

Vascular Plants of Williamson County

Carex perdentata – MEADOW SEDGE, WEBERVILLE CARIC SEDGE, SAND SEDGE
[Cyperaceae]

Carex perdentata S. D. Jones, MEADOW SEDGE, WEBERVILLE CARIC SEDGE, SAND SEDGE. Perennial herb, bunchgrasslike, rhizomatous, fibrous-rooted, many-stemmed at base, cespitose, ascending, in range to 40 cm tall; monoecious; shoots conspicuously leafy with to 9 basal, photosynthetic leaves at flowering, all leaves basal (even “cauline” leaves attached at shoot base), bright green and glabrous never glaucous; rhizomes shoot-creeping, concealed by fibers (decomposed scales, cataphylls), with vertical branch forming an emergent shoot, creeping rhizome shallow, to 4 mm in \times -section, whitish, internodes of emergent segment < 1 mm long, white with purple-red stripes, solid, the scales < 10 mm long, acuminate at tip, having many red-purple parallel veins aging dark brown, scales on vertical rhizomes often longer and internodes very short; adventitious roots arising mostly from nodes on vertical rhizome segments. **Stems (culms):** 3-sided base-to-inflorescence, glabrous, on lower plant (hidden by leaf sheaths) whitish, 1 mm diameter, low-ridged, above leaf sheaths convex 3-sided, tough, mostly lacking minute scabrous teeth on angles. **Leaves:** alternate tristichous, simple with sheath; sheath (basal leaves) closed, increasing upward, with a membranous panel on 1 side, the top low-concave; ligule low-domed at base of blade < 2 mm, curving ligule to 0.25 mm tall; blade linear long-tapered to tip, V-shaped in \times -section folded upward from midrib, in range to 400 \times 3–5 mm, entire becoming minutely scabrous approaching tip on margins, long-acuminate at tip, parallel-veined with to 21 veins and midrib raised on lower surface, upper surface with domed cells with minute papillae, lower surface with stomates in strips (hypostomatic) and minutely scabrous along midrib above midblade to tip. **Inflorescence:** spikes of unisexual flowers, racemelike, terminal and compact, 5–10(–15) per panicle, panicle to 30 \times 8 mm, spikes alternate along 3-sided axis, lateral spikes ascending and appearing tristichous and above mostly spreading, at maturity spike with to 15 pistillate florets (helically alternate florets, 2/5 phyllotaxis) mostly spreading and an erect cluster of several staminate florets at the top (androgynous), occasionally spike pistillate (lacking staminate florets), the terminal spike not noticeably larger, with to 15 pistillate florets and an erect cluster of < 5 staminate florets at the top, florets overlapping, bracteate, glabrous; bract at basal node subtending the lowest lateral spike (proximal bract) attached to 2 sides of axis (open), suberect, lower portion flared triangular with green midstripe and above a slender, long, awnlike tip, in range 60–100+ mm long, lower portion keeled with wide membranous margins to 4 mm long, slender portion commonly 5-veined or 7-veined and scabrous on margins and lower midvein; bract subtending succession lateral spikes decreasing in length and each with wide membranous margins and a central midstripe and successively shorter awn and fewer veins, upper bracts < 15 mm long, the lower spike bracts often having a pair of red (aging brown) structures at base; principal axis of panicle 3-sided, with solid internodes; spike at the lowest 1–2 nodes having bractlets (pistillate type) but no floret; lateral spike lacking prophyll; bractlet of staminate floret not keeled, with 1-veined green midstripe and membranous margins, acute-ovate somewhat folded typically lacking an awnlike tip, 2.8–3.2 \times < 1–1.4 mm (flattened), persistent at top of spike; bractlet of pistillate floret broadly ovate and cupped, with awnlike tip above wide membranous margins, ca. 5 \times 3.5 mm (flattened) including tip, lower portion to 3 mm long

often < mature perigynium, often keeled with 1-veined green midstripe, the tip straight, green, scabrous on margins and lower midvein; pistillate flower enclosed in sac with narrow opening at top (perigynium), perigynium at anthesis ovate flattened front-to-back, at anthesis ca. 2×1 mm, in range aging with body nearly rounded, at anthesis lower portion to midpoint roundish, upper portion with medial canal triangular (neck or “beak”) ca. 1.2 mm long, light green ovary, having scabrous teeth from tip downward to level of ovary. **Staminate flower:** = stamens; **perianth** absent; **stamens** 3, free, exerted from top of bractlet; filaments ca. 3.5 mm long, translucent; anthers basifixed, dithecal, in range 1.3–1.5 mm long, pale yellow with papillate colorless tips, longitudinally dehiscent; pollen pale yellow; **pistil** absent. **Pistillate flower:** ca. 3 mm long, short-stalked ca. 0.2 mm; **perianth** absent; **stamens** absent; **pistil** 1; ovary superior, biconvex roundish compressed front-to-back, ca. 0.7 mm across, light green, 1-chambered with 1 ovule; style 2-branched, lower portion ± 0.7 mm long including an enlarged base, the stigmatic branches 2–2.5 mm long, translucent aging reddish. **Fruit:** achene, short-stalked within perigynium; achene in range circular waferlike, $\pm 1.7 \times 1.5 \times 0.35$ –0.4 mm, greenish aging pale brown; perigynium nearly circular in outline and approximately plano-convex + gaping neck, in range to 3×1.8 –1.9 mm including triangular neck 1.2–1.3 mm long with jagged apical teeth ca. 0.4 mm long, “wing” around chamber narrow, initially green, veinless over achene on both faces, minutely serrate on edges of neck; exerted style branches often broken; stalk of achene ca. 0.2 mm long.

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