



Common Name: GREEN PITCHERPLANT

Scientific Name: *Sarracenia oreophila* (Kearney) Wherry

Other Commonly Used Names: none

Previously Used Scientific Names: *Sarracenia flava* Linnaeus var. *oreophila* Kearney

Family: Sarraceniaceae (pitcherplant)

Rarity Ranks: G2/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: OBL

Description: Perennial **herb** with leaves modified into erect, tubular pitchers. **Pitchers** 8 - 30 inches (20 - 75 cm) tall, green, narrow at the base and widening to an opening partially covered by a hood. Many flat, curved, erect, non-pitcher leaves (**phyllodes**), 2 - 7 inches (5 - 18 cm) tall, are produced in late summer, persist through the winter, and may be more numerous than pitchers when plants are stressed. **Flower stalk** 18 - 28 inches (45 - 70 cm) tall, leafless. **Flower** solitary with 5 drooping, yellow **petals**, 1½ - 2 inches (4 - 5.5 cm) long; 5 yellow-green **sepals**; and a yellow-green, umbrella-shaped **style disk** in the center of the flower. Sepals and style disk persist long after the petals fall, and the **fruit** – a small, round, warty capsule – develops.

Similar and Related Rare Species: All seven of Georgia's pitcherplants are state-protected and included on this web site: yellow trumpets (*Sarracenia flava*), hooded pitcherplant (*S. minor*), white-top pitcherplant (*S. leucophylla*), green pitcherplant (*S. oreophila*), parrot pitcherplant (*S. psittacina*), purple pitcherplant (*Sarracenia purpurea*), and sweet pitcherplant (*S. rubra*).

Habitat: Wet meadows, wet flatwoods, swamps, seepage slopes, sandy stream banks.

Life History: Pitcherplants capture and digest insects and other small animals in their pitchers. Nectar is produced by glands around the top of the pitcher, luring animals to the opening with its sweet smell. Stiff, down-pointing hairs line the pitcher, encouraging the animals to slide in and impeding their escape. Enzymes dissolved in water in the base of the pitcher digest the animals, making nutrients, particularly nitrogen, available for absorption by the plant. (Soils of bogs and other permanently saturated wetlands are typically low in nitrogen.)

Pitcherplants reproduce sexually and also vegetatively by spread of underground stems (rhizomes). Pitcherplants are usually 4 - 5 years old before they flower and may live to be 20 - 30 years old. The unusual shape of their flowers, with drooping petals and umbrella-like style disk, promotes cross-pollination by insects. When an insect, usually a bee, pushes its way past the petals to reach nectar on the interior of the flower, it brushes against one of the stigmas, which are at the pointed tips of the "umbrella," and deposits pollen gathered from a previously visited flower. Once inside the petals, it picks up pollen from the anthers and from the inner surface of the umbrella and then carries it to the next visited flower, usually avoiding the stigmas as it leaves the flower. Since it would be a disadvantage to the plant to "eat" its pollinators, most pitcherplants produce flowers before their pitchers are well developed. However, green pitcherplants flower at the same time their pitchers are fully expanded; no studies have been done to determine how this effects pollination or seed set.

Survey Recommendations: Green pitcherplant blooms May–early June, but pitchers may be identified throughout the growing season.

Range: Thirty-five populations are known in Georgia, northeast Alabama, and southwest North Carolina; historically, plants occurred in eastern Tennessee.

Threats: Destruction of habitat by clearing, ditching, and draining. Fire suppression, canopy closure, and encroachment by woody plants. Poaching. Off-road vehicle traffic. Digging by feral hogs.

Georgia Conservation Status: Only one population has survived; it is protected by a conservation easement.

Conservation and Management Recommendations: Avoid ditching and draining wetlands. Apply prescribed fire or hand-clear to control competing vegetation and prevent canopy closure. Limit access to sites to prevent poaching and off-road vehicle traffic. Eradicate feral hogs.

Selected References:

Catalani, M. 2004. A field study of *Sarracenia oreophila*. Carnivorous Plant Newsletter 33: 6-12.

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

Dennis, W.M. 1980. *Sarracenia oreophila* (Kearny) Wherry in the Blue Ridge Province of northeastern Georgia. *Castanea* 45(2): 101-103.

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

Godt, M.J.W. and J.L. Hamrick. 1996b. Genetic structure of two endangered pitcher plants, *Sarracenia jonesii* and *Sarracenia oreophila* (Sarraceniaceae). *American Journal of Botany* 83(8): 1016-1023.

Govus, T.E. 1987. The occurrence of *Sarracenia oreophila* (Kearney) Wherry in the Blue Ridge Province of southwestern North Carolina. *Castanea* 52: 310-311.

Honda, M. 2008. Insectivorous plants in the wilderness.
http://www.honda-e.com/IPW_3_Description/TX-1PitcherPlants.htm

International Carnivorous Plant Society. 2008. Carnivorous plant FAQ.
<http://www.sarracenia.com/faq/faq5534.html>

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.

McDaniel, S. 1971. The genus *Sarracenia*. Bulletin 9, Tall Timbers Research Station, Tallahassee, Florida.

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.

Schnell, D.E. 1980. Notes on the biology of *Sarracenia oreophila* (Kearney) Wherry in the Blue Ridge Province of southwestern North Carolina. *Castanea* 45(3): 166-170.

Schnell, D.E. 2002. Carnivorous plants of the United States and Canada, 2nd edition. Timber Press, Inc. Portland, Oregon.

USFWS. 1991. Green pitcherplant (*Sarracenia oreophila*) – U.S. Fish and Wildlife Service, Species Accounts. U.S. Fish and Wildlife Service, Washington D.C. <http://endangered.fws.gov>

USFWS. 1994. Green pitcherplant (*Sarracenia oreophila*) recovery plan. U.S. Fish and Wildlife Service, Jackson, Mississippi. <http://endangered.fws.gov>

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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