

Common Name: FLORIDA FINGER GRASS

Scientific Name: Eustachys floridana Chapman

Other Commonly Used Names:

Previously Used Scientific Names: Chloris floridana (Chapman) Wood

Family: Poaceae/Gramineae (grass)

Rarity Ranks: G2?/S1?

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **grass** growing in tufts from a short, underground stem. **Basal leaves** up to 12 inches (30 cm) long and less than $\frac{3}{8}$ inch (8.2 mm) wide; few or no stem leaves. **Flowering stalks** 20 - 40 inches (50 - 100 cm) tall, with 1 - 3 **flower spikes** (usually 2) at the top of the stem. **Spikes** 2 - 5 inches (5 - 13 cm) long, with many tightly packed **flowers (spikelets)** in 2 rows along one side of the spike. **Spikelet** about $\frac{1}{8}$ inch (3 - 3.7 mm) long, enclosed in several tiny bracts, the outer bract (**lemma**) with a line of stiff hairs, an inner bract (**glume**) with a long, stiff, pointed tip (**awn**); stamens with purple-red **anthers**. Magnification of 10x or higher is needed to examine the spikelet.

Similar Species: Bahia grass (*Paspalum notatum*), a common turf grass that invades natural areas, also has 2 spikes with purple anthers, but its spikelets are not awned; its leaf bases are reddish and overlap to form a flattened, fan-like base. It flowers June–October.

Habitat: Sandhills and other dry or moist (not wet) pinelands.

Life History: Florida finger-grass is a perennial, warm-season grass that reproduces sexually as well as vegetatively by sending up stems from the tips of short rhizomes. As with all grasses, it is wind-pollinated. Its fruits are dispersed by insects and small mammals. Florida finger-grass, like all species in the genus *Eustachys*, uses an unusual mode of photosynthesis called "C4 photosynthesis" because carbon dioxide is incorporated into a four-carbon compound. C4 photosynthesis is an adaptation to high sunlight and temperatures and results in less water loss for the plant.

Survey Recommendations: Surveys are best conducted during flowering (late summer–early fall).

Range: Georgia and Florida; also known historically from Alabama

Threats: Conversion of habitat to pine plantations, pastures, and agriculture; fire suppression.

Georgia Conservation Status: Seven populations have been observed but only 3 have been seen in the last 20 years; 2 populations are on conservation land.

Conservation and Management Recommendations: Burn sandhills and flatwoods every 2 - 3 years during the growing season. Avoid clearcutting, bedding, plowing fire lanes, and other soil disturbance.

Selected References:

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L. Chafin, Apr. 2007: original account K. Owers, Jan. 2010: added pictures



