

***Platanthera leucophaea* (Nutt.) Lindl.**  
Prairie Fringed Orchid



**Family:** Orchidaceae

**Synonyms:** *Habenaria leucophaea* (Nutt.) Gray

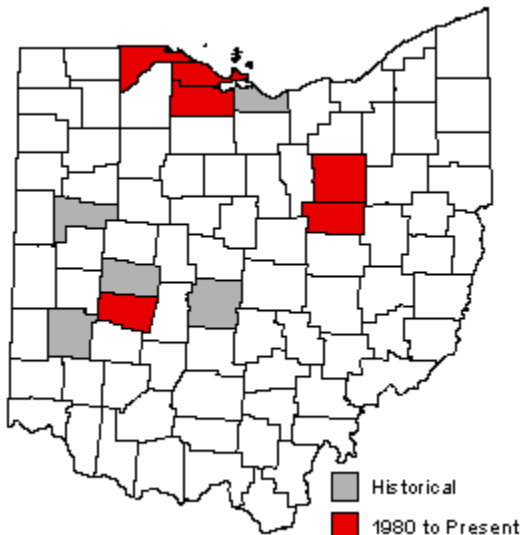
**Description:** Herbaceous perennial; 0.2-1.2 m.; lanceolate leaves several to many, scattered along stem; flowers white or creamy, deeply 3-lobed, margins fringed, column appears hooded. Flowers arranged in cylindric spike.

**Flowering:** June - August

**Fruiting:** August - October

**Similar Species:** Vaguely similar to *Platanthera blephariglottis* and *P. lacera* var. *lacera*. *P. leucophaea* has the lip in three divisions and has cream-white flowers; *P. blephariglottis* has no divisions to the lip and has white flowers. The flowers of *P. lacera* var. *lacera* are greenish

and are smaller than the flowers of *P. leucophaea*. Occasional albino forms of *P. psycodes* and *P. grandiflora* may resemble *P. leucophaea*. *P. leucophaea* has a slightly longer spur and deeper fringing of the lip than these two species; however careful examination and measurements of the flowers are necessary for positive identifications.



**Total Range: USA:** IA, IL, IN, ME, MI, MO, NY, OH, OK, PA, VA, WI; **CAN:** ON.

**Ohio Range:** Auglaize, Clark, Erie, Holmes, Lucas, Montgomery, Ottawa, Sandusky, and Wayne counties. Braun (1967) maps Champaign and Franklin counties.

**Ohio Status:** [www.ohiodnr.com/dnap](http://www.ohiodnr.com/dnap)

**Habitats:** Full sun; neutral to calcareous soils; mesic to wet prairies, marshes, fens, and old fields.

**Threats:** *P. leucophaea* grows well in areas that are good agricultural sites. Drainage and

utilization for cropland has destroyed most of the original populations. It is also threatened by succession to woody species and invasion of exotic species. Invasive species such as reed canary grass (*Phalaris arundinacea*), glossy buckthorn (*Rhamnus frangula*), purple loosestrife (*Lythrum salicaria*) and common reed grass (*Phragmites australis* ssp. *australis*) are species commonly

overtaking orchid habitat. In addition, over collection is always a threat to this rare and conspicuous plant.

**Conservation Potential:** The persistence of this species in Ohio is dependent upon habitat protection and management. Some populations are known to occur in areas that were at one time heavily disturbed. These disturbed communities can contain large orchid populations, but without management, have a low long-term viability. Sheviak (1974) believes that prairie fires may stimulate this species to flower.

**Inventory Guidelines:** Collecting is discouraged; the identification can be determined from photos. Mature flowering material is needed for identification.

**Comments:** Like many other temperate terrestrial orchids, *P. leucophaea* may exhibit dramatic changes in population numbers from year to year.

This plant was collected in 1980 in two separate sites after an apparent 64-year lag in collections. In 1982, it was found in an area that was a cornfield in 1972. New sites may be discovered in prairie and fen areas in Ohio.

This species has very specific needs for reproduction including a particular pollinator (hawkmoth) and reliance on mycorrhizal fungi (Bowles et al. 2002). It is highly susceptible to inbreeding and vegetative spread is very rare.

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