

**Vascular Plants of Williamson County**  
*Elymus virginicus* – VIRGINIA WILDRYE [Poaceae]

*Elymus virginicus* L., VIRGINIA WILDRYE. Perennial herb (bunchgrass), generally not obviously rhizomatous (condensed rhizome forming on large clumps), fibrous-rooted at buried nodes, not rosetted, 1–several-stemmed at base, often cespitose with secondary shoots arising from appressed axillary buds on rhizome, principal shoots unbranched from base, ascending to erect, in range < 100 cm tall; shoots with 1 basal leaf and to 9 cauline leaves, foliage somewhat scabrous with minute teeth along veins and short-hairy on upper surface; adventitious roots nodal on erect rhizome. **Stems (culms):** cylindric, to 3 mm diameter (lower internodes), tough, internodes to 300 mm long increasing upward, light green, nodes usually swollen and not concealed by sheath, straight, green, glabrous; cauline internodes hollow except solid at ground level. **Leaves:** alternate distichous, simple with sheath; prophyll appressed, strongly flattened and 2-keeled, to 10 mm long, rounded at tip, 2-veined; sheath open to closed 2 mm from node, low-ridged, < internode, mostly glabrous but sheaths of lower leaves sometimes with some short-villous hairs, short-ciliate on exposed margin approaching sheath base, hidden margin membranous and 1 mm wide, lobes at top (auricles) present initially but often removed on mature leaves, ascending or spreading, tongue-shaped, 0.5–1.5 mm long, initially crisped; ligule membranous, truncate, in range 0.5–0.7 mm long, splitting or not in age; collar often with wavy margins; blade linear, (110–)150–260 × (2.5–)5–11 mm, the widest near midblade, generally flat, scabrous on margins, long-acuminate at tip, finely parallel-veined with veins raised on upper surface and lower surface smoother; minutely scabrous, upper surface lower surface with inconspicuous microhairs. **Inflorescence:** spike-like stalk having many spikelets, terminal, with conspicuous ascending awns becoming divergent in dry fruit, ± suberect and unbranched, (25–)55–115 mm long (excluding awns) and with awns to 2.5 mm across, with < 20 nodes, having mostly 2 sessile spikelets at each node, clusters alternate distichous along axis, nodes spaced 3–6(–7.5) mm apart, cluster 3-dimensional, each spikelet with (0–)2–3 fertile florets and 1(–2) terminal sterile floret; flag leaf sheath overlapping basal of inflorescence and 1–2 blades >> inflorescence, distinctly scabrous; peduncle cylindric, to 300 mm long, smooth, glabrous; rachis somewhat zigzagged, internodes hemi-cylindric, scabrous along 2 edges, glabrous on faces; stout stalk of spikelet sometimes 2-lobed to spikelets; breaking below the glumes and between florets or the lowest floret with 2 glumes; spikelets at the lowest node sterile and often reduced to several awns < 20 mm long, subtended by a pair of decurrent ridges defining a reduced bract. **Spikelet:** florets at anthesis with lemma and palea spreading; **glumes** 2, awned, ascending, of a pair divergent, subequal, linear-narrowly lanceolate, in range body to 11 × 0.8–1.5 mm, subcylindric at base 2–4 mm long lacking veins, tapered to awn, green or slightly glaucous, with terminal awn 10–15 mm long, ± = body, 0.2 mm wide at base, not lobed at top, body firm, stiff, ridged with 5–8 raised, fine, parallel veins at midpoint on outer surface, margins thickish and opaque white, margins and along veins minutely scabrous, awn indistinct from body; rachilla whitish, internodes mostly 1.5–2 mm long, whitish, glabrous; **lemma** awned, body narrowly lanceolate inrolled, rounded on back to midpoint, to 8.5 × 2 mm (of sterile floret most < 4 mm long), 5-veined (of sterile floret mostly finely 3-veined), yellowish green and somewhat glaucous, with inconspicuously veins below midpoint and midvein raised from midpoint, back glabrous with minute

scabrous teeth along 3 principal veins, margins inconspicuously short-ciliate below midpoint, the awn arising at end of midvein sometimes with an adjacent, inconspicuous lobe or pair of tiny lobes, to 32 mm long, 0.25 mm wide at base; **palea** elliptic in outline, to 8 mm long, 2-keeled, strongly 2-folded the largest 1.4–1.5 mm across, slightly < lemma, membranous, glaucous, 2-veined, margins sharply folded inward along keels, broadly acute at tip with minute hairs, opaque but green along each vein, scabrous along keels, inner surface and folded margins minutely hairy. **Flower:** bisexual; **perianth (lodicules)** 2, ± ovate in outline with 1 small lobe at midpoint, ca. 1.5 × 0.5 mm, initially swollen at base, translucent, membranous upper portion acute; **stamens** 3, free; filaments threadlike, ca. 3 mm long, white; anthers fully exerted, basifixed, dithecal with sacs attached most of length but free and parallel at base, linear, 3–3.8 mm long, pale light yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, ca. 3 mm long; ovary superior, broadly obovoid compressed front-to-back, ca. 0.7 × 1 mm, pale green, lower portion glabrous with tuft of erect hairs at top, 1-chambered with 1 ovule; styles 2, exerted from palea, densely papillate-hairy, 2 mm long, colorless. **Fruit:** achene (caryopsis), dispersed as lanceoloid unit with adherent lemma and palea and an outcurving awn on lemma + glumes, in range minutely scabrous (not hairy); achene oblong to oblanceolate-oblong compressed front-to-back, mostly 4.5–5.2 × 1.4–1.6 mm, brown to dark brown, short-tapered at base, rounded or truncate at tip with an erect tuft of white hairs 1–1.5 mm long, 1 face with midline.

A. C. Gibson