

## **Private Stewardship Grant Program Application**

**Submitted by: Southern Iowa Oak Savanna Alliance (SIOSA)**

**Title: Southern Iowa Oak Savanna and Tallgrass Prairie Restoration Initiative  
January 2006**

The Southern Iowa Oak Savanna and Tallgrass Prairie restoration project is designed to coordinate existing conservation projects in the region including TNC projects like Dunn Ranch and Grand River Grasslands initiative, the Iowa DNR Kellerton Bird Conservation Area and regional Private Lands work and the ongoing efforts of private landowners in the region. The project will coordinate the efforts of private lands biologist from the USFWS and the Iowa DNR to provide private landowners with several methods of habitat enhancement including mechanical brush removal, prescribed fire, grazing, invasive species removal and native species establishment. These practices will benefit grassland species such as Henslow's sparrow, greater prairie chicken, and at least a dozen prairie plant species of special concern including the eastern prairie fringed orchid. The project will also benefit many savanna species such as the federally listed Indiana bat, southern flying squirrel and several rare savanna plant species including Meads milkweed. A complete list of endangered, threatened or species of special concern are listed in **Appendix A**. There are currently 12 landowners with projects ready for habitat development and many more interested landowners eager to join the project.

### **Problem statement: Project Purpose**

The landscape of Iowa has been greatly altered by human activities and has led to a decline in suitable habitat for wildlife including many migratory birds, especially grassland birds, and many species considered rare or endangered today. Southern Iowa, although greatly altered, was used predominantly for grazing cattle and was not plowed as aggressively as many other regions of the state. This land use has kept many acres in a condition that can be fairly easily restored to natural conditions, or more desirable conditions for wildlife species. One trend in land ownership today is the purchase of farms by non-agricultural families for recreational opportunities. Many of these areas are not grazed and do not receive any real management and have quickly become overgrown with encroaching woody vegetation, especially eastern red cedar. These changes in the landscape have forced many migratory grassland birds and oak savanna dependant species into smaller and smaller acceptable habitat units. This project is designed to work closely with landowners to develop management plans that include removal of brush and trees in remnant oak savanna and remnant prairies, prescribed fire planning and implementation, and improved grazing practices. The group will work to develop understanding of oak savanna and native prairie habitat by demonstrating successful projects that improve land for wildlife habitat but also benefit cattlemen by providing improved grazing conditions.

Funding from this grant will enhance current efforts to restore oak savanna and prairie in this region. Specifically, funding will be used to hire contractors or pay landowners to remove encroaching woody vegetation on their property, hire NWCG qualified burn crews to implement prescribed fire activities on private property, hire contractors or pay landowners to install or repair fencing to begin rotational grazing or allow for grazing on recreational land. The funds will also be used to purchase chemicals to control woody vegetation and purchase native seed to enhance restoration efforts.

## Past Success and Future Monitoring

The Southern Iowa Oak Savanna and Tallgrass Prairie Initiative is truly built on the successful restorations of oak savanna and tallgrass prairie by landowners and conservation groups like the Iowa DNR and The Nature Conservancy in this region. Oak savanna and tallgrass prairie are intertwined together and many wildlife species are dependant on the combined habitats for survival. It is important for this project to work closely on both open tallgrass prairie and oak savannas to provide the best combination of habitat for southern Iowa. Specifically, this project will target Decatur and Ringgold counties in south central Iowa.

Landowners Bill and Sibylla Brown of Leon, Iowa have been working to restore oak savanna habitat on their property. Over the past twelve years they have achieved great success in restoring over 200 acres of oak savanna on their property. The response of the plants and animals to the restoration has been fantastic. Over 400 species of native plants, 110 native fungi species, 50 ant species, and many wildlife species including the flying squirrel and red headed woodpecker have returned to their property. Gerould Wilhelm, botanist and Director of Environmental Services at Conservation Design Forum, has stated this site is the best oak savanna restoration he has seen. He further stated that Decatur County has the highest potential for oak savanna restoration that he is aware of. The following awards have marked the achievements of the Browns:

2003 Governor of Iowa Environmental Excellence Award

2005 Iowa Forester of the Year Award

The Browns project has also been awarded funding through the Environmental Protection Agency for monitoring the restoration efforts. The EPA will use this site as a reference point for oak savanna restorations.

The Iowa DNR has also had great success in southern Iowa. They established the first bird conservation area (BCA) in Iowa in Ringgold County. The Kellerton BCA was established to create and maintain habitat for the greater prairie chicken and for rare or endangered grassland birds such as the Henslow's sparrow. The area currently has a breeding population of greater prairie chickens and has seen dramatic increases in grassland bird species use of the area.

