White-fringeless orchid

Platanthera integrilabia

Description

White fringeless orchid is a perennial herb that grows up to 60 cm tall. It has a single, light-green stem rising from a tuber. The leaves have smooth edges and tend to be long and narrow, with leaves lower on the plant being larger. The plant bears white flowers in a loose cluster at the end of the stem, and it flowers from late July through September with small fruit maturing in October.

Habitat

White fringeless orchid grows in wet, boggy areas at the heads of streams and on sloping areas kept moist by groundwater seeping to the surface. It is often associated with Sphagnum in partially, but not fully, shaded areas. Other plants commonly found with it include: cowbane (Oxypolis rigidior), grass-of-Parnassus (Parnassia asarifolia), primrose-leaf stemless white violet (Viola primulifolia) and other orchids, particularly green wood orchid (Platanthera clavellata) and yellow-fringed orchid (Platanthera ciliaris).

Distribution

Historically, there were at least 90 populations of white fringeless orchid. Today it's known or presumed present at 80 sites across its range. The majority of sites consist of fewer than 100 plants, although some have been reported to contain 500-1000 plants at some point in their history. Reports of sites containing over 1000 plants are rare, but not unprecedented.

White fringeless orchid was originally known from Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. The species has disappeared from North Carolina (Henderson and Cherokee Counties), and a population has disappeared from Georgia's Cobb County.

Alabama currently supports 11 occurrences in eight counties:

- Calhoun (two sites, both on Mountain Longleaf National Wildlife Refuge), Clay, Cleburne (on Talladega National Forest), Dekalb, Jackson, Marion, Tuscaloosa, Winston

Georgia currently supports nine occurrences in eight counties:

- Bartow, Carroll (two occurrences), Chattooga, Coweta, Forsyth, Pickens, Rabun, Stephens (on Chattahoochee National Forest)

Kentucky supports 10 known occurrences and is the only state where a majority of the sites are on National Forests.

- Laurel (four sites), McCreary (three sites), Pulaski (two sites), Whitley

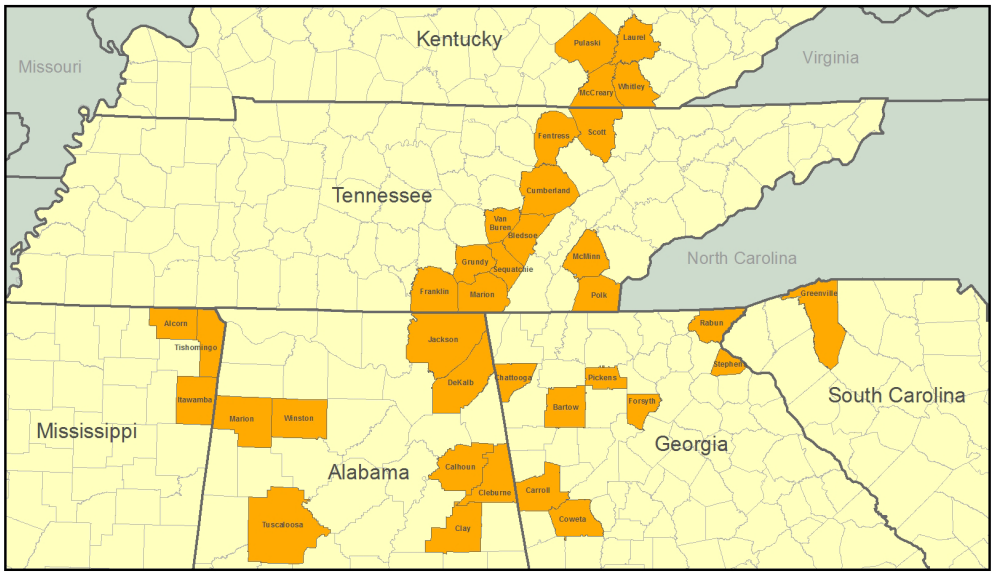
Mississippi has six sites, one in Alcorn County, three in Itawamba County, and two in Tishomingo County

South Carolina has a single occurrence, of questionable status, on state-owned land in Greenville County.

Tennessee contains the majority of known sites across the species range, with 43 known or presumed occurrences distributed among the following counties:

- Bledsoe (three sites), Cumberland, Fentress (two sites, both within Big South Fork National Scenic River and Recreation Area), Franklin (10 sites),

Counties with White Fringeless Orchid being considered for the Endangered Species List in 2015



Grundy (eight sites), Marion (eight sites), McMinn, Polk, Scott (within Big South Fork National Scenic River and Recreation Area, Sequatchie (two sites), and Van Buren (six sites).

Threats

Populations of white fringeless orchid have been lost to habitat-altering activities such as road construction, residential and commercial construction, and soil and water-flow altering projects that reduced habitat quality for the plant. Inundation of plants due to construction of impoundments and impacts from ATV traffic have caused the loss of some populations. Loss of additional sites to these factors and to residential and other construction activities remains a potential threat to populations not managed for conservation.

The best available information indicates that many existing populations and their habitat are adversely affected by factors that directly harm individual white fringeless orchids or alter the plant communities, soils, and water flow in the sites where they occur. These factors include collection/poaching, utility and road right-of-way maintenance, timber harvesting, invasive species encroachment, vegetation succession in the absence of disturbance, and prolonged drought. One or more of these threats has historically impacted or is currently operating at the majority (likely more than 90%) of known occurrences across the species range. These factors, combined with the small sizes and low reproductive rates of many populations, leave the species vulnerable to localized extinctions throughout its geographic range.

Petition history

The white fringeless orchid was first recognized as a candidate for federal listing in 1999; however publication of a proposed listing rule has been precluded by actions directed towards higher-priority species. In May, 2004, the U.S. Fish and Wildlife Service was asked by the Center for Biological Diversity to place monkey-face orchid, along with all other candidates for federal listing, on the federal endangered species list.

The Service has included the orchid as part of its 2015 workload, and by the end of the year will either determine that the plant does not need to be on the endangered species list, or begin the process for placing it on the list.

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