## Vascular Plants of Williamson County

 Carex festucacea - FESCUE CARIC SEDGE [Cyperaceae]Carex festucacea Suhkuhr, FESCUE CARIC SEDGE. Perennial herb, rhizomatous, fibrousrooted, cespitose, many-stemmed at base from shallow rhizome, in range to 35 cm tall; monoecious; shoots with to 7 leaves per shoot at least 2 basal leaves and to 4 cauline leaves, the uppermost $1-2$ blades > inflorescence, blade length increasing upward, glabrous; rhizome creeping, horizontal, with very short internodes, to $15+\mathrm{mm}$ long, to 4 mm diameter, covered with old, fibrous leaf sheaths, flesh whitish; adventitious roots on lower side of rhizome. Stems (culms): visible only above sheath of the uppermost canopy leaf (covered by nested, overlapping closed leaf sheaths), lower portion $\pm 3$-sided, nodes 1 mm diameter, hollow (heart-shaped in $\times$-section; vascular bundles ca. 30) and white, upper portion strongly compressed, strongly ridged, green, tough, hollow except solid just below inflorescence. Leaves: alternate, simple with sheath; sheath closed, to 75 mm long, membranous and colorless (where concealed) and green striped (where exposed) = veins, with a conspicuously wide panel of hyaline tissue from node to orifice; ligule at top of sheath membranous, $\pm$ truncate on outside, in range ca. $1-2 \mathrm{~mm}$ long, on inner side extended as an arch of hyaline tissue onto the base of blade ca. 2 mm projecting ca. 0.5 mm ; blade linear, of basal leaves $40-100 \mathrm{~mm}$ long, of cauline leaves in range 150-370 $\times$ $2-4.3 \mathrm{~mm}$, green not glaucous but sometimes appearing to have whitish stripes between veins, entire and minutely scabrous along margins, acute to acuminate at tip, parallelveined with midrib sunken on upper surface and strongly raised on lower surface, and other veins raised at least on lower surface. Inflorescence: spikes ("spikelets") in a terminal panicle, 3-7(-10) per panicle, spike many-flowered, with staminate flowers to midpoint and pistillate flowers above midpoint (gynecandrous), narrowly ellipsoid-fusiform, at anthesis in range $8-12 \times 1.5-2.5 \mathrm{~mm}$, tip overlapping base of next spike, bracteate, glabrous; peduncle = culm, angular with minutely scabrous ridges; rachis internodes < spike, with several, minutely scabrous ridges; bract subtending subsessile spike, sheath closed (including rachis), membranous, $\pm 1 \mathrm{~mm}$ long, blade with raised midvein (keeled) ending in an awn, bract < spike and decreasing upward, awns in range to 7 mm long; "bractlets" ("scales" or, technically in sedges, bracts) helically alternate and overlapping, acute-ovate and obtuse-ovate at base gradually changing upward to broadly lanceolate, in range ca. $4 \times 2 \mathrm{~mm}$ decreasing upward to $3 \times 1.4 \mathrm{~mm}$, membranous with green midstripe (vein), of pistillate flowers midvein extended as a short point (not an awn), midvein at tip and point minutely scabrous; pistillate flower enclosed in the saclike perigynium (modified prophyll),
. Staminate flower: perianth absent; stamens 3 (sometimes interpreted as 3 united flowers); filaments fused sideways at least at base, 1.2-2 mm long, subequal, white; anthers basifixed, dithecal, in range $2.2-2.7 \mathrm{~mm}$ long, pale light yellow, with tuft of papillate hairs at tip, longitudinally dehiscent; pollen pale yellow; pistil absent. Pistillate flower: perianth absent; stamens absent; pistil 1; ovary superior, elliptic compressed front-to-back, 0.5 mm long, 1-chambered with 1 ovule; style $3.5-4 \mathrm{~mm}$ long, whitish, 2branched, lower portion ca. 1.2 mm long, the stigmatic branches exserted $1.5-2 \mathrm{~mm}$ through orifice of perigynium and aging reddish, ca. 2.5 mm long. Fruit: achene,
abscised as a unit enclosed within perigynium, achene biconvex oblong-narrowly ovoid, in range $1-1.2 \mathrm{~mm}$ long, light brown; perigynium ovate in outline and winged below midpoint, in range ca. $2.5 \times 1.5 \mathrm{~mm}$, upper portion ("beak") flat, triangular green aging brownish with 2 colorless points at orifice, minutely scabrous along edges, beak ca. 1 mm from top to achene, lower portion with fruit chamber somewhat inflated, wings $0.3-0.5$ mm wide; in fruit spike obovoid in outline,
A. C. Gibson

