

Determining Whether Western Prairie Fringed Orchid (*Platanthera praeclara*) May be Present in a Project Area in Minnesota

Consulting on the Effects of Federal Actions under Section 7(a)(2) of the Endangered Species Act

Background

Under Section 7(a)(2) of the Endangered Species Act (Act), Federal agencies must consult with U.S. Fish and Wildlife Service (Service) on any action that they fund, authorize, or carry out that may affect endangered or threatened species or designated critical habitat. The first step in determining whether consultation is necessary is to find out whether any listed species or critical habitat may be present in the area that the proposed action will directly or indirectly affect (the action area).

Where Western Prairie Fringed Orchid May be Present in Minnesota

In Minnesota, the distribution of extant populations of western prairie fringed orchid (*Platanthera praeclara*) corresponds well with that of certain land type associations (LTA), especially in the northwestern part of the state (N. Sather, Minnesota Department of Natural Resources, pers. comm. 2002). Therefore, if suitable habitat is present in an action area we recommend that agencies follow the guidance below and initially assume that western prairie fringed orchid may be present in some parts of the state (Fig. 1).

The areas defined by these LTA's may be conservatively large due to the uncertainty associated with predicting where new populations of this species may be found and the lack of comprehensive surveys in some counties. When a federal agency funds, authorizes, or carries out an action that may affect suitable habitat in these areas (Fig. 1), the Service recommends that they either assume that the species is present and/or that they collect site-specific information to help determine whether it may be present (e.g., a plant survey).

In this guidance, we have retained the use of 1-mile buffers around known occurrences, mostly to address one remaining extant population in southeastern Minnesota (Mower County). This is the only extant population not included in one of the areas shown in Figure 1.

Purpose of Guidance

The purpose of this guidance is to provide action agencies an approach to determine whether it must consult with the Service under section 7(a)(2) of the Endangered Species Act regarding an action that it is funding, authorizing, or carrying out.

Guidance

Use this approach to determine where section 7(a)(2) consultation with U.S. Fish and Wildlife Service regarding western prairie fringed orchid is required in Minnesota:

- 1) Define the action area – all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02).
- 2) Consult the [Minnesota DNR natural heritage database](#) and/or U.S. Fish and Wildlife Service (612.725-3548 ext. 206 or phil_delphey@fws.gov) to answer the following questions. If the answer is yes to either question, go to number 4; if the answer is no to both, go to number 3:
 - a) Does the action area contain any recorded population of western prairie fringed orchid? Note: A few recorded populations are extinct. Examine the data record and/or contact U.S. Fish and Wildlife Service if in doubt about whether a recorded population is still extant.
 - b) Does the action area contain suitable habitat (see below) that lies within one mile of any recorded population? Note: A few recorded populations are extinct. Examine the data record and/or contact U.S. Fish and Wildlife Service if in doubt about whether a recorded population is still extant.
- 3) Does any part of the action area contain suitable habitat for western prairie fringed orchid (see below) that lies within any of the areas described below. If **yes**, go to number 4; if **no**, go to number 5. (For GIS shapefiles of these areas, contact Phil Delphey at phil_delphey@fws.gov.)
 - a) Within the **Barnesville Beach Complex LTA (251Aa09)** in Clay, Norman, and Polk Counties – Area_1 (Fig. 1).
 - b) Within the **Beach Ridges LTA (223Na01)** in Pennington, Polk, and Red Lake Counties – Area_2 (Fig. 1).
 - c) Within the **Gentilly Lake Plain LTA 223 Na15** in Polk and Red Lake Counties – Area_3 (Fig. 1).
 - d) Within the **Bronson Lake Plain LTA 223Na08** in Kittson County – Area_4 (Fig. 1).¹
 - e) Within the **Trosky Till Plain LTA 251Bc02** in Lincoln, Nobles, Pipestone, and Rock Counties – Area_5 (Fig. 1).

¹ Note: The Minnesota County Biological Survey has searched for western prairie fringed orchid within this LTA outside of its known distribution in Kittson County. Therefore, the likelihood of its occurrence outside of known populations may be low (N. Sather, Minnesota Department of Natural Resources, pers. comm. 2002), but we assume that it may be present in suitable habitat within this LTA in Kittson County until we have a more refined model of its likely distribution in the county.

- f) Within the **Blue Mounds LTA 251Bc03** in Pipestone and Rock Counties – Area 6.
- 4) Determine whether the proposed action may affect western prairie fringed orchid. You may seek assistance from U.S. Fish and Wildlife Service (612.725-3548) if you are uncertain about the appropriate determination. Consultation with U.S. Fish and Wildlife Service under Section 7(a)(2) of the Act is required if the proposed action may affect western prairie fringed orchid.
- 5) Western prairie fringed orchid is not likely to be present in the action area.

