

Office of Resource Conservation

State of Illinois

State Wildlife Grant Proposal

Project Number: T-98-D-1

Project Title: Grassland Habitat Restoration at Prairie Ridge State Natural Area

1) Need:

Native prairie covered 21 million acres of Illinois in the early 19th century. Today, less than 2,600 acres (<0.01%) of high-quality prairie remain. Most of the original prairie grassland of Illinois has been plowed, grazed, and/or mowed, and introduced grasses have been planted over much of the former prairie range.

Although native prairie has been extensively destroyed, 19.2% of the state's land cover is categorized as "grassland" habitat. Of this, over 780,000 grassland acres are in temporary agricultural programs as of 2005. However, few grasslands are large enough and unfragmented by woody vegetation and human structures to support area-sensitive species. Often dominated by introduced grasses (and to some extent forbs), these grasslands do not resemble native prairies. Therefore grasslands are arguably the terrestrial habitat most dominated by introduced /exotic species. Far less than the 19.2% of the state's land cover that is classified as grassland is actually functioning as a natural grassland ecosystem.

As a result grassland birds have shown more consistent and steeper geographically widespread declines than any other group on North American bird species (Samson and Knoph 1994). In Illinois, grassland birds are estimated to have declined between 24 and 91 % between 1969 and 1991 (Samson and Knoph 1994) and birds nesting in small remaining fragments of grasslands often experience lower breeding success (Herkert et. al. 2003).

The General Assembly defines IDNR's powers and duties in Article 805 of the Civil Administrative Code 20 ILCS 805/805-1 et seq. which provides the framework for IDNR operations. Article 805 states that "the Department has the power to take all measures necessary for the conservation, preservation, distribution, introduction, propagation, and restoration of fish, mussels, frogs, turtles, game, wild animals, wild fowls and birds" (20 ILCS 805-805-100). Section 805-225 authorizes the conservation of natural and scenic areas, and Section 805-225 authorizes the development of recreational areas and facilities.

The Illinois Wildlife Action Plan (IWAP) was approved by the U. S. Fish and Wildlife Service in 2005 (<http://dnr.state.il.us/orc/wildliferesources/theplan/home.htm>). The Plan is organized around Campaigns - sets of conservation actions, programs and strategies that seek to address

the most widespread and the most urgent issues affecting wildlife and habitats, in an efficient, effective, and comprehensive manner. Four of these Campaigns are habitat-based to achieve both broad and specific conservation goals for Forests, Prairies, Wetlands, and Streams. The Plan identifies habitat areas that demonstrate the greatest conservation need and potential and establishes specific conservation goals for the enhancement and protection of these habitats and associated wildlife. Further, the Plan outlines 654 Species in greatest need of conservation, including, 433 invertebrates, 79 fish, 14 amphibians, 23 reptiles, 85 birds, and 20 mammals.

The Grassland Habitat Restoration at Prairie Ridge State Natural Area Project addresses conservation needs of the IWAP Prairie Campaign. The purpose of this project is to enhance and increase suitable grassland habitats at Prairie Ridge State Natural Area in order to maintain and enhance associated and characteristic native wildlife populations in these habitats. Secondly, the project will seek to enhance and expand functionally equivalent prairie that support native wildlife species with emphasis on those species in greatest need of conservation (Illinois Wildlife Action Plan, 2005).

In addition to these species and habitat-specific benefits, the project addresses the following sections of the Illinois Wildlife Action Plan (IWAP):

1. Habitats Goals (pp. 46 – 48)
 - a. Grassland Habitat Goals 1, 2, and 6
2. Campaigns Actions (pp. 67 – 87)
 - a. Farmland and Prairie Campaign Actions 1a, 1b, 1d, 2a, 2b, 2d, 3a, 3b, 3f
 - b. Invasive Species Campaign Actions 3b
 - c. Land & Water Stewardship Campaign Actions 2a, 2b, 2c

This project will further address habitat-specific actions on one Natural Division in Illinois (IWAP, 2005; p. 119), as listed below:

Southern Till Plain (p. 203)

Finally, the project will enhance and increase habitat for species in greatest need of conservation listed in Appendix A.

