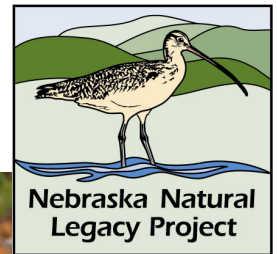


# Sandstone

## Prairies

landscape includes the bluffs and breaks along the Little Blue River and Rose Creek in Jefferson and Thayer counties. The soils in some parts of the area are shallow and derived from sandstone, with limited agricultural development in many areas. Large blocks of native tall-grass prairie still remain. These prairies are often interspersed with cropland. Many of the prairies have been disturbed from past grazing practices and invasive cool-season grasses. Eastern red cedar and invasive deciduous trees are problematic in many areas. Bur oak woodlands occur in many of the drainage bottoms. Prairie fens occur occasionally in canyon bottoms and on side slopes.



The landscape contains some of the last remaining populations of the massasauga and timber rattlesnakes in the state. Even though many of the prairies are degraded, the large size of prairie remnants makes this area unique and provides an opportunity for landscape-scale tall-grass prairie conservation. The largest protected areas in the landscape include Rock Glen WMA, Rose Creek WMA, and Rock Creek Station State Historical Park.

## Natural Legacy Demonstration Site

### **Rock Glen Wildlife Management Area and Rock Creek Station State Historical Park - Nebraska Game and Parks Commission**

Rock Creek Station State Historical Park includes 350 acres with a high proportion of native vegetation. Uplands are covered with both oak woodland and tall-grass prairie. Riparian forest occurs along Rock Creek. The Nearby Rock Glenn WMA includes 706 acres of rolling native upland and tree-lined drainages. Eastern red cedar is a primary threat, so thinning in conjunction with burning and grazing are the primary conservation actions.

## Stresses Affecting Species and Habitats

- ❖ Specific livestock grazing and haying practices that may reduce native plant diversity and promote uniform habitat structure
- ❖ Conversion of native prairies to cropland and other uses
- ❖ Lack of fire has led to invasive tree encroachment in prairies and woodlands (e.g., honey locust, eastern red cedar, osage orange)
- ❖ Exotic herbaceous plant invasion. In prairies, heavy grazing and annual mid-summer haying promotes exotic invasion.
- ❖ Housing development and fragmentation of habitat
- ❖ Agricultural run-off into streams
- ❖ Streambed degradation
- ❖ Clay mining for bricks in restricted areas.
- ❖ Poorly-sited utility-scale wind turbines

## Conservation Strategies

- ❖ Implement invasive tree clearing programs on grasslands on conservation and private lands in conjunction with prescribed fire and planned grazing
- ❖ Conduct annual surveys for invasive plants in woodlands and prairies, especially on public lands
- ❖ Develop and implement control programs for garlic mustard, sericea lespedeza, and other invasive exotic species
- ❖ Protect priority streams from siltation and contaminants using methods such as stream buffers and grass waterways. Address water quality problems with watershed planning.
- ❖ Coordinate with landowners interested in using conservation easements or voluntary fee title acquisition to protect high-quality prairies
- ❖ Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. Wind farms should not be located within the recommended radius of 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.

## Collaborative Conservation Opportunities across State Borders

Coordinate with Kansas organizations, particularly efforts to benefit like species of greatest conservation need on NE Sandstone Prairie/KS Eastern Tallgrass Prairie Conservation Region border (i.e., Republic and Washington Counties in KS). Nebraska Tier I at-risk species identified also in the Kansas wildlife action plan include greater prairie chicken, Henslow's sparrow, massasauga, timber rattlesnake, Arogos skipper, and Ottoe skipper. Species lists may be modified as

new information becomes available. Innovative methods for sufficient information exchange could aid the collaborative process.

Coordinated wildlife management actions (e.g., invasive species management, wildlife surveys) should mirror strategies identified in Kansas' Comprehensive Wildlife Conservation Plan. Collaborative conservation efforts across state borders should include researchers, federal and non-profit environmental program coordinators, and landowners, particularly those with properties extending over state lines. It will be necessary to identify and develop staffing and funding sources for implementation of conservation actions beyond state boundaries.

## Tier I At-risk Species

### **Plants:**

None

### **Animals:**

Greater Prairie Chicken  
Henslow's Sparrow  
Loggerhead Shrike  
Massasauga<sup>3</sup>  
Timber Rattlesnake  
Iowa Skipper  
Ottoe Skipper  
Regal Titlary  
Married Underwing  
Whitney Underwing  
Pimpleback  
Plains Harvest Mouse

### **Aquatic Communities:**

Headwater, Warm Water Stream  
Mid-order, Warm Water River

### **Terrestrial Communities:**

Cottonwood-Peachleaf Willow Riparian Woodland  
Sandstone Upland Bur Oak Woodland\*  
Sandbar Willow Shrubland  
Riparian Dogwood-False Indigobush Shrubland  
Freshwater Seep\*  
Prairie Fen\*  
Eastern Cordgrass Wet Prairie  
Eastern Sedge Wet Meadow  
Eastern Bulrush Deep Marsh  
Cattail Shallow Marsh

Upland Tall-grass Prairie\*  
Dakota Sandstone Tall-grass Prairie\*  
Lowland Tall-grass Prairie  
Southern Sand/Gravel Prairie\*  
Perennial Sandbar  
Sandbar/Mudflat  
Eastern Sandstone Bluff and Cliff\*

\* 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