

Common Name: LARGE PURPLE FRINGED ORCHID

Scientific Name: Platanthera grandiflora (Bigelow) Lindley

Other Commonly Used Names: greater purple fringed orchid (or orchis)

Previously Used Scientific Names: Habenaria grandiflora (Bigelow) Torrey, Habenaria

psycodes var. grandiflora (Bigelow) Gray

Family: Orchidaceae (orchid)

Rarity Ranks: G5/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: FACW

Description: Perennial **herb** 10 inches - 4 feet (27 - 120 cm) tall. **Leaves** 5 - $9\frac{1}{2}$ inches (13 - 24 cm) long, 1 - $3\frac{1}{2}$ inches (2.5 - 9 cm) wide, 2 - 6 in number, sheathing the stem and gradually decreasing in size to the flower spike. **Flowers** lavender to pink-purple, in a dense cluster at the top of the stem. **Flower** about 1 inch (2 - 3 cm) long, not including the spur. **Sepals** oval with pointed tips. **Petals** oval with rounded, slightly toothed tips. **Lip** 3-lobed with a showy fringe more than $\frac{1}{3}$ the length of the lip. **Spur** $\frac{1}{2}$ - $\frac{1}{8}$ inch (1.5 - 3.5 cm) long. The opening into the center of the flower is round or oval. The lowest flowers in the cluster are still open when the upper flowers open, so that the flower cluster is cylinder-shaped.

Similar and Related Rare Species: Small purple fringed orchid (*Platanthera psycodes*, Special Concern) is taller than large purple fringed orchid, but its flowers are smaller, less than ½ inch (0.5 - 1.5 cm) long, not including the spur, which is less than ¾ inch (1.2 - 1.8 cm) long. The lip is fringed less than ⅓ of the length of the lip. The opening in the center of the flower is dumbbell shaped rather than circular. Its flowers open from the bottom of the cluster to the top, with the lowest flowers open while the upper flowers are only in bud, so that the flower spike is coneshaped. Small purple fringed orchid occurs in streamside thickets, north-facing coves, and boulderfields in Union County.

Also see on this website: southern white fringed orchid (*Platanthera blephariglottis*), Chapman's fringed-orchid (*P. chapmanii*), monkeyface orchid (*P. integrilabia*), and purple fringeless orchid (*P. peramoena*).

Habitat: Wet thickets and seepy areas along rocky streams.

Life History: Large purple fringed orchid is pollinated by moths and butterflies, whose long tongues are adapted to probing the long, nectar-containing spur of fringed orchids. During the process of probing for nectar, sticky packets of pollen adhere to the front of the insects' heads and are brushed off onto the stigmas of flowers that are subsequently visited. Flowers must be cross-pollinated for fruit to set. The dust-like seeds are dispersed by wind and gravity.

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

Range: Georgia, north to Newfoundland, and west to Ontario.

Threats: Logging and other mechanical clearing of habitat. Damming or ditching small streams. Plant poaching.

Georgia Conservation Status: Approximately 5 populations are known, 4 in the Chattahoochee National Forest.

Conservation and Management Recommendations: Avoid logging, trail construction, and other mechanical disturbances near streams and wetlands. Avoid draining wetlands. Prosecute plant poachers.

Selected References:

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Author of Species Account: Linda G. Chafin

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