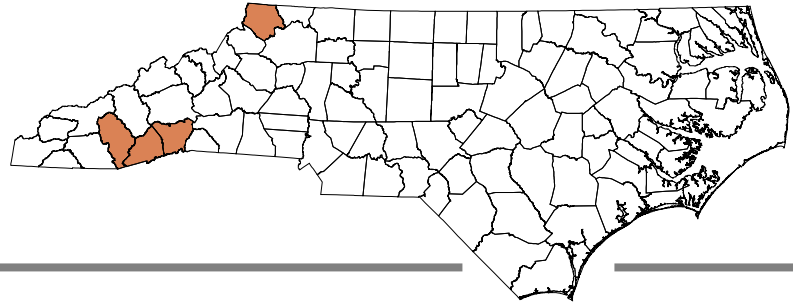


Swamp pink

Helonias bullata

Threatened (September 9, 1988)



Description: Swamp pink is a perennial herb in the lily family growing to 12 inches (30 cm) tall from a stocky underground rhizome. During seed maturation, the flower stalk can grow up to 5 ft (1.5 m) tall. Strap-like leaves are lance-shaped, evergreen, with a pointed tip and parallel veins, up to 10 inches (25 cm) long and 0.8-1.6 inches (2-4 cm) wide, and grow from a rosette at the base of the plant. Thirty to fifty fragrant flowers grow in a tight cluster at the end of a thick stalk. The cluster is 1-3 inches (3-8 cm) long. Each flower has 6 petals and 6 sepals, and is colored pink to lavender. Leaves turn reddish brown in winter and lie mostly flat on the ground, sometimes hidden by leaf litter. A large button in the center of the leaves holds the flower head for next season.

Life History: Flowering occurs early March-May. The fruit is a papery, three-lobed capsule in the shape of an upside-down heart, 0.12-0.2 inch (3-5 mm) long and 0.3-0.4 inch (8-10 mm) wide. Fruiting occurs June-July. Reproduction is primarily asexual by clonal root growth. Species can reproduce sexually by seeds but flowering and seed dispersal is limited. Plants tend to grow in clumps due to clonal activity and populations are very slow to expand.

Habitat: Variety of wetland habitats including Appalachian bogs and swamps, swampy forests bordering small streams, boggy meadows, and spring seepage areas. Requires constant saturated, but not flooded, forest habitat. Commonly associated with some evergreens, including pitch pine (*Pinus rigida*), Atlantic white cedar, American larch, black spruce, red spruce, and with red maple. Often grows on hummocks

formed by trees, shrubs, and sphagnum moss. The hummocks keep the roots moist but not submerged.

Distribution: Southern mountain region in Ashe, Henderson, Jackson, and Transylvania counties.

Threats: Wetland loss to urban, agricultural, and silvicultural development; habitat degradation (esp. siltation) from off-site disturbance including groundwater withdrawal, sewage discharge, siltation from soil erosion, and introduction of excess nutrients and toxic chemicals; collection; trampling by humans and livestock; competition from exotic plants; intensive livestock grazing and resultant over-fertilization.

Management Recommendations: Education of private landowners of existing sites about protection of site hydrology, prevention of siltation, maintaining a thin canopy with enough shade to minimize competition with other more aggressive species, and providing buffer zones of at least 150 meters wide. Searches for new populations and research to study specific habitat requirements.

Sources: Murdock pers. com.; Radford et al. 1964; USFWS 1991b, 1992a.

