

Common Name: BALTZELL'S SEDGE

Scientific Name: Carex baltzellii Chapman ex Dewey

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Cyperaceae (sedge)

Rarity Ranks: G3/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial, evergreen, grass-like **herb** forming leafy clumps. **Leaves** 8 - 30 inches (20 - 80 cm) long, less than $^5/_{16}$ inch (4 - 8 mm) wide, pale blue-green, roughly hairy on the upper surface, with a tapering tip. **Flowering stems** erect, about 1 foot (30 cm) tall, usually shorter than the leaves, bearing both female-flowered and male-flowered spikes. **Female-flowered spikes** $^5/_8$ - $^1/_8$ inches (1.5 - 3.5 cm) long, held below the male-flowered spike (lower spike in photo, right) and also hidden in the tuft of leaves. **Male-flowered spikes** $^3/_8$ - $^1/_8$ inches (1 - 4 cm) long, at the top of the flowering stem (upper spike in photo, right). Both female and male spikes are composed of tiny, overlapping, sharp-pointed, dark reddish-purple **scales** with yellow edges and midveins, each scale enclosing an inconspicuous floret. **Fruits** are less than $^1/_8$ inch (3 mm) long, 3-angled, brownish-black, hairy, on a tiny stalk, and enclosed in a papery, ribbed sac (**perigynium**). Magnification of 10x or higher is needed to examine the spikes and fruits.

Similar Species: Other upland sedges in Georgia with blue-green leaves have pale green, not purple, scales (e.g. *Carex flaccospermum*) or are found only in wetlands (*C. glaucescens*, *C. verrucosa*, *C. joori*).

Related Rare Species: Nearly 40 species of *Carex* are protected or of Special Concern in Georgia. Detailed information about 7 of these *Carex* species is provided on this website: Baltzell's sedge (*C. baltzellii*), granite dome sedge (*C. biltmoreana*), velvet sedge (*C. dasycarpa*), impressed-nerve sedge (*C. impressinervia*), wretched sedge (*C. misera*), Radford's sedge (*C. radfordii*), and Roan Mountain sedge (*C. roanensis*).

Habitat: Moist, hardwood forests in ravines, usually mid-slope, under a canopy of beech, southern magnolia, and spruce pine.

Life History: Baltzell's sedge is a perennial, evergreen herb. Like most sedges, it is wind-pollinated. Nothing is known about seed dispersal or other aspects of reproduction for this species.

Survey Recommendations: Surveys are best conducted during fruiting (May–June) because fruits are important for identification; however, no other sedge in this upland habitat has bluegreen leaves and dark reddish-purple scales on the spike. Baltzell's sedge flowers late Marchearly April.

Range: Coastal Plain of Georgia, Florida, Alabama, and Mississippi.

Threats: Logging and clearing, invasion by exotic pest plants, and conversion of habitat to pine plantations and developments.

Georgia Conservation Status: Only one population – on private land in Early County – is known. Plants were reported from Thomas County in the 1800s.

Conservation and Management Recommendations: Protect slopes and ravine forests from clearing and erosion. Eradicate exotic pest plants such as Japanese honeysuckle.

Selected References:

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

FNA. 2003. Flora of North America. Vol. 23, Magnoliophyta: Commelinidae (in part), Cyperaceae (part 1). Oxford University Press, New York.

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

NatureServe. 2007. NatureServe Explorer. Arlington, Virginia. http://www.natureserve.org/explorer

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

Weakley, A.S. 2007. Flora of the Carolinas, Virginia, Georgia, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.

Author of species account: Linda G. Chafin

Date Compiled or Updated:

L. Chafin, Oct. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures



Inflorescence

BALTZELL'S SEDGE Carex baltzellii