2) Purpose and Objectives:

By the end of this grant period, this project will maintain, enhance, and develop 4,317 acres of grassland habitat and their functional equivalents (e.g. large acres of desirable cultivated Eurasian grasses that support grassland wildlife including species in greatest need of conservation) utilizing ecosystem-based natural community and habitat management practices at Prairie Ridge State Natural Area. (Figure 1, Table 1).

Funds approved through this grant will be used to expand the restoration and stewardship of high quality wildlife habitats at Prairie Ridge State Natural Area to meet the goals and objectives established in the Illinois Wildlife Action Plan (IWAP) and the state approved “A Plan for the Recovery of the Greater Prairie-Chicken in Illinois” (Walk 2004). Prairie Ridge State Natural Area 1) is listed on the Illinois Natural Areas Inventory, 2) provides suitable habitat for threatened and endangered species, 3) provides suitable habitat for multiple species in greatest need of conservation, 3) is protected in perpetuity through an Illinois Nature Preserve program and 4) is within a designated Conservation Opportunity Area.

Types of activities to be accomplished under this project include habitat protection, habitat management, surveys to locate extant wildlife populations, monitoring effects of management practices, and improving natural resource databases. The management and restoration of rare habitat types that support unique assemblages of wildlife will also be targeted at Prairie Ridge State Natural Area in the Southern Till Plain Natural Division and Section – Illinois’ equivalent of physiographic divisions (IWAP, 2005 p.119).

3) Expected Results or Benefits:

Focused natural resource management at Prairie Ridge State Natural Area will insure that long-term IWAP and IDNR goals can be achieved; resulting in permanently improved habitat conditions and enhanced populations of rare and declining species. Areas such as Prairie Ridge State Natural Area will be critical components of any effort to recover rare species as well as to prevent declining species from reaching perilously low numbers, necessitating more intensive and expensive conservation efforts.

Improving habitat conditions on specific project areas will maintain and enhance targeted wildlife populations, achieving the primary goal of the IWAP. Large land holdings in the public trust are one of the most important components of any long-term conservation action.

Benefits of this project will include:

- Maintained large blocks of habitat that support area-sensitive wildlife will be improved on public land at Prairie Ridge State Natural Area.
- Maintained and enhanced grassland habitats and populations of species in greatest need of conservation.
- Enhanced habitat for various species of wildlife that will benefit from the implemented conservation actions. Many additive wildlife species that are not species in greatest need of conservation will also benefit from habitat conditions created and maintained under this project.

- Actions taken under this project will implement effective and efficient practices for improving habitat conditions on the ground and will serve as models for other public landowners, non-governmental organizations, and private landowners state-wide.

4) Approach:

The Project will implement management actions at Prairie Ridge State Natural Area focused specifically on grassland habitats and associated species in greatest need of conservation. Prairie Ridge State Natural Area is currently part of the prairie/grassland COA as defined in the Illinois Wildlife Action Plan.

Within this project, IDNR and its partners will use the following conservation practices to maintain improved high-quality prairie habitats and associated wildlife benefits.

- **Prescribed Fire**

Details - Prescribed fire involves the planned application of fire to meet specific management goals. Prescribed fire may be used to control the invasion or spread of exotic and/or invasive species, control succession, maintain grassland wildlife habitats, maintain and promote the regeneration of associated plant species. The prescribed burning activities include planning, preparation, implementation and monitoring/evaluation of the prescribed burn and its impacts. All DNR-led prescribed fires will be conducted under the Department's Prescribed Burn Policy (IDNR Policy and Procedure Manual Chapter 5D, Section 2) and all Burn Bosses will be State Certified under the Illinois Prescribed Burn Act (525 ILCS 37) and its Administrative Rules (Title 17 Chapter 1d part 1565).

