



U.S. Fish & Wildlife Service

Threatened and Endangered Species

Eastern Prairie Fringed Orchid

(Platanthera leucophaea)



States where the eastern prairie fringed orchid is found.

What is the eastern prairie fringed orchid?

The eastern prairie fringed orchid is a federally threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

The eastern prairie fringed orchid is 1 of at least 200 North American orchid species.

Appearance - This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers. Each flower has a three-part fringed lip less than 1 inch long and a nectar spur (tube-like structure) which is about 1 to 2 inches long.

Habitat Requirements - The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. This fungi helps the seeds assimilate nutrients in the soil.

Life History - This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators, though they are also at greater risk of being eaten by deer. Seed capsules mature over the growing season and are dispersed by the wind from late August through September.



Photo by Mike Redmer

What is the eastern prairie fringed orchid? (cont'd.)

Reproduction/Pollination - Night flying hawkmoths pollinate the nocturnally fragrant flowers of this white orchid. Visiting hawkmoths inadvertently collect pollen on their proboscises as they ingest nectar from the flower's long nectar spurs.

Why is the eastern prairie fringed orchid threatened?

Historic Decline - Early decline was due to the loss of habitat, mainly conversion of natural habitats to cropland and pasture.

Current Decline - Current decline is mainly due to the loss of habitat from the drainage and development of wetlands. Other reasons for the current decline include succession to woody vegetation, competition from non-native species and over-collection.

What is being done to prevent extinction of the eastern prairie fringed orchid?

Listing - The eastern prairie fringed orchid was added to the U.S. List of Endangered and Threatened Species on September 28, 1989 which benefits the species by focusing attention and money on its conservation.

Recovery Plan - In September 1999 a recovery plan was completed by the U.S. Fish and Wildlife Service which delineates reasonable actions needed to recover and/or protect this orchid. The purpose of the plan is to promote the conservation of the threatened eastern prairie fringed orchid by implementing identified tasks.

Recovery Plan Actions - Protect habitat, manage habitat, increase size and numbers of populations, conduct surveys on known populations, conduct research, and review progress.

What can I do to help prevent the extinction of species?

Learn- Learn more about the eastern prairie fringed orchid and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Join - Join a conservation group; many have local chapters. Volunteer at a known orchid site to help with annual demographic data collection or to help with prescribed burns at these sites. Or volunteer at a local nature center, zoo, or wildlife refuge.

Protect - Protect remaining wetland areas by **not** filling them for residential or commercial development. Protect native plant species: do not plant non-native invasive plant species in your gardens or landscape projects. Protect water quality by minimizing use of lawn chemicals (i.e., fertilizers, herbicides, and insecticides), recycling used car oil, and properly disposing of paint and other toxic household projects.

The Eastern Prairie Fringed Orchid Recovery Plan and additional species information can be found at <http://midwest.fws.gov/endangered>. **Copies of the recovery plan may be purchased by contacting the** Fish and Wildlife Reference Service at 5430 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814, or by phone 1-800-582-3421 or 301-492-6403 or on the Internet at <http://fa.r9.fws.gov/r9fwrs/>.