

Vascular Plants of Williamson County

Eleocharis montevidensis – SAND SPIKESEDGE, SAND SPIKERUSH, GIANT HAIR-GRASS
[Cyperaceae]

Eleocharis montevidensis Kunth, SAND SPIKESEDGE, SAND SPIKERUSH, GIANT HAIR-GRASS. Perennial herb, emergent aquatic, rhizomatous, fibrous-rooted, mat-forming with erect to ascending shoots each with terminal inflorescence. in range to 45 cm tall; shoots typically with 1 basal leaf, glabrous, light green, glabrous; rhizomes stolonlike, horizontal, 1.2–2 mm diameter, internodes of runners to 10 mm long, initially white aging brown with solid white core, with scale (prophyll) having closed sheath to below midpoint, prophyll membranous, low 2-keeled or with 2 principal veins converging at tip, to 9 mm long, colorless or with reddish veins aging reddish; adventitious roots at nodes of rhizome.

Stems (culm = peduncle): cylindric to slightly compressed, 0.5–0.7 mm wide, nongreen in mud and light green or light yellow-green to green above mud, glabrous, smooth; tissue whitish with a conspicuous ring of air canals. **Leaves:** 1 + prophyll, basal and alternate, = sheath closed to top, sheath tightly hiding stem, subtruncate at tip with an inconspicuous, awl-shaped “tooth” at top to 0.9 mm long, persistent, rim at top often having minute reddish spot, lower sheath often bright red aging darker, upper sheath colorless and not splitting. **Inflorescence:** spikelike (“spikelet”), terminal, narrowly ovoid or ellipsoid aging oblong-ellipsoid, acute at tip, in range 30+-flowered (with 30 flowers ellipsoid and $4 \times \pm 1.8$ mm), the flowers helically alternate, with a bractlet (“floral scale”) subtending each flower, bractlets appressed, the 2 lowest bracts (bractlets) subtending spikelet alternate distichous, lacking flower, bractlets subtending flowers helically alternate in 3/8 phyllotaxis; peduncle = stem; basal bract subtending spikelet sheathing and closed around axis (amplexicaule) or clasping at least 3/4, the second sterile bract clasping, ca. 0.8 mm long with length < width, rounded, center cupped and ovate to triangular with wide membranous margins over tip often aging recurved; bractlets subtending flowers ovate, 2–2.7 mm long, center cupped-ovate rounded on back to upper bractlets somewhat keeled, green, having wide membranous margins and obtuse tip wringled or commonly recurved and scarious, not sheathing. **Flower:** bisexual, \pm radial, with exserted stigmatic branches and anthers; **perianth** = bristles with backward-pointing (retrorse) barbs, 5–6(–7), subequal to unequal, \pm 1 mm long except at least 1 short bristle ca. 0.5 mm long, colorless aging tannish; **stamens** 3, free, exserted from bractlet; filaments threadlike, 1.5–2.5 mm long, translucent elongating and drying whitish; anthers basifixed, dithecal, fully exserted, in range 0.75–2 mm long, light yellow to pale yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, obovoid and 3-sided and 3-angled or somewhat 3-sided in \times -section, \pm 0.5–0.6 \times 0.4 mm, light green, 1-chambered with 1 ovule; style ascending with tips exserted from bractlets, at base swollen to form a tubercle, the tubercle \pm conic to pyramidal with 3 angles or even 3 basal lobes, 0.2–0.3 mm and constricted at base or not constricted (no constriction, lacking a “neck”), style 3-branched, below fork flattened, ca. 0.7–0.8 mm long, translucent, the divergent stigmatic branches 1–2 mm long and exserted, translucent, aging curved and twisted, papillate along entire length. **Fruit:** achene with the persistent style tubercle, 1-seeded, fruit body inversely pear-shaped and sometimes somewhat 3-lobed, ca. 0.8–1 \times 0.6–0.7 mm, if 3-sided ridges weakly defined, light yellow-brown, minutely textured with raised cells; tubercle somewhat pyramidal with 3 edges, \pm

0.3 mm, sometimes faces indented; fruit abscised with bractlet, bractlet scarious, keeled and folded holding achene, ca. 2 mm long.

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