- **Invasive Woody Plant Control**

Details - Invasive woody plant control is the planned mechanical removal, elimination or thinning of woody plant material that has invaded a project area. Such control frequently, but not exclusively, includes follow-up application of appropriate herbicides to control resprouting as well as preparation and monitoring/evaluation of efforts. Control methods will include removal or thinning of target invasive and/or exotic woody plants depending on the management goals. The control methods applied shall be those that are most effective in meeting the desired goal, have a minimal adverse impact on non-target species and are most cost efficient. Those methods will include mechanical cutting or removal of brush with tractor mounted mowers, hand operated brush cutters, and chainsaws. Application of appropriate herbicides using cut stem, injection, basal bark and foliar methods, or a combination of methods. All activities, supplies and equipment needed to plan, implement and evaluate a woody plant control effort at a project site will be included. All invasive woody plant control on state owned land will be approved through the annual site resource planning process and included on the site's annual plan of work.

- **Invasive Exotic Species Control**

Details - Invasive exotic species control is the planned removal, elimination or reduction of invasive exotic species. Invasive exotic species include woody and herbaceous plants, and animals. The control methods applied in a project site shall be those that will be effective in meeting the desired goal, have a minimal adverse impact on non-target species, and are cost efficient. All activities, supplies, and equipment needed to plan, implement, and monitor/evaluate an invasive exotic species control effort at a project site will be included. All invasive exotic species control will be approved through the annual site resource planning process and included on the site's annual plan of work.

- Boundary Protection/Fence Repair

Details - Project sites may be impacted from external intrusions from off road vehicles, free ranging pets and people at or near the site. These intrusions can cause direct harm to resources within a preserve or may result in degraded habitat conditions (e.g. increased erosion, increased disturbance on native wildlife and spread of exotic or invasive species). Boundary protection includes locating, delineating, and marking of boundaries and the construction or repair of a fence or barrier if necessary. Prairie Ridge State Natural Area has four prairie pastures where livestock grazing is utilized to enhance nest structure for grassland wildlife. All activities and supplies needed to implement boundary protection may be included in this project. Land surveys will be conducted by licensed land surveyors.

- Habitat Creation/Reconstruction/Enhancement: Planting

Details – Planting of seed, started plants, rootstock, and seedlings/whips is used to establish new habitat and restore or enhance existing habitats. This practice will also include necessary grassland management actions such as mowing, prescribed grazing, and disking/overseeding to maintain optimal species composition and structure for grassland birds. Existing high quality habitats shall not be adversely impacted by such projects (e.g. over collection of seed). Restoration and enhancement for grassland habitats may include native grasses and forbs, cool season grasses/legumes and native shrubs. All activities included in planning, obtaining plant material, planting and monitoring/evaluating the success of habitat creation/restoration/planting, maintenance of equipment and storage facilities will be included in this practice. All planting projects will be approved through the annual site resource planning process and included on the site's annual plan of work.

- Hydrology Restoration

Details – The restoration of natural or manageable hydrologic conditions can correct degradation in wet and wet-mesic prairies and the loss of small wetland features (e.g. ephemeral pools, shallow water wetlands) important to some Species in Greatest Need of Conservation, most notably marsh birds, amphibians, crayfish, and some invertebrates. All planning, implementation, and monitoring/evaluation activities will be included in this practice.

Management and restoration of wetland features at Prairie Ridge State Natural Area will focus on the existing shallow water wetlands and vernal pools located at this site. Invasive/exotic species will be controlled and water level control structures will be maintained. (*A Guide to*

Creating Vernal Ponds (Biebighauser 2002), *Habitat Management Guidelines for Amphibians and Reptiles of the Midwest* (Partners in Amphibian and Reptile Conservation 2002) and the *Illinois Landowner's Guide to Amphibian Conservation* (Szafoni et al. 2002).

- Project Monitoring
- **Details**— The management at this site is annually evaluated through various surveys conducted at this site. Annual spring lek surveys of greater prairie-chickens are conducted to closely monitor numbers to ensure genetic and demographic thresholds are maintained. In addition other surveys conducted include: prairie-chicken broods, breeding birds, marsh bird surveys as well as incidental observations of state endangered and threatened species utilizing the site. Element Occurrence Records are reported the Natural Heritage database for each sighting of a state listed species. Annual cover mapping of the entire site is conducted to monitor invasive/exotic species and develop an annual management plan.

5) Useful Life: N/A

6) Geographic Location: Prairie Ridge State Natural Area is located in Jasper and Marion Counties. See Figure 1.