Suitable habitat for Western Prairie Fringed Orchid in Minnesota

Suitable habitat for western prairie fringed orchid in Minnesota is, in general, wet or moderately moist (mesic) prairie or sedge meadows with level or gently sloping topography. In some cases, the species may also occur along ditches or roadsides where this type of habitat is present. Water (e.g., flooding) may be an important agent of seed dispersal (Hof et al. 1999), although seeds will only develop into flowering plants where hydrologic and other conditions are suitable and where management is appropriate. For further information on the species, see the [Western Prairie Fringed Orchid Recovery Plan](#).

Literature Cited

Hof, J., C.H. Sieg and M. Bevers. 1999. Spatial and temporal optimization in habitat placement for a threatened plant: The case of the western prairie fringed orchid. *Ecological Modelling* [Ecol. Model.]. 115(1):61-75.

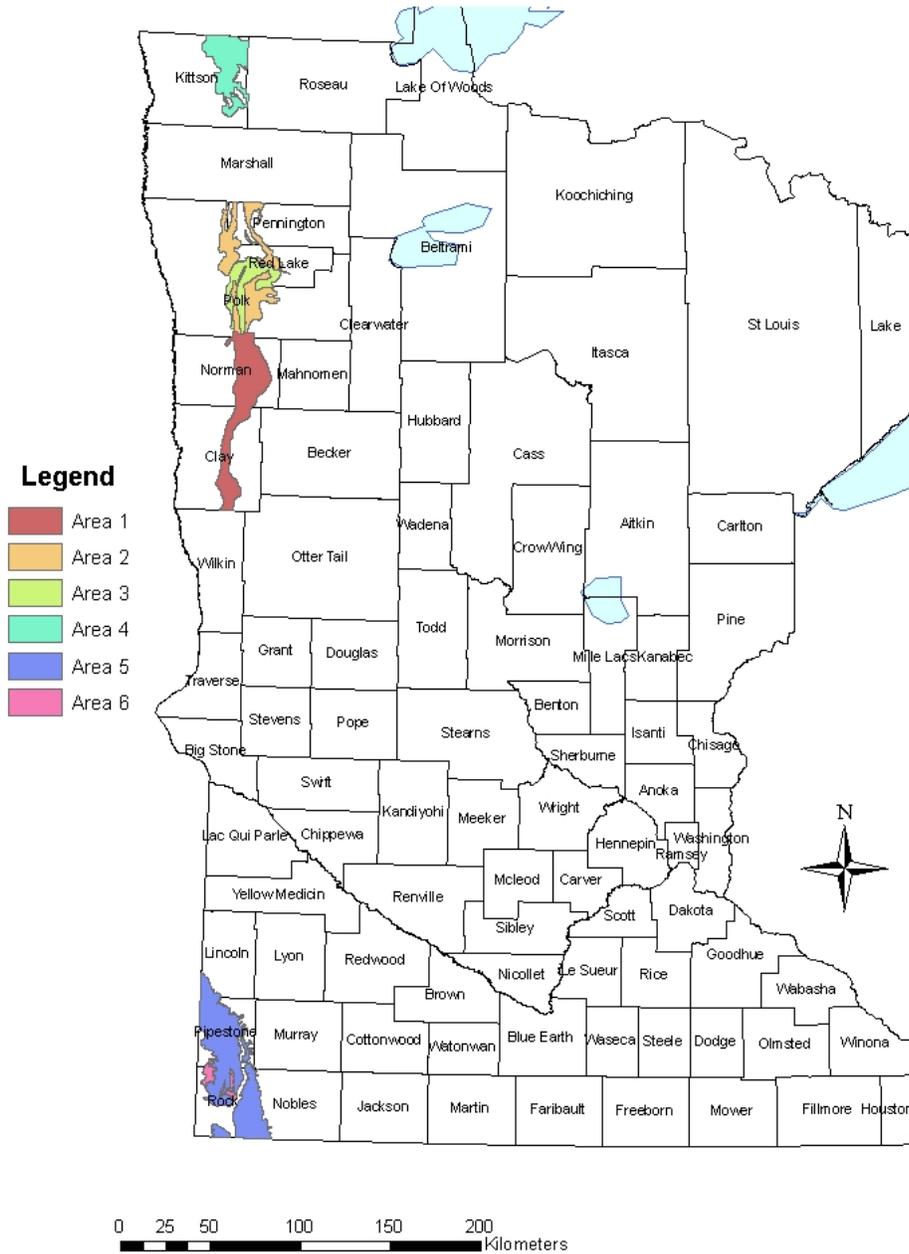


Figure 1. For section 7 consultations, the areas shown are Land Type Associations, or portions thereof, in which unrecorded populations of this species may be present in suitable habitat (see details in guidance). All known extant populations of western prairie fringed orchid occur within these polygons except for one in southeastern Mower County.