Common Name: STOKES ASTER

Scientific Name: *Stokesia laevis* (Hill) Greene

Other Commonly Used Names: blue stokesia

Previously Used Scientific Names: *Carthamus laevis* Hill

Family: Asteraceae/Compositae (composite)

Rarity Ranks: G4/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: FAC

Description: Perennial **herb** with a woolly **stem** up to 2 feet (20 - 60 cm) tall. **Basal leaves** 4 - 12 inches (10 - 30 cm) long and ⅜ - 2 inches (1 - 5 cm) wide, dotted with tiny glands, smooth and somewhat fleshy, evergreen, with bluntly pointed tips and winged leaf stalks. **Mid-stem leaves** 2¾ - 4¾ inches (7 - 12 cm) long, lance-shaped, alternate, widely spaced, clasping the stem, edges slightly inrolled and smooth except for a few pointed teeth near the base. **Flower**

heads 2¾ - 4 inches (7 - 10 cm) wide, held at the tips of long, leafy stalks; with whorls of leafy, spiny bracts beneath the head; **ray flowers** up to 1¼ inch (3 cm) long, blue, lavender, or white, with 5 deeply cut lobes at the tip; inner **disk flowers** up to ¾ inch (2 cm) long, tubular, blue or white. **Fruits** less than ⅜ inch (5 - 8 mm) long, seed-like, greenish-white, shiny, 3- or 4-sided.

Similar Species: No other species has such showy, blue flower heads. The fleshy, gland-dotted basal leaves are similar to those of a pink-flowered species which occurs in flatwoods, vanilla plant (*Carphephorus odoratissimus*).

Related Rare Species: Stokes' aster is the only species in its genus.

Habitat: Wet pine savannas and flatwoods, pitcherplant bogs.

Life History: Stokes aster reproduces sexually and possibly vegetatively – some sources describe it as rhizomatous. As with most members of the composite family, Stokes aster flower heads contain both disk flowers and ray flowers. All of its flowers, both disk and ray flowers, are fertile and bisexual. The flowers must be cross-pollinated in order to produce seed. They are visited by a wide variety of insects and are probably pollinated by butterflies and bees. Stokes aster is a potential oilseed crop; its seeds contain high levels of a fatty acid that can be converted to epoxy oil and used in the manufacture of plastics, varnish, and glues.

Survey Recommendations: Surveys are best conducted during flowering (June–July).

Range: Georgia, Florida, Alabama, Mississippi, Louisiana, and South Carolina.

Threats: Clearing and logging; conversion of habitat to pine plantations, pastures, and development; fire suppression and encroachment by woody plants.

Georgia Conservation Status: Five populations are known, none on conservation land.

Conservation and Management Recommendations: Avoid ditching and draining wetlands. Apply prescribed fire every 2 - 3 years. Avoid logging, bedding, and other soil-compacting activities. Protect sites from conversion to pine plantations and developments.

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