7) Principle Investigator:

The following IDNR personnel will be the primary staff implementing the Grassland Habitat Restoration at Prairie Ridge State Natural Area Project. They will perform grant administration, project implementation and management, and direct contact with contractors. Other Office of Resource Conservation staff may be involved in limited site specific project implementation.

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8). Program Income: N/A

9) Budget Narrative:

Budget Categories	Federal Funds	Non-Federal Funds	Total
Salaries and Wages			
Administrative/Professional		\$107,836.00	\$107,836.00
Academic / Graduate Hourly Wages			\$0.00
Other Title			\$0.00
Tuition Remission			\$0.00
Fringe Benefits			
Administrative/Professional			\$0.00
Academic / Graduate Hourly Wages			\$0.00
Other Title			\$0.00
Travel			
In-State			
Meals / Per Diem			\$0.00
Lodging			\$0.00
Mileage			\$0.00
Out-of-State			
Meals / Per Diem			\$0.00
Lodging			\$0.00
Mileage			\$0.00
International			
Meals / Per Diem			\$0.00
Lodging			\$0.00
Mileage			\$0.00
Equipment			\$0.00
Materials and Supplies			\$0.00
Contractual Services			
	\$240,000.00		\$240,000.00
Other			\$0.00
Total Direct Costs	\$240,000.00	\$107,836.00	\$347,836.00
Modified Total Direct Cost (MTDC)	\$240,000.00	\$107,836.00	\$347,836.00
Indirect Rate of 20%			\$0.00
Indirect Rate of 19.84%		\$21,395.00	\$21,395.00
Unrecovered Indirect Rate (20% vs 19.84% MTDC)		\$0.00	\$0.00
Overmatch			\$0.00
Total Project Costs	\$240,000.00	\$129,231.00	\$369,231.00
Percentage of Total Project Cost	65.00%	35.00%	

BUDGET JUSTIFICATION

Salaries and Wages: Non Federal match will be IDNR – Prairie Ridge State Natural Area staff salaries.

Fringe Benefits:

Travel:

Equipment:

Materials and Supplies:

Contractual Services: Contractual services are agreements entered into with qualified contractors to complete specific habitat management practices. These practices can include but are not limited to Prescribed Fire, Invasive Woody Plant Control, Invasive Exotic Species Control, Boundary Protection/Fence Repair, Habitat Creation/Restoration/Planting, Hydrology Restoration and Project monitoring. Contractual services will be bid out following IDNR procurement/contacting procedures.

10) Multipurpose Projects: N/A

11) Relationships with other Grants.

Prairie Ridge State Natural Area has been involved in projects that were funded through T- 5-M-1, R-07-001, T-28-M-1, T-76- D -1 and T-85-D-1. T -85-D-1 is still active at Prairie Ridge State Natural Area. This project involves translocating greater prairie-chickens from the State of Kansas over a three year period for genetic and demographic rescue. This work has been contracted to the Illinois Natural History Survey and the Illinois Audubon Society with assistance from the Illinois Department of Natural Resources. Year one of this project was completed in 2014.

12). Timeline: January 1, 2016 – June 30, 2019

A Scope of Work will be submitted for bid through IDNR Procurement in October 2015. A three year contract will be developed by January 1, 2016 for implementation of this restoration work during 2016, 2017 and 2018.

13) General:

Table 1.

Grassland Habitat Restoration at Prairie Ridge State Natural Area

SITE NAME	ACRES	SITE NAME	ACRES
Prairie Ridge – Jasper County Unit	2894		
Prairie Ridge – Marion County Unit	1423		
Total	4317		

Location:

