Elymus condensatus J. Presl, GIANT WILD-RYE, GIANT RYE GRASS. Perennial herb, robust, clump-forming, rhizomatous, fibrous-rooted, broadly cespitose but stems solitary from rhizome tip, each branch erect with terminal inflorescence, in range (40–)120–250 cm tall; shoots with several basal leaves and 8+ cauline leaves, with tough, stiff blades, essentially glabrous; rhizomes to 10 cm depth, crooked and knobby, 5–6 mm diameter, with overlapping scales, the scales tough, deltate to narrowly triangular with long-acuminate tips, brown, having raised ridges, often split lengthwise by emerging adventitious roots; adventitious roots nodal, arising in all directions from rhizomes, thick, crooked, abruptly thicker next to rhizome. **Stems (culms):** cylindric, 5–9 mm basal diameter, tough, low-ridged; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, typically > internode, low-ridged, with thin-membranous margins, sometimes glaucous when young, with lobes (auricles) at top to 3.5 mm long, often breaking off so auricles appearing absent or short and appressed to stem; ligule membranous, rounded, typically 3–6(–7.5) mm long, fringed and jagged on margin; collar short, golden brown, inconspicuously pubescent or short-strigose with downward-pointing hairs; blade strap-shaped with long-tapered tip, (190–)350–1010 × 13–33 mm (flag leaf shorter and narrower), the widest in basal 1/3, initially somewhat inrolled but aging flatter, entire except margins minutely toothed approaching tip, parallel-veined without conspicuous midrib but with all veins slightly raised on both surfaces, dull and glabrous, lower surface minutely toothed along principal veins approaching tip. **Inflorescence:** spikelets, densely clustered in narrow, terminal, panicles, panicle 150–400+ mm long with 20–27 alternate distichous nodes, each node with 2–6 short branchlets, spikelet 1–7-flowered with terminal floret commonly diminutive and sterile, bracteate, awned; peduncle hollow, sometimes completely sheathed by flag leaf; rachis cylindric at base but upward increasingly flattened on side of cluster, essentially glabrous but inconspicuously short-hairy around nodes and becoming scabrous on angles of upper internodes, mostly concealed by overlapping clusters of spikelets or exposed in lower 1/3, the internodes 2.5–35 mm long (to 60 mm long at base of rachis); bract at rachis node sheathing or partially so, diminutive, appressed, thickened, whitish, densely short-strigose on outer face or densely pubescent on margin, at first node rounded or truncate, to 1 mm long, reduced upward; branchlets erect to ascending, congested and often fused at base, 10–65 mm long with the longest at the lowest nodes, essentially equal at lower nodes and more unequal upward, branchlet bearing 1–36+ spikelets; the lowest 2–3 internodes of outer branchlets congested and < 1 mm long, whitish along veins, light green and densely puberulent on margins, the lowest internodes of inner branchlets to 16 mm long, green; stalk of spikelet puberulent and minutely scabrous along edges. **Spikelet:** to 25 mm long, breaking above glumes and between florets; **glumes** 2, ± spreading and sometimes appearing in a different plane than florets, subequal, linear with long awnlike point, 6–17.5 × 0.6–1.2 mm, lower glume > upper glume ca. 1 mm, rounded on back and sometimes weakly keeled above midpoint, thicker centrally and membranous on margins, entire or sparsely ciliate on margins above midpoint, often 3-veined at base reduced to 1-veined above midpoint, narrow and minutely toothed on margins and back approaching tip, glabrous; rachilla 2–3.2 mm long, not extended past terminal spikelet, densely puberulent; **lemma** elliptic to lanceolate, 7–11 × 1.3–1.6 mm decreasing from base to tip of spikelet, rounded on back,

often minutely jagged (awned) at tip, with 3 principal veins converging at tip and also several minor veins to midpoint, inconspicuously puberulent near base; **palea** = lemma or 1 mm shorter, membranous, 2-veined and strongly keeled along each bright green vein, depressed between veins, entire or short-ciliate on margins approaching tip, puberulent on inner surface and sometimes on outer surface nearing tip, often minutely toothed along keels above midpoint. **Flower:** bisexual; **perianth (lodicules)** 2, lanceolate to broadly oblanceolate, 1.4–2 × 0.4–0.6 mm, with a pale green, swollen ovoid center and colorless margins, 2-toothed on outer margin, ciliate; **stamens** 3, free; filaments threadlike, at anthesis 4.5–5.5 mm long, white; anthers exserted, dorsifixed, dithecal, linear, 3.7–6.2 mm long, light greenish yellow to light yellow sometimes blushed reddish, longitudinally dehiscent; pollen light yellow to white; **pistil** 1, ± 3.5 mm long; ovary superior, ellipsoid to conic with 2 points, 0.7 mm long, greenish white, glabrous below and long-pubescent above, 1-chambered with 1 ovule; styles 2(3), exserted laterally from lower lemma, widely separated on top of ovary, spreading, 2 mm long, light greenish to whitish, densely feathery (plumose) with colorless to whitish stigmatic branches. **Fruit:** achene (caryopsis), 1-seeded, enclosed in dispersal unit (lemma, palea, and appressed rachilla internode), ± cylindric, 5–6 × 1 mm, dull brown, with lengthwise groove on palea side, with tuft of hairs at tip; dispersal unit straw-colored, with slightly raised veins on lemma. Early May–late July.

Native. Perennial herb commonly observed throughout the range from above the upper beach community to coastal sage scrub, chaparral, and southern oak woodland, in either full sun or partial shade. *Elymus condensatus* is treated by some authors as a species of *Leymus*, and it may be that *Leymus* (including *Psathyrostachys*) may be distinct enough genealogically and genomically to be recognized as its own lineage. This species is likely the easiest native grass species to identify because it forms circular clones several meters across and has broad, tough cauline leaves. In flower this species forms long, narrow panicles of spikelets at or above eye level. Clones are achieved by a shallow rhizome system, but it remains clumplike in hard, rocky soil.
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