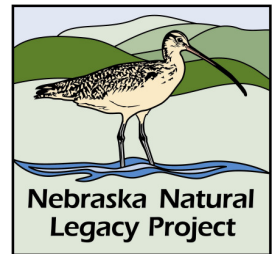




# Willow Creek Prairies



landscape includes the Willow Creek valley and surrounding uplands in Pierce County and small portions of neighboring Madison and Antelope counties. Willow Creek is a meandering prairie stream. Its floodplain contains many wet meadows dominated by big bluestem and prairie cordgrass. Cropland is also common in the valley. The majority of the meadows are hayed. These meadows are

significant in that they contain one of the state's largest remaining populations of the federally and state threatened western prairie fringed orchid.

Sand dunes, supporting dry-mesic sand prairie, occupy much of the upland bordering the stream valley. Many of these prairies are hayed and in good condition, while some are grazed and more degraded. Cropland is also common on the dunes. There are currently no protected areas in this landscape.

## Stresses Affecting Species and Habitats

- ❖ Conversion of native prairies to cropland
- ❖ Housing development
- ❖ Exotic plant invasion in native prairies, primarily leafy spurge, but also smooth brome, reed canary grass, timothy, and redtop
- ❖ Some livestock grazing practices that may reduce native plant diversity and promote uniform habitat structure
- ❖ Annual mid-summer haying of wet meadows, which impacts populations of the western prairie fringed orchid and native plant species diversity
- ❖ Center pivot development and wetland drainage, which could lower groundwater levels and degrade native prairies
- ❖ Poorly-sited utility-scale wind turbines

## Conservation Strategies

- ❖ Support voluntary implementation of ecologically-sensitive grazing and haying strategies on private and public lands in combination with prescribed fire and rest
- ❖ Protect orchid meadows and other key high-quality prairies through conservation easements or voluntary fee title acquisition
- ❖ Promote grassland conservation programs

- ❖ Develop and implement cooperative leafy spurge control methods, potentially using bio-control agents, in orchid meadows and other native grasslands. Work with county weed authority and use care to protect sensitive areas (e.g., small white lady's slipper habitat)
- ❖ Restore ditched or otherwise degraded wetlands
- ❖ Implement research projects to determine best management practices for the western prairie fringed orchid
- ❖ Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. Avoid placing wind turbines in native prairies and woodlands and in close proximity to prairie grouse leks and nesting grounds. Turbines can be halted temporarily during peak migration periods for bats and birds. Pre- and post-construction monitoring should be implemented. See Nebraska Game and Parks Commission guidelines for wind energy development.

### **Tier I At-risk Species:**

#### **Plants:**

Western Prairie Fringed Orchid  
 Wolf Spikerush<sup>4</sup>

#### **Animals:**

Bell's Vireo  
 Burrowing Owl  
 Greater Prairie Chicken  
 Regal Fritillary  
 Plains Topminnow  
 Plains Pocket Mouse<sup>4</sup>

#### **Aquatic Communities:**

Headwater Warm Water Stream

#### **Terrestrial Communities:**

Sandbar Willow Shrubland  
 Riparian Dogwood-False Indigobush Shrubland  
 Freshwater Seep  
 Eastern Cordgrass Wet Prairie\*  
 Eastern Sedge Wet Meadow\*  
 Eastern Bulrush Deep Marsh  
 Cattail Shallow Marsh  
 Reed Marsh  
 Lowland Tall-grass Prairie\*  
 Eastern Sand Prairie\*  
 Sandhills Dune Prairie  
 Perennial Sandbar  
 Sandbar/Mudflat

\* Priority for conservation in this BUL

<sup>1</sup> This is the only BUL where the species is known to occur

<sup>2</sup> Known to occur in only one other BUL

<sup>3</sup> Known to occur in only two other BULs

<sup>4</sup> Known to occur in only three other BULs