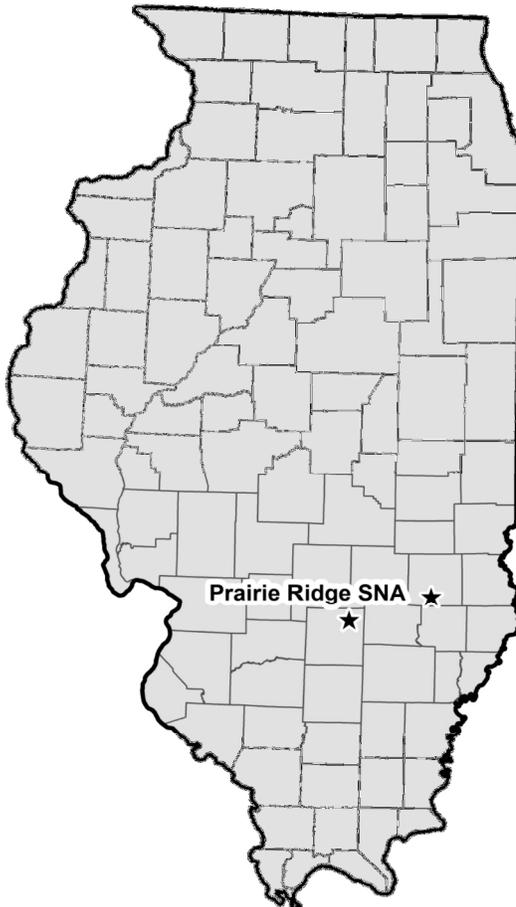


Figure 1.
Grassland Habitat Restoration at Prairie Ridge State Natural Area.

General

(i) Substantial in Character and Design

The project statement describes a need consistent with the -State Wildlife Grants (SWG); states a purpose and sets objectives, both of which are based on the need; uses a planned approach, appropriate procedures and research; and is cost effective.

(ii) Compliance:

The IDNR will use its CERP (Comprehensive Environmental Review Process) as a tool to aid the Department in meeting NEPA compliance for the project outlined under this grant proposal. It is the Department's policy to require CERP applications for all land disturbing activities unless those activities are covered by CERP exemptions.

All planned activities will also be in compliance with the Endangered Species Act. All determinations and documentation will be in accordance with the current established U.S. Fish and Wildlife Service protocols for section 7.

All planned activities will be in compliance with the National Historic Preservation Act and the Council on Historic Preservation Act. All determinations and documentation will be in accordance with the terms of the Programmatic Agreement, as amended, effective September 23, 2002.

When applicable, those planned activities which involve a floodplain and/or jurisdiction wetlands will be done in accordance with Presidential Executive Orders 11988 and 11990.

When applicable, those planned activities which involve programs and/or site improvements will be done in accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.

When applicable, those planned activities which involve the use of pesticides, herbicides or other comparable chemicals will be done in accordance with current state and federal regulations to assure the safe and legal application of those chemicals. All chemicals will be applied in accordance with the manufacturers label instructions. All persons applying chemicals will be licensed by the Illinois Department of Agriculture as a chemical operator along with a licensed applicator, in accordance with Illinois state law.

(iii) **References:**

- Admiraal, A.N., M.J. Morris, T.C. Brooks, J.W. Olson and M.V. Miller. 1997. Illinois wetland restoration & creation guide. Illinois Natural History Survey Special Publication 19. Illinois Natural History Survey, Champaign, Illinois, USA.
- Biebighauser, T.R. 2002. A guide to creating vernal ponds. USDA Forest Service, Morehead, Kentucky, USA.
- Illinois Department of Energy and Natural Resources 1994. The Changing Illinois Environment: Critical Trends. Summary Report and Volumes 1-7 Technical Report. Illinois Department of Energy and Natural Resources. Springfield. 242 p.
- Illinois Department of Natural Resources. 2005. Illinois Comprehensive Wildlife Conservation Plan-Strategy. Illinois Department of Natural Resources. Version 1.0. xxv+353 pp.
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- Herkert, J. R., D. Reinking, D. Wiedenfeld, M. Winter, J. Zimmerman, W. Jensen, E. Finck, R. Koford, D. Wolfe, S. Sherrod, M. Jenkins, J. Faaborg and S. Robinson. 2003. Effects of Prairie Fragmentation on the Nest Success of Breeding Birds in the Midcontinental United States. Conservation Biology 17:587-594.
- Schwegman, J. E., G. B. Fell, M. Hutchison, W. M. Shepherd, G. Paulson, and J. White. 1973. Comprehensive plan for the Illinois Nature Preserves System. Part 2, The Natural Divisions of Illinois. Illinois Nature Preserves Commission. Rockford. 32 p + map.
- Szafoni, R.E., C.A. Phillips, S.R. Ballard, R.A. Brandon and G. Kruse. 2002. Illinois Landowner's Guide to Amphibian Conservation. Illinois Natural History Survey Special Publication 22. Illinois Natural History Survey, Champaign, Illinois, USA.
- Walk, J.W. 2004. A Plan for the Recovery of the Greater Prairie-Chicken in Illinois. University of Illinois, Urbana, Illinois. Office of Resource Conservation, Illinois Department of Natural Resources, Springfield, Illinois 72pp.

