

Vascular Plants of Williamson County

Alopecurus carolinianus – CAROLINA FOXTAIL, TUFTED FOXTAIL [Poaceae]

Alopecurus carolinianus Walter, CAROLINA FOXTAIL, TUFTED FOXTAIL. Annual, fibrous-rooted, several-stemmed at base, “tufted” (likely several individual plants growing in a tight cohort), upright (decumbent), in range to 45 cm tall; shoots with several basal leaves and to 4 cauline leaves on weak stems, basal leaves withered at flowering, glabrous; adventitious roots nodes at bases of stems. **Stems (culms):** cylindrical, < 2 mm diameter, internodes to 120 mm long. **Leaves:** alternate distichous, simple with sheath; prophylls not observed; sheath open with overlapping margins (occasionally the lowest cauline leaf short-closed), to 40 mm long, smooth drying with raised veins, with membranous margins not lobed at top (auricles) but margins continuous with ligule; ligule membranous, obtuse, 2.8–4.5 mm long, often splitting downward, glabrous; collar weakly defined; blade linear, 35–150 × 0.9–2.5 mm wide, entire and minutely toothed on margins, long-tapered to fine tip, parallel-veined, surfaces with minute projections along veins. **Inflorescence:** spikelets, in terminal and spike-like panicle, panicle in range to 40 × 3 mm (excluding any spreading awns but typically awns appressed until spikelets abscised), spikelets 200+ densely layered and overlapping with 2–5 on helically alternate, short, ascending branchlets, spikelet strongly flattened front-to-back, with 1 bisexual floret, 1-awned, bracteate; principal axis low-ridged, 0.3–0.35 mm diameter, whitish, with whitish, ascending branchlets to 2.5 mm long, stalks of spikelets to 1 mm long with saucerlike tips, axes sparsely puberulent. **Spikelet** ± ovate in outline strongly flattened front-to-back slightly gapped at top, in range 2.2–2.8 mm long, with no rachilla prolonged beyond floret, breaking below glumes with tough base having straight hairs to 1.2 mm long, awn emerging off-center when abscised becoming bent (geniculate) and diverging at top of the lower glume; **glumes** 2 equal and in range barely fused at base, keeled and strongly folded flat ca. 0.4 mm wide, membranous 1-veined with 2 green strips (keel + 1 on outer side of spikelet, keel not winged, conspicuously and densely ciliate, the hairs ascending and straight to 0.85 mm long, in range both faces conspicuously straight-hairy to midpoint (“sparsely pubescent” of other authors), membranous edges wider to top, in range ends of keel aging purplish and adjacent margin tinged purplish; **lemma** strongly flattened compressed side-to-side but not keeled, fused (margins) to midpoint (ca. 1 mm), obtuse-ovate in outline, 2–2.3 × 0.7 mm (folded), membranous and green above midpoint, 5-veined, glabrous, in range ends of veins at top with purple, the awn arising 0.5–0.6 mm long from base, 5–7 mm long, lower portion straight repeatedly twisted, at top of lemma diverging and upper portion not twisted to 5 mm long; **palea** absent. **Flower:** **perianth (lodicules)** absent; **stamens** 3, free; filaments in bud 0.7 mm long and colorless elongating threadlike; anthers exerted, basifixed, dithecal, ca. 0.6 mm long, translucent aging whitish, longitudinally dehiscent; pollen colorless; **pistil** 1, exerted near top of spikelet; ovary superior, vertically disclike, < 0.5 mm, glabrous, 1-chambered with 1 ovule; style 1 (= 2 fused), off-center, ca. 1 mm long, colorless, 2-branched, lower portion ca. 0.3 mm long, the branches stigmatic. **Fruit:** achene (caryopsis), mostly obovate (broadly ovate) in outline strongly flattened and biconvex, 1–1.3 × 0.7–0.8 × 0.2–0.25 mm, tannish.

A. C. Gibson