

BEAKED SPIKERUSH

Eleocharis rostellata (Torr.) Torr.

Synonyms: *Scirpus rostellatus* Torr.

Family: Cyperaceae (sedge)

FNAI Ranks: G5/S2

Legal Status: US-none; FL-Endangered



Plants densely tufted, mat-forming; often forming large clonal colonies by tip-layering culms. Tide Swamp Unit of Big Bend Wildlife Management Area. Photo by Kelly Anderson.

Field Description: Perennial herb with tip-rooting (bearing proliferous spikelets) and reproductive culms; **culms** usually firm or hard, 0.4 - 3.0 mm wide, compressed; 1.5 - 3 times as wide as thick, bearing up to 8 subacute ribs; some **tip-rooting culms** approaching 2 m long with flexible and whip-like stems; **leaf sheath summit** truncate, sometimes with callous swelling, but not bearing an apical tooth; **spikelets** with 20 - 40 scales; **achene** green to medium or dark brown, apex rounded, not widened and truncate and without "neck" below confluent tubercle; **tubercle** confluent with achene (not clearly differentiated); thus, tubercle base and achene apex merged and with little to no demarcation.

Similar Species: Blackfruit spikerush (*Eleocharis melanocarpa*) is similar by producing tip-rooting culms, but can be differentiated by culms 0.5 - 1.3 mm wide; usually with 10 blunt ribs, finely ridged and minutely granular (at 20x); distal leaf sheath nearly always bearing an apical tooth up to 2 mm long. Most often found in freshwater wetlands, rather than coastal brackish wetlands.

Related Rare Species: Creeping spikerush (*Eleocharis ambigens*) is an uncommon to potentially rare species that may be mistaken for beaked spikerush, as it occupies the same habitat (e.g. brackish tidal marshes). It is characterized as a robust perennial growing from evident horizontal rhizomes and lacking tip-layering culms; culms 0.3 - 5.0 mm wide; having a distal leaf sheath apex firm, opaque, somewhat thickened, with an acute to obtuse apex, and sometimes bearing a small tooth; rarely disintegrating, not inflated or wrinkled; basal (proximal) scale of spikelet amplexicaulous (encircling the culm); achenes not persistent in the spikelet after scales have fallen, 0.9 - 1.9 mm long; achenes prominently reticulate-pitted or finely rugulose (at 10 - 20 times magnification); tubercles pyramidal or mammillate (nipple-like).

Habitat: Brackish and freshwater tidal marshes, sea-level fens; saline soils inland. Calcareous fens northward.

Best Survey Season: Flowering and fruiting July - September.

Range-wide Distribution: ME, ON, and BC south to FL, TX, CA, and Mexico; West Indies. Reported for WV. Coastal FL from Santa Rosa, Wakulla, Taylor, and Miami-Dade Counties.

Conservation Status: Populations of the species are probably most affected by hurricanes and the subsequent deposition of wrack and debris. Individuals occurring in roadside populations appear to do surprisingly well and produce many reproductive culms (Taylor Co. site) in spite of regular mowing and rutting from equipment.

Protection and Management: Burn coastal wet flatwoods at the appropriate fire return interval (2 - 4 years). If possible avoid creating roads or firebreaks through the matrix of wet flatwoods and salt marsh < 1 km from the coast.

References: Harmon, Ford-Werntz, and Grafton 2006, Weakley, A. S. and the Southeastern Flora Team 2023, Wunderlin and Hansen 2011.



Flowering spikelets in wet flatwoods at Tide Swamp Unit of Big Bend Wildlife Management Area. Photo by Kelly Anderson.



Spreading by tip-layering culms. Tide Swamp Unit of Big Bend Wildlife Management Area. Photo by Kelly Anderson.

beaked spikerush

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Growing along margin of salt marsh and wet flatwoods at Tide Swamp Unit of Big Bend Wildlife Management Area. Photo by Kelly Anderson.