Elymus triticoides Buckley var. triticoides, BEARDLESS WILD-RYE. Perennial herb, clonal, rhizomatous, fibrous-rooted, several-stemmed at base, ± erect, in range 60–105 cm tall; shoots with 5–9 leaves, leaves mostly cauline with widely spreading to ascending blades but prophyll and first basal leaf only sheath, cauline blades yellow-green, typically flat and often slowly twisting 180–360° along length, minutely scabrous on upper blade surface, appearing glabrous when blades inrolled (involute) during early growth; rhizomes shallow, horizontal and creeping, generally 1.5–2 mm diameter, with nodal adventitious roots, internodes to 40 mm long, each having several prominent, raised veins (= veins of scale sheath). Stems (culms): cylindric, ca. 1.5 mm diameter at base, tough, glabrous, lower nodes often purplish; internodes hollow. **Leaves:** alternate distichous, simple with sheath; prophyll at base of shoot strongly 2-keeled below midpoint, 25–45 mm long, acuminate at tip, keels distinctly wavy, exposed surface inconspicuously puberulent; sheath open. mostly smooth, of upper cauline leaves generally > node, glabrous, with short-lived lobes (auricles) at top, the auricles sickle-shaped, to 1.2 mm long; ligule stiff-membranous, truncate, to 0.4 mm long, minutely jagged on margin; blade linear, in range 140–310 × 2.5–6 mm, the widest at base,  $\pm$  tough, minutely toothed on margins especially above midblade, parallel-veined with veins raised on upper surfaces and midrib on lower surface, upper surface densely scabrous-puberulent. Inflorescence: spikelets, in terminal, spikelike panicles, panicle in range  $70-130 \times < 8$  mm (spreading to 11 mm at anthesis). often with flag leaf blade > panicle, mostly with 2 subsessile spikelets per node but having only 1 spikelet at the uppermost nodes and tip, spikelets ascending, overlapping the next node and somewhat turned on rachilla partially obscuring alternate distichous (2-ranked pattern), spikelet with 2–4 bisexual florets and (1–)2 sterile florets at tip, bracteate, with awnlike tips on glumes and short awns on lemmas of the lowest 1–2 florets per spikelet; rachis hemi-cylindric, internodes 5–10 mm long, mostly green with 2 colorless and scabrous edges; stalk of spikelet calluslike, < 1 mm long, green, glabrous or with several short hairs. **Spikelet:** in range 10–14(–16) mm long, rachilla segments 1–1.3 mm long, minutely scabrous along 2 edges, breaking above glumes; glumes 2, subequal, awl-shaped, 6.5–11.5 mm long, lower glume 2.5–3.5 mm < upper glume, < lower lemma, firm and tough, lower glume 1-veined, upper glume 3-veined and ± keeled folded somewhat unequally, green with translucent, minutely toothed margins and scabrous on awnlike tip; callous glossy green, glabrous; **lemma** lanceolate with terminal short awn (lower florets) and without awn (upper florets), rounded and minutely scabrous on back, inconspicuously 5-veined or 7-veined, in range the awn to 3 mm; palea 5–7.5 mm long, = lemma body, 2veined, 2-keeled, strongly folded along keel scarious on margins and concave between keels, minutely ciliate along keels above midpoint, fringed and shallowed 2-lobed at tip. **Sterile floret: lemma**  $\pm$  3 mm long (first sterile floret) to 1 mm long (second sterile floret); palea of first sterile floret membranous, short, notched, strongly folded, palea of second sterile floret absent. Flower (bisexual): protogynous; perianth (lodicules) 2, ovate to broadly elliptic,  $\pm 1$  mm long, swollen at base and flat and thin above, colorless, short-ciliate above midpoint, persistent dry; stamens 3, free; filaments slender becoming threadlike, 4.5–5 mm long, white, bases constricted by lodicules; anthers initially erect above styles later pendent from closed floret, basifixed with sacs extending 1 mm, dithecal, 4.5–5 mm long, pale light yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 4– 5 mm long; ovary superior, somewhat top-shaped, ca. 0.7 mm long, greenish, densely

cover with stiff straight hairs, 1-chambered with 1 ovule; styles 2, widely spaced from rim of ovary top and arching, mostly exserted from floret, to 4 mm long, whitish, 1-sided with dense branches at least 3 mm to tip, the branches to 1.2 mm long, whitish. **Fruit:** not seen in range. Mid-May-late June.

Naturalized. Clonal perennial grass of open habitats, e.g., at Tapia State Park (SMM) and southernmost SMMNRA Cheeseboro and at Wildwood Regional Park (SH) in disturbed meadow close to roads growing in heavy soil. *Elymus triticoides*, also treated as a species of *Leymus*, does not flower every year, and in range does not appear to form fertile fruits, presumably because outcrossing between different clones is required. It is likely that this native species was introduced here via horses, from either hay or feed, and therefore can be expected to occur along any horse trail. *Elymus triticoides* is summer active; it has flat, ascending to spreading, yellow-green cauline blades, so this species is easy to spot when all other springtime active grasses have dried up. The blade tends to be twisted slowly along its length, and the flag leaf blade generally is longer than the inflorescence, although on the plant the blade is widely spreading. The very short awns is an easy character to distinguish this species of wild rye from *E. glaucus*, which can be found growing in the same habitat but has longer awns.

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