Appendix A.

Species of Conservation Concern Found at Prairie Ridge State Natural Area. All are species in greatest need of conservation listed in the Illinois Wildlife Action Plan, with additional habitat restricted or state-record insects included.

Scientific Name	Common Name	Status
PLANTS		
<i>Silene regia</i>	Royal Catchfly	State Endangered
<i>Sebatia campestris</i>	Prairie Rose Gentian	State Threatened
<i>Liatris scariosa</i> var. <i>nieuwlandii</i>	Blazing star	State Threatened
<i>Schoenoplectus purshianus</i>	Weak Bullrush	State Endangered
<i>Aristolochia serpentaria</i>	Virginia Snakeroot	
INSECTS		
<i>Amphipoea erepta</i>		habitat restricted
<i>Apamea indocilis</i>	Ignorant Apamea	
<i>Basilodes pepita</i>	Gold Moth	habitat restricted
<i>Meropleon titan</i>		state record
<i>Papaipema beerina</i>	Liatris Borer Moth	
<i>Papaipema cerussata</i>	Ironweed Borer Moth	
<i>Papaipema eryngii</i>	Rattlesnake Master Borer Moth	State Endangered
<i>Papaipema limpida</i>	Limpid Borer Moth	
<i>Papaipema maritime</i>		
<i>Papaipema rutila</i>	Mayapple Borer Moth	
<i>Papaipema silphii</i>	Silphium Borer Moth	
<i>Parapamea buffaloensis</i>	Buffalo Moth	habitat restricted
<i>Tibicens dorsatus</i>	Prairie Cicada	habitat restricted
<i>Phytomtra ernestina</i>	Ernestine's Moth	
<i>Schinia nundina</i>		
<i>Schinia gaurae</i>	Clouded Crimson	
<i>Tricholita notata</i>		
<i>Vaxi auratella</i>		
AMPHIBIANS		
<i>Rana areolata</i>	Crayfish Frog	
<i>Rana sylvatica</i>	Wood Frog	
REPTILES		
<i>Clonophis kirtlandii</i>	Kirtland's Snake	State Threatened
<i>Emydoidea blandingii</i>	Blanding's Turtle	State Endangered
<i>Terrapene ornata</i>	Ornate Box Turtle	State Threatened

