Common Name: PANHANDLE MEADOWBEAUTY

Scientific Name: *Rhexia salicifolia*

Other Commonly Used Names: willowleaf meadowbeauty

Previously Used Scientific Names: none

Family: Melastomataceae (meadowbeauty)

Rarity Ranks: G2/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Perennial **herb** usually about 8 inches (20 cm) tall, occasionally up to 22 inches (55 cm). **Stems** rigid, somewhat at the base, usually much branched, covered with glandular hairs, square at midstem, the 4 faces nearly equal in width, the angles with very narrow wings. **Leaves** ½ - 1½ inches (1.5 - 4 cm) long, opposite, narrow, lacking leaf stalks, with 3 conspicuous veins and glandular hairs on margins and both surfaces; **leaves** are turned at right angles to the ground so the surfaces face out rather than up. **Flowers** with 4 dark pink petals and 8 bright yellow stamens with curved anthers; the base of the flower is enclosed by a small, vase-shaped **floral tube** with scattered hairs, short neck, round body, and 4 triangular segments (calyx) at the top. **Fruit** enclosed in the floral tube which expands to about ¼ inch (5 - 7 mm) long when mature; seeds tiny, curved like a snail shell.

Similar Species: There are 12 species of meadow-beauty in Georgia. Panhandle meadowbeauty is the only species with this combination features: narrow leaves turned perpendicular to the ground, equal-sided stems, and glandular-hairy fruit (floral tube) with the neck shorter than the body.

Related Rare Species: Nuttall's meadowbeauty (*Rhexia nuttallii*, Special Concern) occurs in wet pine flatwoods and bogs in southeast Georgia. Also see on this web site: small-flowered meadowbeauty (*Rhexia parviflora*) and awned meadow-beauty (*Rhexia aristosa*).

Habitat: Sunny margins of depression marshes, flatwoods ponds, and sinkhole ponds, in wet sands or peats.

Life History: Panhandle meadowbeauty reproduces both sexually and vegetatively, occasionally sprouting from tubers. Its flowers are pollinated by insects, probably by bumblebees. The bright yellow anthers (pollen-bearing structures in the flower) are curved and appear to be hinged at the junction with the stamen's filament, or stalk. Bees grasp the anther and "buzz" it, the vibration causing pollen to shake from a tiny pore at the tip of the anther. The seeds of panhandle meadowbeauty remain in the soil seed bank for years, and germinate when water levels in ponds recede and expose sandy shores. Panhandle meadowbeauty leaves are turned perpendicular to the ground, avoiding direct sunlight and the light reflected from the white sands of the pond margins.

Survey Recommendations: Surveys are best conducted during flowering and fruiting (June–October) although the leaves turned perpendicular to the ground are distinctive throughout the growing season.

Range: Georgia, Alabama, and Florida.

Threats: Lowering of groundwater table due to withdrawal for irrigation and urban uses; off-road vehicle use; creation of turf-grass lawns around sinkhole ponds; fire suppression.

Georgia Conservation Status: Only one population has been discovered in Georgia; it occurs on conservation land.

Conservation and Management Recommendations: Allow fire in surrounding uplands to burn into ponds and wetlands; avoid placing firebreaks in pond margins. Maintain pond shoreline vegetation in natural condition; avoid clearing and mowing. Prevent run-off and sedimentation into ponds and wetlands. Exclude off-road vehicles from wetlands.

Selected References:

Chafin, L.G. 2000. Field guide to the rare plants of Florida. Florida Natural Areas Inventory. Tallahassee, Florida.

Godfrey, R.K. and J.W. Wooten. 1981. Aquatic and wetland plants of southeastern United States, Vol. 2, dicotyledons. University of Georgia Press, Athens.

Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Technical Publication R8-TP2. United States Forest Service, Atlanta.

Kral, R. 1995. Status report on *Rhexia salicifolia*. U.S. Fish and Wildlife Service, Jackson, Mississippi.

Kral, R. and P.E. Bostick. 1969. The genus *Rhexia* (Melastomataceae). Sida 3(6): 387-440.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia.
http://www.natureserve.org/explorer

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
http://www.herbarium.unc.edu/flora.htm

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