 mm long, yellowish; anthers fused into cylinder surrounding style, exerted, basifixed, dithecal, 1.5–1.7 mm long, yellow, tailed ca. 0.25 mm at base, with a sterile, rounded appendage at tip ca. 0.15 mm long, longitudinally dehiscent; pollen yellow; **pistil** 1; ovary inferior, at anthesis compressed-discoid, ca. 0.5 mm long, light green, narrowly winged on margins, glabrous, with green beak ca. 0.2 mm long, 1-chambered with 1 ovule; style 5–7.8 mm long, 2-branched, with ascending hairs on

upper 1.5 mm below branches, the stigmatic branches exerted, ca. 0.4 mm long, spreading and eventually recurved. **Fruits:** cypselae, with pappus in spheric display 11–17 mm across, beaked; fruit body oblanceoloid to narrowly obovoid and compressed, 2.8–3.5 × 1–1.3 mm, light gray brown mottled with darker gray brown, slightly bowed, 5–7-ribbed, narrowly winged on edges, scabrous-ciliate above midpoint of margin, sparsely scabrous on ribs approaching tip; beak 3.5–4.1 mm long, mostly white but yellowish brown at base and pale green at tip, scabrous on basal portion of beak; pappus of ca. 80–110 capillary hairs, the hairs 4–5 mm long, white, fine, silky, fused at base for < 0.1 mm and forming a thin rim or funnel at top of beak ca. 0.3 mm diameter, each capillary bristle deciduous from rim edge. Mid-June–late October (mid-January).

Naturalized. Annual extremely common and potentially occurring in any disturbed habitat or waste area throughout the range. *Lactuca serriola*, also including forms named *L. scariola*, is a European weed with several common forms; individuals can have either lobed or unlobed leaves, with or nearly without bristles and prickles, and one can find individuals of different forms growing together. The cauline leaves tend to be elevated and sometimes twisted, causing blades to be vertically oriented. The ligulate flowers wither within thirty minutes of collecting, and typically every ovary forms a fruit, even after the plant is collected, indicating that they are self-pollinated and likely apomictic, which helps to explain why it is such a successful weed.

B. A. Prigge & A. C. Gibson