

Western Prairie Fringed Orchid

Platanthera praeclara

Guidelines for Landowners Using Conservation Practices

Missouri Department of Conservation

Common name ▪ Western Prairie Fringed Orchid
Scientific name ▪ *Platanthera praeclara*
State status ▪ Endangered
Federal status ▪ Threatened

Ecology

The western prairie-fringed orchid is a stout, erect plant standing one to four feet tall and occurs in rich, deep-soiled upland prairies of Missouri. This perennial orchid blooms from mid-June to early-July and bears seed in September. The flowers are fragrant at night to attract moths, which are the only known pollinator. Following drought years these orchids may remain dormant in the soil. The western prairie fringed orchid was known to have been distributed throughout the western portions of the state in mesic areas of upland prairies and in bottomland prairies. Currently it is known only in Atchison, Holt and Harrison counties.

Reasons for Decline

Decline of the western prairie fringed orchid is directly linked to the conversion of prairies to cropland and exotic grass pastures. Currently, the western prairie fringed orchid's habitat continues to be lost to agriculture practices that diminish or destroy high quality, diverse native prairies.

Recommendations

Efforts should be made in maintaining and promoting hydrologic conditions fostering prairie swales and bottomland prairies. Survey high quality prairies in western and northern Missouri during flowering period to determine if the orchid is present.

[A survey of the project area should be conducted by](#)

[a trained biologist in order to identify occurring populations of this species.](#)

Promote land management activities that restore native prairie communities. Delay haying, mowing or grazing until after western prairie-fringed orchid has dispersed seeds, i.e. mid-September or later. Areas adjacent to existing western prairie fringed orchid sites should be managed in such a way as to prevent the introduction of nonnative species or possible degradation of the native plant community.

[Refer to Management Recommendations for Conserving Native Prairie in Missouri for additional guidelines.](#)

[Consider the balance between adverse and beneficial practices when determining the overall effect of a conservation practice.](#)



Photo Credit: Missouri Department of Conservation

Beneficial Practices

- In most years, leaves begin emerging in mid-April and seed set occurs about September 1. Unless surveys verify that orchids are not present above ground in a particular year, prescribed burns should be conducted between September 1 and April 15 to minimize mortality to this species.
- Removal of competing woody vegetation in areas where western prairie fringe orchid occur.
- Controlling invasive plants in areas where this species occurs. To minimize harm to this species use a selective herbicide [a spot application](#), or well timed application with a

nonselective herbicide when this plant is dormant.

Adverse Practices

- Degradation or destruction of upland prairie where western prairie fringed orchid occurs.
- Heavy foot traffic, vehicle traffic, or use of heavy machinery in areas with western prairie-fringed orchid populations.
- Establishing invasive vegetation, such as tall fescue, sericea lespedeza, brome or birdsfoot trefoil on sites or nearby where it could spread into the native plant community, and thus degrade or destroy habitat for this species.
- Mowing or burning of western prairie-fringed orchid populations during the April through September growing period.
- Allowing continuous, heavy grazing or grazing during flowering and fruiting periods (April - September).
- Establishing trees or shrubs in areas where this species occurs.
- Conducting earthmoving practices or causing erosion that destroys or degrades communities with this species.
- Applying a nonselective or broadleaf herbicide in areas where this species is located and actively growing.
- Unmanaged application of pesticides, animal waste or fertilizers that destroys or degrades prairies that support populations of this species.

Information Contacts

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573-751-4115
<http://www.mdc.mo.gov/nathis/endangered/>

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVillie Dr., Suite A
Columbia, MO 65203
Telephone: 573-234-2132
<http://www.fws.gov/midwest/partners/missouri.html>

Legal

The Missouri Department of Conservation prepared these guidelines for conservation practices with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with these management guidelines is not required by the Missouri wildlife and forestry law or by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

“State Endangered Status” is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3 CSR 10-4.111.

Species listed under the Federal Endangered Species Act must be considered in projects receiving federal funds or requiring permits under the Clean Water Act, with compliance issues resolved in consultation with the U.S. Fish and Wildlife Service.