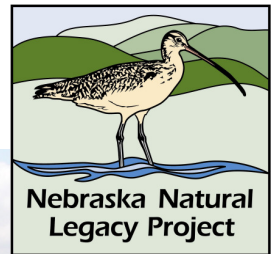


Rulo Bluffs

landscape includes the steep bluffs of the Missouri River in the far southeast corner of the state. The majority of the bluffs support eastern deciduous forest of oaks, hickories and

basswood. Because of its location in extreme southeastern Nebraska, this landscape has a high diversity of eastern deciduous forest plant and animal species. Tallgrass prairie remnants occur on some bluff tops and south- and west-facing slopes. These have been reduced in size and degraded over the years by shrub and tree encroachment resulting from lack of wildfires. Scattered cropland and pastureland occur in the landscape. Some areas of woodland have been farmed or logged in the past. The Nature Conservancy's Rulo Bluffs Preserve is a high-quality protected area in the landscape.



Stresses Affecting Species and Habitats

- ❖ Specific livestock grazing and haying practices that may reduce native plant diversity and promote uniform habitat structure
- ❖ Invasive woodland plant species, including garlic mustard, common buckthorn and other exotic plants, as well as increased density of shrubs in the forest understory
- ❖ Tree and shrub encroachment of prairie remnants.
- ❖ Invasive insects, especially the emerald ash borer is a potential threat
- ❖ Housing development and other forms of fragmentation
- ❖ High-grade logging
- ❖ Excess deer browsing
- ❖ Utility-scale wind energy developments

Conservation Strategies

- ❖ Promote ecologically-sensitive grazing strategies.
- ❖ Conduct annual surveys for garlic mustard and other invasive woodland plants and implement control strategies, especially on conservations lands and adjacent private lands

- ❖ If emerald ash borer infestations occur, remove infected trees and restrict the importation of firewood
- ❖ Coordinate with landowners interested in using conservation easements or voluntary fee title acquisition to protect key habitats from development and commercial logging of mature forests
- ❖ Offer voluntary financial incentives to private landowners to implement tree and shrub thinning and prescribed burning within high-quality native woodlands
- ❖ Improve access to and harvest of deer
- ❖ Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. See Nebraska Game and Parks Commission guidelines for wind energy development.
- ❖ Provide education about woodland/forest ecology

Collaborative Conservation Opportunities across State Borders

Coordinate with Kansas and Missouri organizations, particularly efforts to benefit shared species of greatest conservation need on NE Rulo Bluffs/KS Eastern Tallgrass Prairie Conservation Region/MO Central Dissected Till Plains borders, especially forest and woodland (i.e., Brown County in KS and Holt County in MO). Nebraska Tier I at-risk species identified also in the Kansas wildlife action plan include southern flying squirrel, cerulean warbler, and timber rattlesnake. And, Tier I Nebraska species identified also in the Missouri strategy include cerulean warbler and timber rattlesnake. 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 corridor development) should mirror strategies identified in Kansas' Comprehensive Wildlife Conservation Plan and/or actions in the Missouri Comprehensive Wildlife Strategy. 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:

American Ginseng⁴
Nodding Pogonia²

Animals:

Southern Flying Squirrel³
Cerulean Warbler⁴

Wood Thrush
Regal Fritillary
Timber Rattlesnake

Aquatic Communities:

None

Terrestrial Communities:

Red Oak-Basswood-Ironwood Forest*
Oak-Hickory-Ironwood Forest*
Mesic Bur Oak Forest and Woodland*
Dry-Mesic Bur Oak Forest and Woodland*
Dry Upland Bur Oak Woodland
Freshwater Seep
Upland Tall-grass Prairie*
Eastern Sandstone Bluff and Cliff*

* Priority for conservation in this BUL

¹ This is the only BUL where the species is known to occur

² Known to occur in only one other BUL

³ Known to occur in only two other BULs

⁴ Known to occur in only three other BULs