The Nature Conservancy is also active in tallgrass prairie restoration in the area. They manage approximately 1500 acres in Ringgold County Iowa and manage the Dunn Ranch, a 3500 acre tract of tallgrass prairie. The TNC has had great success in restoring tallgrass prairie and re-establishing greater prairie chickens.

Future monitoring will include the EPA grant with the oak savanna project on the Browns. The EPA has hired Gerald Wilhelm to conduct the research to monitor management activities and the resulting effects on the habitat. The EPA has established 10 plots on the property to monitor the effects of prescribed fire and tree thinning on species diversity and plant composition. Additional monitoring opportunities are being developed with Graceland University Biology Department.

Cost Share

<u>Cooperator</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>\$Fund</u>
Decatur Co. Conservation Board	1500.00		\$7200.00	
Graceland University	1500.00		10,000.00	
Decatur Co. Econ. Development Corp.	1000.00			
Southern Iowa Oak Savanna Alliance	2500.00			
Iowa DNR	2000.00			
TNC	2000.00			
<b>TOTALS</b>	<b>10,500.00</b>		<b>17,200.00</b>	

**Funding applied for through this grant: \$125,000**  
**Cost share by participants: \$27,700**  
**Total project cost: \$152,700**  
**% cost share 18%**

Landowner Participation

The project is currently working with 12 landowners, but there is a lot of interest in this project and we project at least 25 additional landowners will participate in this project. Below is a list of current landowners participating in the project at this time or who have land they would like habitat work done on with the funding of this grant.

<u>Name</u>	<u>County</u>	<u>Township</u>
John Orvis	Decatur	Morgan
Caroll Vik	Decatur	Morgan
Dick Hillyard	Decatur	High Point
Bill/Sibyla Brown	Decatur	
Rod Smith	Decatur	
John Kline	Decatur	
Kay Herring	Decatur	
Del Raney	Decatur	
TNC-Grand River	Ringgold	
TNC-Dunn Ranch	Missouri	
Jay Tone III	Decatur	
Richard Erke	Decatur	

## Budget

Estimated breakdown of expenditures of \$125,000 grant:

<b>Brush/tree removal:</b>	<b>\$55,000</b>
- Contracted crews	\$40,000
- Landowners	\$15,000
<b>Prescribed fire implementation:</b>	<b>\$40,000</b>
- Contracted crews (NWCG qual)	\$35,000
- Fire gear for local crew*	\$5,000
<b>Grazing:</b>	<b>\$10,000</b>
- Fence installation/repair**	\$10,000
<b>Chemical:</b>	<b>\$10,000</b>
- Stump treatment (Garlon)	\$9,000
- Pre-seeding burndown (Round-up)	\$1,000
<b>Native Prairie Seed:</b>	<b>\$10,000</b>
- Local origin grass	\$4,000
- Local origin forbs	\$6,000

\*Fire gear would include nomex pants and shirts, helmets, goggles, gloves, fire shelters, canteens and boots.

\*\* repair of fencing will be for landowners who currently do not but would like to rent their pasture to cattleman. Repair dollars would not be spent on land currently being grazed. On land currently being grazed, grant dollars would only pay for additional fencing needed to facilitate rotational grazing.

## Estimated Project Acres

Woody species control:	250 acres	(\$220/acre)
Prescribed fire:	700 acres	(\$50/acre)
Grazing management:	1,175 acres	(\$8.50/acre)
Native prairie enhancement:	50 acres	(\$200/acre)
<b>TOTAL</b>	<b>2,175 acres</b>	<b>(\$58/acre)</b>

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**Appendix A: Endangered or Threatened Species impacted by the project**

**Project Title: Southern Iowa Oak Savanna and Tallgrass Prairie Restoration Initiative**

**Endangered or Threatened Species**

**Animals**

<b><u>Common Name</u></b>	<b><u>Scientific Name</u></b>	<b><u>State Status</u></b>	<b><u>Federal Status</u></b>
* Henslow's Sparrow	<i>Ammodramus henslowii</i>	<b>T</b>	
Long-eared Owl	<i>Asio otus</i>	<b>T</b>	
Northern Harrier	<i>Circus cyaneus</i>	<b>E</b>	
Indiana Bat	<i>Myotis sodalis</i>	<b>E</b>	<b>E</b>
Spotted Skunk	<i>Spilogale putorius</i>	<b>E</b>	

