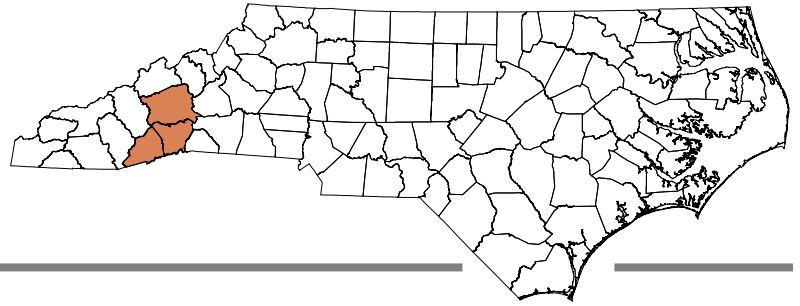


Mountain sweet pitcher plant

Sarracenia rubra ssp. *jonesii*

(Trumpets, dumb-watches, Eve's cups, fly bugles)

Endangered (September 30, 1988)



Description: Mountain sweet pitcherplant is an insectivorous, rhizomatous, perennial herb with hollow, pitcher-like leaves, up to 29 inches (73 cm) tall. There is a narrow, linear ridge (wing) on one side of the leaf, and a heart-shaped hood at the top which is usually erect and 0.4-1.2 inches (1-3 cm) wide. When viewed from the side, the leaves appear trumpet shaped. Mature leaves have red veins on a coppery green background. Leaves usually die off with the first frost. The first leaves to form in the spring look somewhat deformed, with a wide wing along the leaf, a small pitcher tube, and an 'S' shaped curvature. Flowers are solitary and sweet-smelling, 0.8-1.2 inches (2-3 cm) long, with petals that are usually maroon on the outer surface. There may be more than one flower per plant. The fruit is a dry capsule, 0.2-0.6 inch (5-15 mm) in diameter. Insects that fall into the hairy, trumpet-like pitcher leaves are digested in liquid containing enzymes. Nutrients (minerals) from their bodies are absorbed by the plant tissue. Although not completely understood, this process may allow carnivorous species to compete in nutrient poor habitats.

Life History: Like other pitcher plants, it can reproduce vegetatively by rhizomes for decades without sexual reproduction by seeds. This lack of sexual reproduction is a great concern because even though the rhizomes are persistent and long lasting (20-35 years), the older plants cannot live indefinitely. Flowering occurs April through June with fruiting in June through July.

Habitat: Endemic to a few mountain bogs and stream banks; usually found in level depressions associated with floodplains. Some populations grow along waterfalls on granite rock faces. Bog habitats have deep, saturated soils containing loam, sand, and silt with a high organic matter content and medium to high acidity, dominated by shrubs and herbs. Historically, the bogs were probably kept open by natural distur-

bances like water fluctuation, beaver activity, and the constantly high water table in the bogs which does not permit woody seedlings to become established.

Distribution: Limited to ten populations in the southern mountains of North Carolina and South Carolina. In North Carolina, reported in Buncombe*, Henderson, and Transylvania counties.

Threats: Overcollection of plants, trampling by humans and livestock; degradation of habitat by drainage of wetlands, impoundment, cultivation and over-grazing, natural succession, and recreational development (the single most significant threat to this plant, especially golf courses).

Management Recommendations: Protect existing populations and habitat. Educate private landowners in protection and management of the species sites. Search for additional populations. Study and research species autecology and habitat characteristics.

* No record has been reported in this county in the past 20 years.

Sources: Radford et al. 1964; Schnell 1976; USFWS 1992a, 1995a.

