

Common Name: CUMBERLAND ROSE GENTIAN

Scientific Name: Sabatia capitata (Rafinesque) Blake

Other Commonly Used Names: Appalachian rose gentian

Previously Used Scientific Names: Sabatia boykinii Gray, Lapithea boykinii (Gray) Small,

Lapithea capitata (Rafinesque) Small

Family: Gentianaceae (gentian)

Rarity Ranks: G2/S2

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: none

Description: Annual or short-lived perennial **herb** 6 - 28 inches (15 - 70 cm) tall. **Leaves** 1 - 2 inches (2.3 - 5 cm) long and $\frac{3}{8}$ - $\frac{3}{4}$ inch (1 - 2 cm) wide, opposite, with rounded to pointed tips

and a slightly clasping base. **Flowers** single or in tight clusters of 2 or more flowers, with no or very short flower stalks, at the top of the stem or in the angle between stem and leaf. **Petals** 7 - 12 (usually 8), dark pink to almost white, with a yellow mark at the base; different shapes and sizes of petals sometimes occur within the same flower. **Stamens** 7 - 12, showy, bright yellow, twisted. **Fruit** an oval capsule $\frac{5}{8}$ - $\frac{7}{8}$ inch (1.7 - 2.2 cm) long.

Similar Species: Most of Georgia's rose gentians occur in the Coastal Plain. The other species that occur in north Georgia (*Sabatia angularis*, *S. brachiata*, and *S. campanulata*) have 5-petaled, stalked flowers in loosely branching clusters.

Related Rare Species: None in Georgia.

Habitat: Openings in oak-hickory-pine forests, wet meadows over sandstone caprock or shale, roadsides and rights-of-way through these habitats.

Life History: Cumberland rose gentian is an annual or a short-lived perennial herb. Little else is known about the biology of this species; all species of *Sabatia* are capable of self- and crosspollination, but outcrossing is favored by the fact that the pistils and stamens mature at different times, usually with the anthers maturing first. Observations of pollinators and seed dispersers for Cumberland rose gentian have not been reported.

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

Range: Georgia, Alabama, Tennessee, and North Carolina.

Threats: Conversion of habitat to pine plantations, agriculture, or developments; use of herbicides in rights-of-way, logging and other clearing.

Georgia Conservation Status: Seven populations are known, only 3 on conservation land.

Conservation and Management Recommendations: Use prescribed fire or hand-clearing to control woody underbrush. Avoid herbicide use in rights-of-way; schedule mowing well before flowering or after fruiting. Avoid clearing or logging.

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.

Clark, J. 2004. Wildflowers of Pigeon Mountain, Lookout Mountain, Cloudland Canyon State Park, and Chickamauga National Military Park in northwest Georgia. Waldenhouse Publishers, Walden, Tennessee.

Duncan, W.H. and M.B. Duncan. 1999. Wildflowers of the eastern United States. University of Georgia Press, Athens.

Good, A. 2004. Sabatia capitata: annual or perennial? Tipularia 19: 36-38.

Horn, D., T. Cathcart, T.E. Hemmerly, and D. Duhl. 2005. Wildflowers of Tennessee, the Ohio Valley, and the southern Appalachians. Lone Pine Publishing, Auburn, Washington.

NatureServe. 2008. 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.

Perry, J.D. 1971. Biosystematic studies in the North American genus *Sabatia* (Gentianaceae). Rhodora 73: 309-369.

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

Wilbur, R.L. 1955. Revision of the North American genus *Sabatia* (Gentianaceae). Rhodora 57: 1-104.

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Date Compiled or Updated:

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