**Plants**

<b><u>Common Name</u></b>	<b><u>Scientific Name</u></b>	<b><u>State Status</u></b>
* Mead's milkweed	<i>Asclepias meadii</i>	<b>E</b>
Prairie Bush Clover	<i>Lespedeza leptostachya</i>	<b>E/ fed E</b>
Kittentails	<i>Besseyia bullii</i>	<b>T</b>
* Eastern prairie fringed orchid	<i>Platanthera leucophaea</i>	<b>E</b>
Pink milkwort	<i>Polygala incarnata</i>	<b>T</b>
Waxy meadowrue	<i>Thalictrum revolutum</i>	<b>E</b>
* Round-stemmed false foxglove	<i>Agalinus gattingerii</i>	<b>T</b>

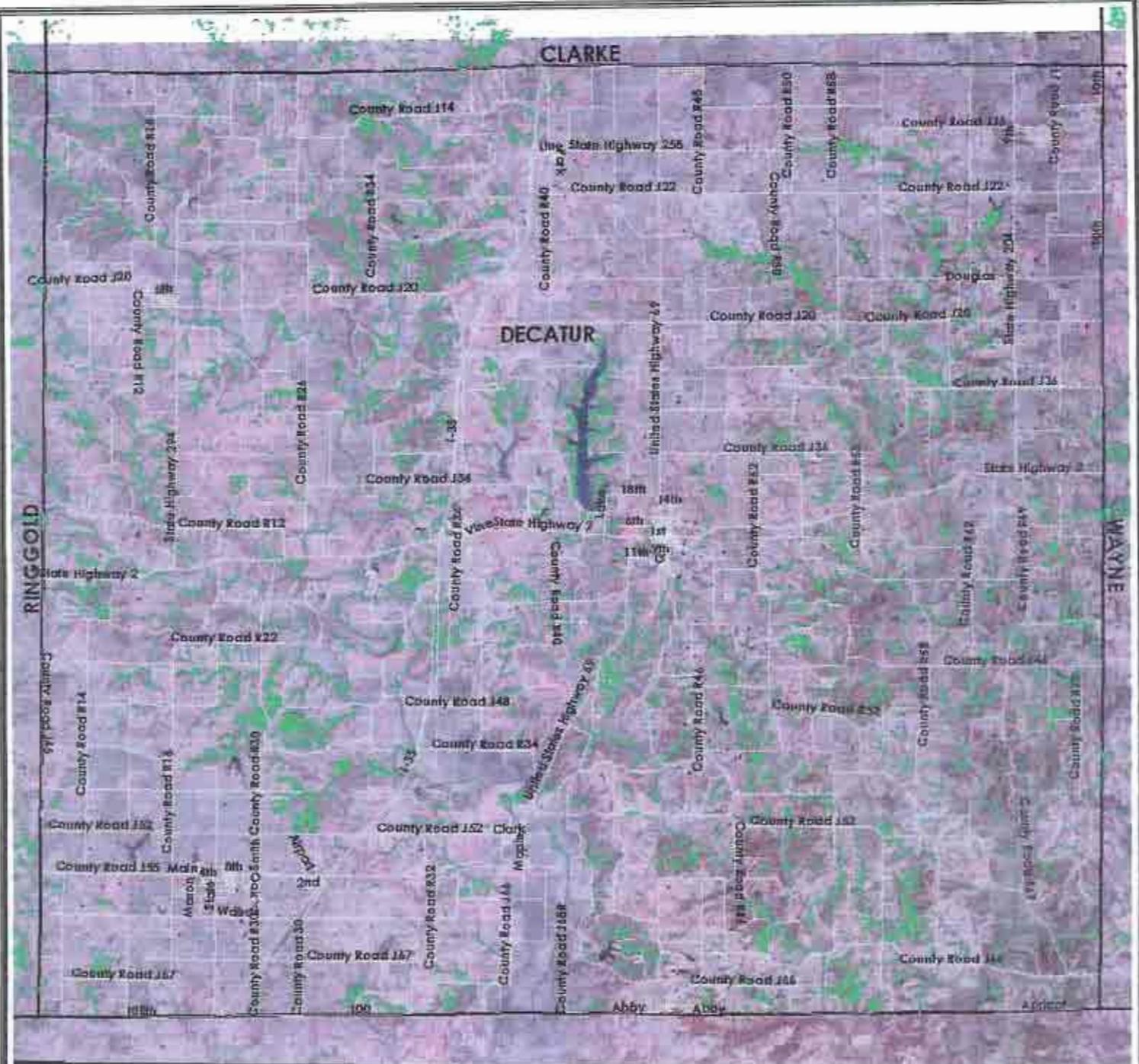
**Species of Special Concern**

- \* Greater Prairie Chicken, *Tympanuchus cupido*
- \* Red-headed Woodpecker, *Melanerpes erythrocephalus*
- \* Diccissel, *Spiza Americana*
- \* Southern Flying Squirrel, *Glaucomys volans*
- \* Bobolink, *Dolichonyx oryzivorus*

