



Common Name: GRANITE DOME SEDGE

Scientific Name: *Carex biltmoreana* MacKenzie

Other Commonly Used Names: Biltmore sedge

Previously Used Scientific Names: none

Family: Cyperaceae (sedge)

Rarity Ranks: G3/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial, evergreen, grass-like **herb** forming large clumps with scaly, intertwined **rhizomes** embedded in rock crevices. **Leaves** up to 20 inches (50 cm) long and ¼ inch (6 mm) wide, blue-green with a purple base, with rough hairs on the veins and margins. Leaves with a purplish, basal **sheath** that encircles the stem; old sheaths form a mat of tan fibers at the base of plants. **Flowering stems** 1 - 2½ feet (30 - 75 cm) tall, leafy, 3-angled with tiny, rough hairs on the angles and a purple base. **Male-flowered spikes** up to 1 inch (2.5 cm) long, reddish-brown, solitary at the top of the flowering stem. **Female-flowered spikes** 1 - 3 per plant, up to 1⅜ inches (3.5 cm) long, purple-brown, held below the male-flowered spike on the same stem, each spike with 6 - 20 fruits. **Fruits** less than ⅛ inch (2.5 mm) long, tapered at both ends, 3-angled, yellow-brown, tightly enclosed in an oval sac (**perigynium**) with many ribs and a bent tip. Magnification of 10x is needed to examine the spikes and fruits.

Similar Species: Granite dome sedge resembles several other sedges but is larger than most and forms drooping clumps on seepy, sloping rock outcrops.

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: Seepy areas with thin soils on granite cliffs, ledges and outcrops at high elevations and in nearby woods; often with bush honeysuckle and mountain dwarf dandelion.

Life History: Granite dome sedge, like most sedges, are wind-pollinated. Nothing is known about seed dispersal or other aspects of reproduction for this species.

Survey Recommendations: Surveys are best conducted during fruiting, June–August; mature fruits are important for identification. Plants flower May–June.

Range: Georgia, South Carolina, and North Carolina.

Threats: Logging, clearing, and development in high elevation forests. Excessive recreational use by climbers and hikers of high elevation rock outcrops.

Georgia Conservation Status: Six populations are known, all in the Chattahoochee National Forest.

Conservation and Management Recommendations: Protect high elevation forests from logging, clearing, and development. Direct hikers and climbers away from rock outcrops.

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Date Compiled or Updated:

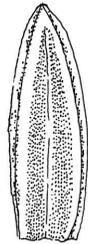
L. Chafin, Oct. 2007: original account

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

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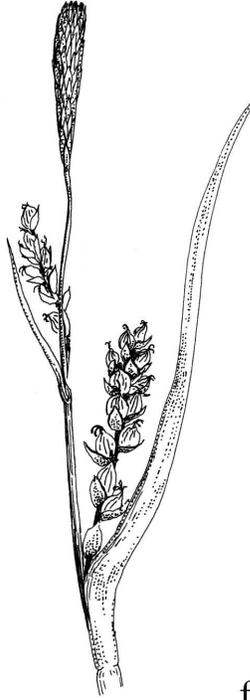
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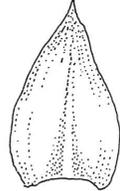
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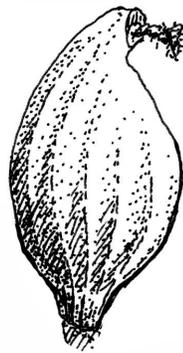
male-flowered
spike



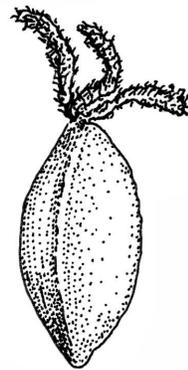
female-flowered
spike



scale



ribbed fruit sac
with bent tip



fruit