

Vascular Plants of Williamson County
Limnodea arkansana – OZARKGRASS [Poaceae]

Limnodea arkansana (Nutt.) L. H. Dewey, OZARKGRASS. Annual, fibrous-rooted, often cespitose, (1–)several-stemmed at base, principal shoots unbranched above base, \pm erect, in range to 45 cm tall; shoots with slender basal leaves withered at flowered and several wider cauline leaves. **Stems:** cylindric, node to 1.5 mm and internode < 1 mm diameter, internodes green to reddish and lower nodes sometimes aging reddish, internodes to 90 mm long; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, tightly rolled and overlapping at base, low-ridged, $<$ internode, green, pilose-ciliate on exposed margin and membranous on concealed margin, surface with inconspicuous microhairs, lacking lobes (auricles) at top; ligule membranous continuous from membranous margins, truncate and minutely jagged at top, 1–2 mm long, exposed surface minutely strigose with upward-pointing hairs; collar short; blade narrowly lanceolate-linear to linear, $< 40\text{--}70 \times 2\text{--}6$ mm, the widest approaching midblade, with persistent hairs bases of pilose hairs + portions pilose-ciliate on margins, acuminate at tip, parallel-veined, veins pilose and with microhairs. **Inflorescence:** spikelets, in terminal, paniclelike array with spikelets on each branch spreading-ascending later strongly ascending, flowering portion narrowly lanceoloid in outline, to 120×22 mm but in fruit more narrow, having to 10 nodes, the lowest nodes or nodes somewhat hidden by persistent, suberect blade of flag leaf (sheath), spikelet having only 1 bisexual floret, awned; lateral branches to 4 per node, unequal, the longest to 40 mm long (incl. awns) and having 15+ spikelets, principal axes and branchlet axes nearly cylindric (never angled), green, with widely spaced, minute, scabrous hairs, axes often with somewhat swollen base, branchlets with 1–5 spikelets. **Spikelet:** scarcely compressed side-to-side, ca. 3 mm long + awn, with tips of glume $>$ lemma, with erect glumes slightly gapping, breaking below glumes resulting in abscission of entire spikelet including 1 fruit; **glumes** 2, lacking awns, subequal, in range 3–3.3 mm long, green, 3-veined with lateral veins close to margins, in range short-hirsute and appearing minutely beaded on other cells, lower glume scarcely ridged (midvein), firm and persistent, tightly enclosing floret; rachilla above floret = fine bristle to 0.5 mm long persistent and appearing attached to lemma of floret; **lemma** sessile, 2-toothed at top with awn arising in notch, in range lemma body 2.7–2.9 mm long, $<$ glume and appearing shorter in flower, rounded on back, membranous with 3 green veins, the outer surface minutely textured but glabrous, the teeth triangular, ca. 0.5 mm long, each green and having a lateral vein, the awn from notch initially mostly straight, in range 8–12.5 mm long, when mature strong twisted just above glumes and having a sharp bend near midpoint where awn diameter narrows (appearing 1-bent or 2-bent in developing fruit); **palea** membranous, narrow, $1.5\text{--}1.8 \times 0.35\text{--}0.4$ mm, $<$ lemma and enclosed by lemma, colorless, if 2-keeled only to midpoint, veinless above keels, persistent. **Flower:** enclosed completely within floret; **perianth (lodicules)** 2, asymmetric lanceolate-ovate, ca. 1×0.35 mm, colorless and without veins, slightly swollen at base, with 1 straight margin, acute at tip, lacking hairs; **stamens** 3, free, 1 mm long; filaments ca. 0.6 mm long, colorless; anthers dorsifixed, dithecal, in range 0.4–0.45 mm long, pale yellow, longitudinally dehiscent; pollen yellowish; **pistil** 1, ca. 1 mm long; ovary superior, ovoid, ca. 0.3 mm long, white, 1-chambered with 1 ovule; styles 2, touching anthers, colorless, short-papillate (not bottlebrushlike). **Fruit:** achene (caryopsis), contained within awned spikelet (1

floret), ellipsoid somewhat compressed side-to-side, ca. 2×0.7 mm, smooth and opaque, dispersed when achene still fleshy and immature, in separated spikelet drying and aging brownish; lemma awn wavy below midpoint, mostly 8–12 mm long.

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