\* *These species have been documented within the project area.*

It is the goal of this project to improve habitat conditions on over 2,000 acres of land. Many of these species have shown positive response to previous restoration activities in the project area.

The UFSWS has received a positive Section 7 consultation for the oak savanna work currently underway in regards to the impacts on the federally listed Indiana Bat.



# Potential Savanna, Decatur County



**Legend**

- Roads 
- Potential Savanna 
- County Boundaries 





**U.S. Fish & Wildlife Service**  
**Iowa Private Lands Office**  
P.O. Box 399, Prairie City, IA 50228  
Telephone (515) 994-3400  
Fax (515) 994-3459



January 19, 2006

Peter Fasbender  
Ecological Services Operations  
Bishop Henry Federal Building  
One Federal Drive  
Ft. Snelling, MN 55111-4056

Dear Grant Selection Committee,

I am writing to support the Southern Iowa Oak Savanna Alliance (SIOSA) in their application for funding through the Private Stewardship Grant Program. Southern Iowa has a tremendous potential for wildlife habitat restorations, especially tallgrass prairie and oak savanna.

SIOSA is a newly formed group of individuals dedicated to restoring and protecting oak savanna and tallgrass prairie in southern Iowa. The group is led by Sibylla and Bill Brown, who have restored 200 acres of oak savanna on their property. Their restoration efforts have opened the eyes of many conservation professionals to the potential scale of restoration possible in southern Iowa. SIOSA members are very enthusiastic and have a strong desire to see positive changes for wildlife habitat in the region. I have visited several members of SIOSA, other landowners in the area and several professional conservation groups and have seen the potential restorable acres and I am very excited about the possibilities. Much of the area has not seen the plow, a rare occurrence in Iowa. I strongly support the efforts of SIOSA and recommend that the organization receive full funding for the grant opportunity.

The U.S. Fish and Wildlife Service is dedicated to working with private landowners in this region of the state. I am excited to be the first Partners for Fish and Wildlife biologist to be stationed in the area at Graceland University in Lamoni. The cooperative nature of the people in this area is a great asset to the project and will greatly enhance the efforts of the USFWS to complete habitat work in the area.

Thank you for your consideration of the grant application by SIOSA. I hope you look favorably on this great opportunity to restore a large amount of oak savanna and tallgrass prairie in southern Iowa.

Sincerely,  
  
Gregg Pattison  
Private Lands Biologist  
USFWS Lamoni, Iowa



The Nature Conservancy in Iowa  
303 Locust Street, Suite 402  
Des Moines, IA 50309

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[nature.org/iowa](http://nature.org/iowa)

January 20, 2006

Peter Fasbender  
Ecological Services Operations  
Bishop Henry Federal Building  
One Federal Drive  
Ft. Snelling, MN 55111-4056

Dear Grant Selection Committee:

The Nature Conservancy in Iowa fully supports the Southern Iowa Oak Savanna Alliance's Private Stewardship Grant Proposal to provide restoration and management assistance to landowners in Decatur and Ringgold Counties in Southern Iowa. The Conservancy believes that this area is the best place in the Central Tallgrass Ecoregion to conserve tallgrass prairie, burr oak savannas and grassland birds. Recent surveys commissioned by the Conservancy indicate that the SE quarter of Ringgold County alone has at least 4,000 acres of remnant prairie within a region that is over 65% grassland. This remarkable grassland landscape is home to the only Greater Prairie Chicken flock in Iowa. Rare nesting occurrences for Northern Harrier and Henslow's sparrows have also been documented.

To date the Conservancy and Iowa DNR have focused on acquiring key prairie remnants and Bird Conservation Area cores. This effort has resulted in two 2000 acre protected cores within the Grand River project area. However, if we are to succeed in creating viable populations of grassland birds and prairie communities it is imperative that restoration and management assistance be provided to surrounding landowners. A PSGP grant would be a tremendous compliment to our efforts.

