Purple fringeless orchid (*Platanthera peramoena*)

Pennsylvania Threatened Plant State Rank: S2 (imperiled) Global Rank: G5 (secure)

What it looks like:

The purple fringeless orchid is a short plant, 3-10 decimeters (about 12-39 inches) tall, bearing loose inflorescen-

ces (spikes) of violet to pink flowers. It is thought to be adapted for pollination by daylight-active lepidoptera (moths and butterflies).

Flowers are bilaterally symmetrical, with prominent lower petals deeply divided into three wedge-shaped segments with finely toothed outer edges. The lowermost segment is partially split by a single, central notch. Flowering occurs in July and August.

Leaves are long and narrow, 10-20 cm (about 4-8 in) long at the bottom of the stem and shorter towards the inflorescence.

Where it is found:

The purple fringeless orchid grows in open, swampy places – along roads, in forest openings and meadows, and near vernal pools, preferring acidic soil. It is found from Pennsylvania south to Mississippi and west to Arkansas.



Photo by Clifford Pelchat, from Digital Flora of Texas

Why it is rare:

The orchid's restricted habitat has made it vulnerable to changing land use and forest harvesting or management practices. Changes to its forest habitat have contributed to the species' critically imperiled status across the eastern seaboard and into the southeast of the United States.

North American State/Province Conservation Status



Purple-fringeless Orchid (Platanthera peramoena)

Conservation considerations:

The purple fringeless orchid will benefit most from habitat protection. Forest management strategies should avoid disturbing known populations of the orchid, and forest land containing marshes or vernal pools should be preserved against human interference.

References

- Digital Flora of Texas. 2005. Image Library Texas Vascular Plants [web application]. Available at http://www.texasflora.org/dftimagebase.htm. Accessed 12 January 2005.
- Gleason, Henry A. and Arthur Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Second ed. New York: The New York Botanical Garden. 822.
- Holmgren, Noel H. 1998. The Illustrated Companion to Gleason and Cronquist's Manual. New York: The New York Botanical Garden. [page(s)].
- NatureServe. 2025. NatureServe Explorer [web application] NatureServe, Arlington, Virginia. Available at https://explorer.natureserve.org (Accessed: May 8, 2025)
- Stoutamire, Warren P. 1974. Relationships of the Purple-Fringed Orchids Platanthera Psychodes and P. Grandiflora. Brittonia. 26(1): 42-58.

