

# *Scleria lacustris*: Aquatic and Wetland Sedge Invasive in Florida



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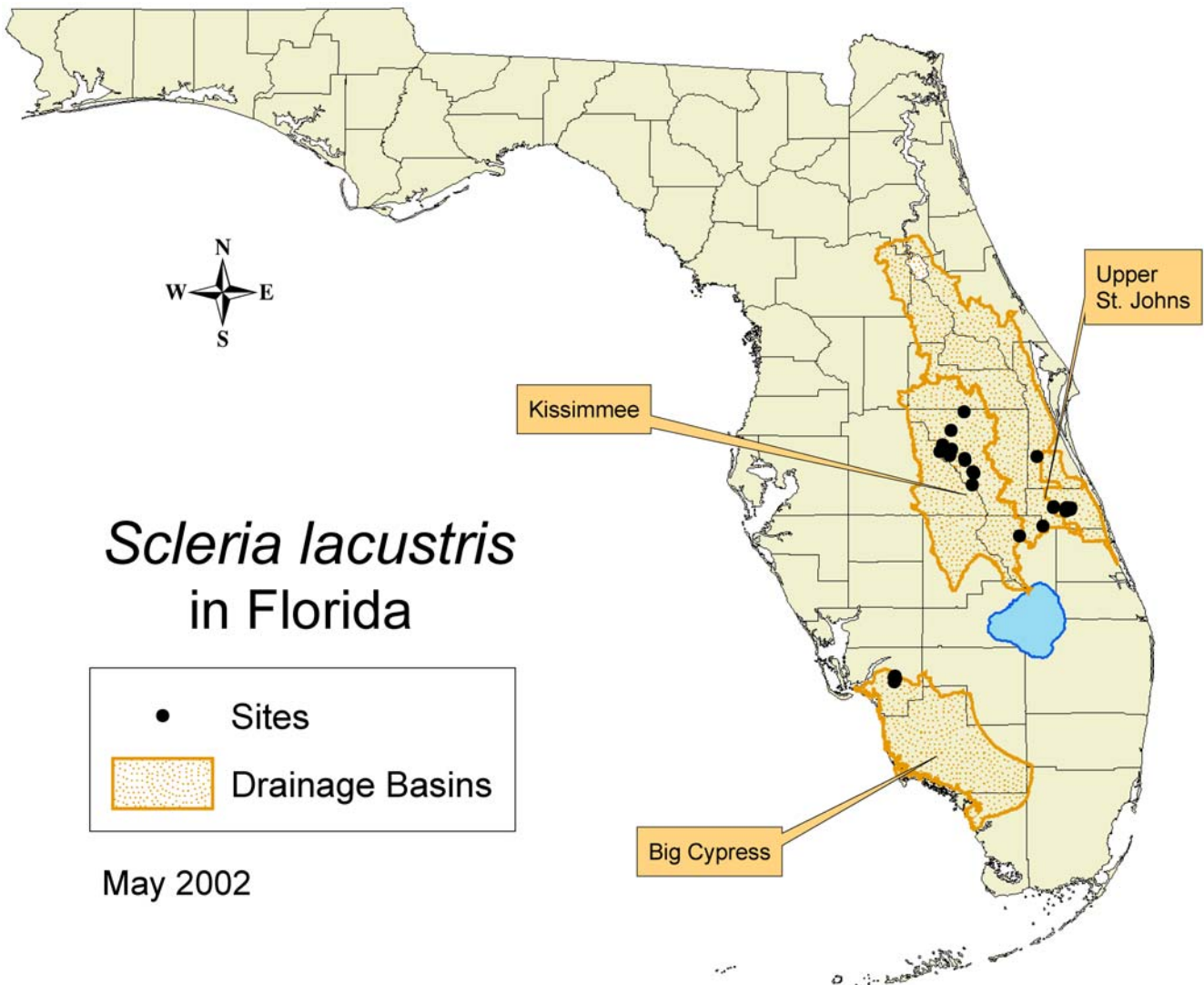
Center for Aquatic and Invasive Plants

**Field season 2001 found the nonindigenous sedge *Scleria lacustris* (Wright’s nut-rush) spreading in conservation marshlands of south central Florida.**

Marshes in the upper basins of the St. Johns River (Brevard and Indian River counties), the Kissimmee River (Polk, Osceola, and Okeechobee counties), and Big Cypress (Lee County) have recently experienced large populations. While scattered collections have been made in Florida over the past fourteen years, *Scleria lacustris* has become more frequent only within the last few years.

Freshwater marshes characterized by seasonal water level fluctuation appear most vulnerable to invasion by *Scleria lacustris*. Included are maidencane and flag marshes. Seedlings of *Scleria lacustris* emerge and become established during spring when marshes are dry. Juvenile plants adapt readily to the influx of water during the rainy summer months. As late summer water levels reach 30 to 100 cm, emergent plants mature to heights of 200 cm. In autumn, *Scleria lacustris* lodges across the standing water (Fig. 8).

*Scleria lacustris* is rare in its native range, the African and American tropics. Its source of introduction to Florida is unknown. Birds and airboats are suspected to aid in dispersal of the shiny nutlets. Nutlets may also float through drainage systems, leaving vast marshes of southern Florida at risk.



### Identification Tips for *Scleria lacustris* (Wright's nut-rush):

- **Nutlets** – Oval to elliptic and somewhat triangular in outline. White to mottled gray, hard, porcelain-like nutlets contain a single seed. Nutlets mature on heavy branching heads September to December (Fig. 5). During winter nutlets can be found under a mulch of dry stalks (Fig. 1). Vegetative portions of plants do not over-winter or spread, however nutlets ensure viable seed banks for reoccurrence in spring.
- **Seedlings** - Appear March through June, when the substrate is dry. The nutlet remaining attached to young seedling roots lends positive identification (Fig. 2).
- **Roots** – Dark red, stout and shallowly anchored in the substrate. Also, fibrous floating roots appear at nodes when stems become submersed (Fig. 3).
- **Stems** - As thick as 2.5 cm at the base and sharply three angled throughout. Stems solitary in aquatic conditions, developing spongy interiors as plants emerge from water (Fig. 4). Dry land plants are smaller in stature (60 –150 cm) with thinner, multiple stems (5 - 7). Stems are streaked with red, especially at the base.
- **Leaves** – Pleated, smooth and shiny. Leaf width to 2.5 cm, length to 60 cm and tapering to a point. Prickles along the leaf and stem margins impart a deep, slicing wound when handled (Fig. 7).
- **Flowers** - Displayed August to September on bisexual spikelets. Spikelets spirally to alternately arranged on branching inflorescences (flowers have matured to nutlets in Fig. 6).

**Report Occurrences:** [Colette\\_Jacono@usgs.gov](mailto:Colette_Jacono@usgs.gov) or phone 352.378.8181 ext. 315.

**Further Information:** Jacono, C.C. 2001. *Scleria lacustris* (Cyperaceae), an aquatic and wetland sedge introduced to Florida. Sida, Contributions to Botany 19(4): 1163-1170.

**On the Web.** [http://www.fcsc.usgs.gov/Nonindigenous\\_Species/Scleria\\_lacustris/scleria\\_lacustris.html](http://www.fcsc.usgs.gov/Nonindigenous_Species/Scleria_lacustris/scleria_lacustris.html)

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