We certainly hope that the U.S. FWS fully funds the proposal submitted by SIOSA. As you know grassland birds and temperate grasslands such as Midwestern tallgrass prairie are the most imperiled animals and systems on earth. Since the Grand River grasslands are the best place to conserve both of these elements in the Central Tallgrass Ecoregion we think that restoration of private lands in this region should be a high priority.

Sincerely

David W. De Geus  
Director of Conservation Programs

6 Nov 2003

Jim Munson  
Iowa Private Lands Coordinator

Dear Jim,

I am pleased to submit on the behalf of Sibylla Brown a letter that might be helpful in assuring that her activities at Timberhill are perceived as deserving of an Environmental Excellence Award from the Governor of Iowa.

I have been studying the nature of and biota of our remnant Midwestern landscapes for nearly 30 years; indeed it has been my life's work. I have followed the progress and development of knowledge concerning these systems since our awareness of them was awakened in an acute way nationally in 1969. As late as 1974 in the Midwest, the perception that "Human intervention" was necessary in the stewardship of our remnants was strong in the minds of only a very few people. Nearly all the "experts" were convinced that humans were to stay out of the places that were "natural." Ecological succession was the doctrine of the day; it would heal all wounds, given enough time. Actually, there is a strong contingent of academics that still are most comfortable with that view.

As the decades wore on, however, and progressively more people became aware of the plight of most of our native plants and animals, the idea that there is something inherently unnatural about people is giving over slowly to the idea that it is choices people make with respect to their relationship with remnant lands that are more important. The roles of Native People, not just in America, but around the world, are now seen to be crucial in the sustenance of local biodiversity. Chris Bair, of the Iowa Valley RC&D, recently has compiled data that show that virtually 100% of all landscape fires in Iowa prior to settlement were not only Indian-set, but mostly annual in frequency.

For years now, however, some folks already had discerned the efficacies of fire in the health and well being of remnant Midwestern systems. Mostly, these folks were not scientists. Rather, they were people who had made it their business to be attentive to the responses of plants and animals to landscape management choices dictated by the ecological doctrines of the day, and found these choices to be debilitating.

Sibylla Brown is one who not only was among the skeptics, but one who had the strength of character and conviction to defy the doctrines and attempt to model more aboriginal landscape management choices on her own property. Her observation was the "successional" processes were depleting local biodiversity at a rate that she could observe personally in a catastrophically short period of time geologically. Light that used to drive life was deprived of all plants but canopy trees. Water that once soaked into the ground to emerge clean and constant as base flow in streams was shifting to surface

discharge and all its related erosional forces. Fungi were languishing. Birds were less apparent. Plants were winking out.

In the face of castigation and ridicule by bureaucrats and experts, Sibylla initiated the thinning and burning of some of her woodlands. She watched to see what the response of the native plants and animals would be. They affirmed her choice overwhelmingly. She expanded the effort over the next ten years.

This year, on one visit in June, I meandered through a small portion of a large timbered tract, some of which had burned annually for the last 8 or 9 years. On this trek, I noted 206 native vascular plants species. Generally, in areas of high remnant quality, such as in the Indiana Dunes National Lakeshore, I am gratified to note 180 species on a single survey. The only other places in the world where I have seen such fecundity is on Indian reservations where landscape fire is an annual event and on military bombing and artillery ranges, where fire is an annual event. We were so impressed that we enlisted the appearance of Laura Rericha, a biologist with the Forest Preserve District of Cook County, Illinois. Quite facile in her knowledge of most living things, she is a noted authority on Midwestern Ants; on one day she recorded no fewer than 22 native ant species, which is an exceptionally high number in a single plant community.

If Sibylla's efforts were replicated throughout our region, the result would be to enliven and enhance the biodiversity of our remnant lands that the aggregate effect is probably beyond even my ability to imagine. Flooding would be much attenuated. Streams would regain their base flow in those districts. Springs would emerge in those areas where they once issued forth clean and cold from the earth.

I am aware that many experts have eschewed her efforts, and will not even take time to visit, look, and learn. I and all who care truly about the health and well being of Iowa and her natural heritage, will be very grateful to you for causing the powers that be to consider Sibylla for recognition. It is my sincere hope that Iowans will examine the efficacies of Sibylla's efforts, and learn to listen more to the plants and animals and understand that their survival, like ours, will depend on conscious and active choices made by custodians of Iowa's remnant lands.

Very sincerely,

Gerould Wilhelm