BIRDS

<i>*Ammodramus henslowii</i>	Henslow's Sparrow	
<i>Ammodramus leconteii</i>	LeConte's Sparrow	
<i>Ammodramus nelsoni</i>	Nelson's Sharp-tailed Sparrow	
<i>*Ammodramus savannarum</i>	Grasshopper Sparrow	
<i>Anas rubripes</i>	American Black Duck	
<i>Ardea alba</i>	Great Egret	
<i>*Asio flammeus</i>	Short-eared Owl	State Endangered
<i>Aythya affinis</i>	Lesser Scaup	
<i>Aythya valisineria</i>	Canvasback	
<i>*Bartramia longicauda</i>	Upland Sandpiper	State Endangered
<i>*Botaurus lentiginosus</i>	American Bittern	State Endangered
<i>Buteo lineatus</i>	Red-shouldered Hawk	
<i>Buteo platypterus</i>	Broad-winged Hawk	
<i>Buteo swainsoni</i>	Swainson's Hawk	State Endangered
<i>Calcarius pictus</i>	Smith's Longspur	
<i>Calidris himantopus</i>	Stilt Sandpiper	
<i>Caprimulgus carolinensis</i>	Chuck-Will's-Widow	
<i>Caprimulgus vociferus</i>	Whip-Poor-Will	
<i>Certhia americana</i>	Brown Creeper	
<i>*Chaetura pelagica</i>	Chimney Swift	
<i>Chlidonias niger</i>	Black Tern	State Endangered
<i>Chordeiles minor</i>	Common Nighthawk	
<i>*Circus cyaneus</i>	Northern Harrier	State Endangered
<i>*Cistothorus palustris</i>	Marsh Wren	
<i>*Cistothorus platensis</i>	Sedge Wren	
<i>*Coccyzus americanus</i>	Yellow-billed Cuckoo	
<i>*Coccyzus erythrophthalmus</i>	Black-billed Cuckoo	State Threatened
<i>*Colaptes auratus</i>	Northern Flicker	
<i>*Colinus virginianus</i>	Northern Bobwhite	
<i>Coturnicops noveboracensis</i>	Yellow Rail	
<i>Cygnus buccinator</i>	Trumpeter Swan	
<i>Dendroica cerulea</i>	Cerulean Warbler	
<i>Dendroica discolor</i>	Prairie Warbler	
<i>*Dolichonyx oryzivorus</i>	Bobolink	
<i>Egretta caerulea</i>	Little Blue Heron	
<i>Egretta thula</i>	Snowy Egret	State Endangered
<i>*Empidonax traillii</i>	Willow Flycatcher	
<i>Empidonax virescens</i>	Acadian Flycatcher	
<i>Euphagus carolinus</i>	Rusty Blackbird	
<i>Falco peregrinus</i>	Peregrine Falcon	State Threatened
<i>Gallinula chloropus</i>	Common Moorhen	
<i>*Gallinago delicatata</i>	Wilson's Snipe	

<i>Grus americana</i>	Whooping Crane	
<i>Grus canadensis</i>	Sandhill Crane	
<i>Haliaeetus leucocephalus</i>	Bald Eagle	
<i>Hylocichla mustelina</i>	Wood Thrush	
* <i>Icteria virens</i>	Yellow-breasted Chat	
* <i>Ixobrychus exilis</i>	Least Bittern	State Threatened
* <i>Lanius ludovicianus</i>	Loggerhead Shrike	State Endangered
<i>Laterallus jamaicensis</i>	Black Rail	State Endangered
<i>Limnodromus griseus</i>	Short-billed Dowitcher	
* <i>Lophodytes cucullatus</i>	Hooded Merganser	
* <i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron	State Endangered
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	State Threatened
<i>Oporornis agilis</i>	Connecticut Warbler	
<i>Oporornis formosus</i>	Kentucky Warbler	
<i>Pandion haliaetus</i>	Osprey	State Endangered
* <i>Passerculus sandwichensis</i>	Savannah Sparrow	
<i>Phalaropus tricolor</i>	Wilson's Phalarope	State Endangered
<i>Pluvialis dominica</i>	American Golden-plover ¹	
* <i>Podilymbus podiceps</i>	Pied-billed Grebe	
<i>Protonotaria citrea</i>	Prothonotary Warbler	
* <i>Rallus elegans</i>	King Rail	State Endangered
* <i>Scolopax minor</i>	American Woodcock	
<i>Seiurus aurocapillus</i>	Ovenbird	
* <i>Spiza americana</i>	Dickcissel	
* <i>Spizella pusilla</i>	Field Sparrow	
<i>Sterna forsteri</i>	Forster's Tern	State Endangered
<i>Sterna hirundo</i>	Common Tern	State Endangered
* <i>Toxostoma rufum</i>	Brown Thrasher	
<i>Tringa melanoleuca</i>	Greater Yellowlegs	
<i>Tryngites subruficollis</i>	Buff-breasted Sandpiper	
* <i>Tympanuchus cupido</i>	Greater Prairie-chicken	State Endangered
* <i>Tyto alba</i>	Barn Owl	State Endangered
<i>Vermiforma pinus</i>	Blue-winged Warbler	
* <i>Vireo belli</i>	Bell's Vireo	

*Nests at Prairie Ridge

MAMMALS

<i>Lontra canadensis</i>	River Otter
<i>Mustela nivalis</i>	Least Weasel
<i>Ondatra zibethicus</i>	Muskrat
<i>Taxidea taxus</i>	American Badger
