Common Name: FLATROCK ONION

Scientific Name: *Allium speculae* Ownby & Aase

Other Commonly Used Names: Little River Canyon onion

Previously Used Scientific Names: none

Family: Liliaceae (lily) or Alliaceae (onion)

Rarity Ranks: G2/S2

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** rising from a bulb; all parts of the plant have a distinct onion odor. **Leaves** usually 4 - 5 per plant, 8 - 10 inches (20 - 25 cm) long, fleshy, grass-like, flat or curved in cross-section with a long, deep groove running the length of the leaf. **Flower stalk** 8 - 12 inches (20 - 30 cm) tall, leafless, round in cross-section. **Flower cluster** with 10 - 15 flowers, the base of the cluster enclosed by a papery **sheath** that splits into 3 segments, each segment with a single, faint vein. **Flowers** about ½ inch (1.3 cm) across, with 6 spreading, white or pinkish **tepals** (3 petals + 3 sepals) and green centers. **Fruits** 3-lobed, rounded, with a series of low crests alternating with lobes.

Similar Species: Cuthbert's onion (*Allium cuthbertii*) has 2 - 3 leaves per plant, 5 - 7 veins per sheath segment, down-curved tepals, and green, knobby crests on its fruits. Canada onion (*A. canadense* var. *canadense*) produces a cluster of small bulbs with, or instead of, flowers. Mobile onion (*A. canadense* var. *mobilense*) has 3 - 7 veins per sheath segment, and its fruits lack crests. False garlic (*Nothoscordum bivalve*) flowers have yellow centers; its stem is usually less than 1 foot (30 cm) tall, and its leaves lack the onion smell.

Related Rare Species: None in Georgia.

Habitat: In Georgia, seepy edges of vegetation mats on granite outcrops of Lithonia gneiss; in Alabama, shallow depressions on sandstone outcrops.

Life History: Several types of insect are known to visit the flowers of flatrock onion, including honey bees, bumble bees, and butterflies. Seed dispersal occurs when the capsule opens; seeds fall to the ground and germinate near the parent plant, leading to a clumped growth pattern. The seeds of some western species of *Allium* are dispersed when the inflorescence breaks off from the plant and is carried by the wind, but this has not yet been observed with flatrock onion.

Survey Recommendations: Surveys are best conducted during flowering (mid-May–June) and fruiting (mid-June–mid-July).

Range: Georgia and northeast Alabama (on Sand and Lookout Mountains, where it is known as Little River Canyon onion).

Threats: Granite outcrops are threatened by quarrying, trash dumping, off-road vehicle use, and development.

Georgia Conservation Status: Flatrock onion occurs at 8 outcrops, none of which is protected.

Conservation and Management Recommendations: Protect granite outcrops from quarrying, trash dumping, and off-road vehicle use. Direct foot traffic away from rare plant sites. Create buffers and limit development around outcrops. Protect outcrops with conservation easements.

Selected References:

Allison, J.R. 1989. Status report on *Allium speculae* Ownby & Aase in Georgia. Georgia Natural Heritage Program, Social Circle.

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. 26, Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford University Press, New York.

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

Ownbey, M. and H.C. Aase. 1959. *Allium speculae*, a new species of the *Allium canadense* alliance from Alabama. Rhodora 61:70-72.

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.

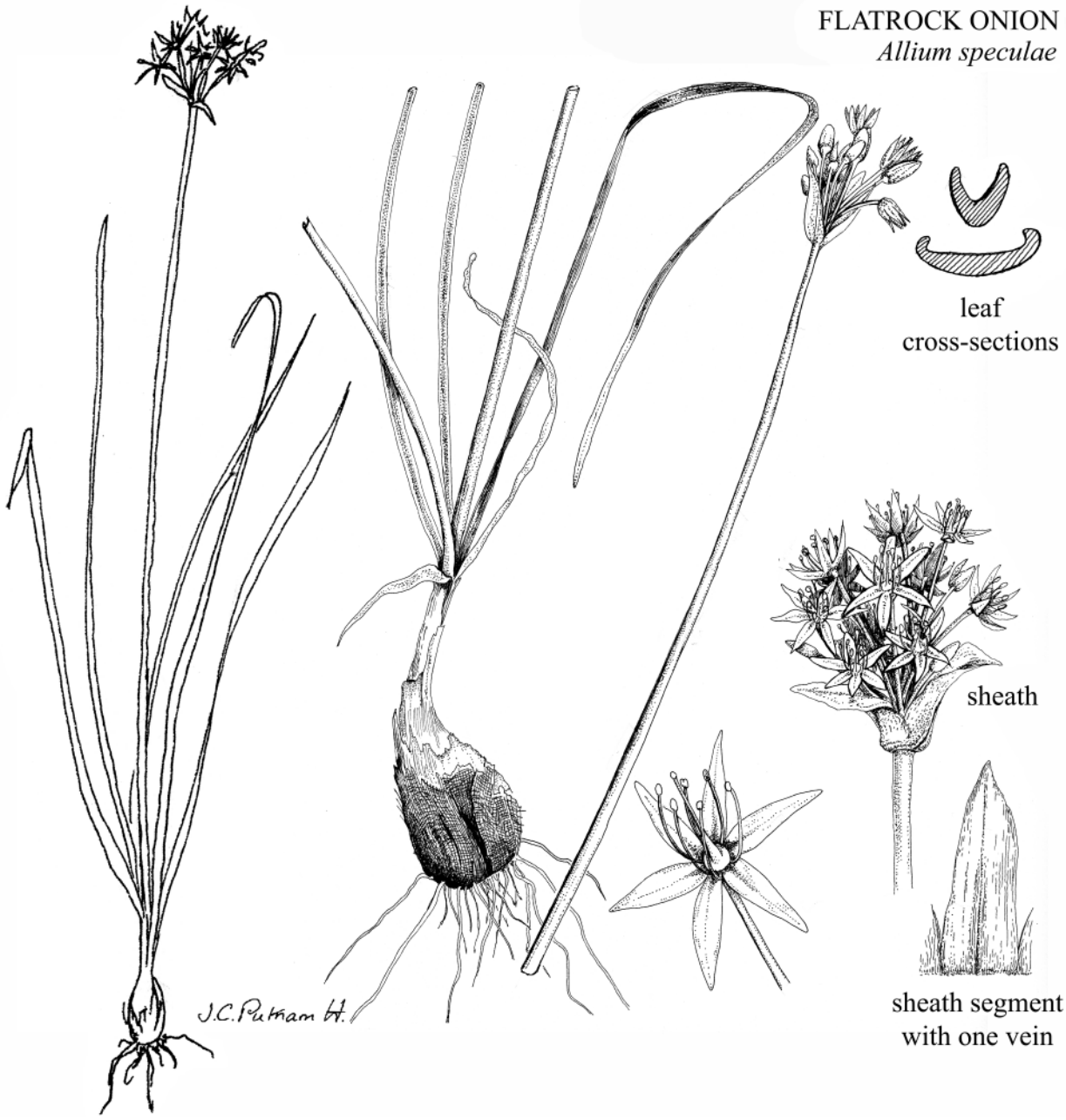
Schotz, A.R. 1998. Status survey report on *Allium speculae*, Little River Canyon onion, in Alabama. Alabama Natural Heritage Program, Montgomery.

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

Author of species account: Linda G. Chafin

Date Compiled or Updated:
L. Chafin, Sept. 2007: original account
K. Owers, Jan. 2010: updated status and ranks, added pictures

FLATROCK ONION
Allium speculae



Inflorescence