

State agency coding center: 0610730, Account 5206090.  
City of Watertown, Terry Redlin Environmental Center, Watertown, SD  
SD Game, Fish and Parks Wildlife Diversity \$5,000 granted in 2010.

The Terry Redlin Environmental Center (TREC) attached to the Bramble Park Zoo, was completed in February 2010. The central part is an area for educational exhibits. The Zoo director asked that the Upper Big Sioux River Watershed Project staff develop exhibits for that area, an exciting and educational activity as it turned out. With donor funds granted to the city in the neighborhood of \$54,300, the main exhibit expense total was approximately \$63,300. This does not include costs for painting or wiring or plaques. Each of the three wall exhibits cost about \$20,000. The grand opening for the TREC was held in May, 2010. A 'Thank you' plaque listing donor organizations was hung in June, 2010. (See Donor .pdf)

Staff brainstormed ideas in late 2009 intending to develop two themes. These evolved into four distinct areas. Initially, staff wanted to highlight the watershed project and the unique geography of NE South Dakota. Discussions with several exhibit companies fine-tuned the 3D topographical map ideas.

An interest in local floral and fauna started thought about including the tallgrass prairie. Beginning with the map in *Grassland Plants of South Dakota and the Northern Great Plains*, (James R. Johnson and Gary E. Larson, SDSU: Brookings, SD) and working with the BPZoo director, staff began to pull ideas together for illustrating the tallgrass prairie and the wildlife that inhabits what's left of the prairie today. The zoo director expressed a preference for interactive displays, since the largest number of zoo visitors are kids and their families. A presentation by Museum Arts in Texas resulted in some keen ideas for interactive displays. A month or so of fine-tuning, and three wall displays and a wetland floor exhibit evolved. To compliment those displays, a Tallgrass Prairie wall mural and native tallgrass prairie garden were developed for the front of the building at the watershed offices.

By far and away, the most popular and frequented exhibit is the Prairie Plant Trivia display of wildlife habitat, for which the wildlife diversity grant was submitted. Visitors can match 10 creatures at the top with 10 plants across the bottom. If the match is correct, a happy bell sounds. If the match is incorrect, a buzzer sounds. The best age-appropriateness seems to be 3rd or 4th grade to adult. Younger children tend to pound on the lighted buttons and make as much noise as they can. The exhibit is very durable!

Staff started with a list of tallgrass prairie plants they wanted included, and then found wildlife to match. Each creature's listing includes a 'clue' to the match plant. (See attached .pdf for schematics of the exhibit, with detail.) Hundreds of pictures of plants and wildlife were proposed and accepted or rejected for their quality and photographic appeal. The map that originally was the main focus of the exhibit became much less critical to the overall display. Animal and plant relationships (habitat) became the focus.

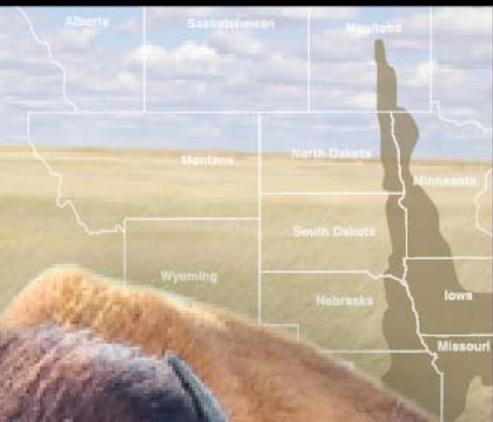
The second most popular exhibit is the wetland floor diorama, which includes a top exhibit area with geese, birds, ducks and grasses. The base includes sections for aquatic furbearer pelts (including a river otter donated by the local GF&P office), tadpole/frog development, and aquatic bugs with microscopes. There have been 55,950 visitors to the TREC/BPZ since May, 2010. The area is a wonderful educational tool.



# The Tallgrass Prairie

## PLANTS, FLOWERS AND GRASSES TAKE ROOT

The tallgrass prairie is a complex ecosystem. Grasses, which grow up to nine feet above and more below ground, share space and nutrients with flowers, birds, mammals, insects, and microorganisms. The tallgrass prairie has almost vanished as a result of plowing. The soil was ideal for homesteaders' crops. It grows again through dedicated conservation efforts. The historic range of the tallgrass prairie is shown in the map to the right.



## Prairie Plant Trivia

Test your knowledge of the South Dakota prairie. Press a button next to an *Animal or Insect*. Then press the button of its matching *Habitat* before time is up!

 "Holy cow!" Monarch caterpillars feed on...

 Monarchs are "ablaze" getting nectar from ...

 Dakota Skippers get nectar from this "colorful" flower.

 Bees are in their "element" finding nectar in a ...

 "Big" bison chew on this grass called ...

 Coyotes' noses "twitch" while hiding in this grass.

 Rabbits take a "little" cover in this grass.

 Song birds perch on this "native" grass.

 Migratory birds make this grass their "main dish."

 Squirrels should wear "shades" while eating this.

Little Bluestem




Swamp Milkweed




Switchgrass




Sideoats Grama




Big Bluestem




# The Tallgrass Prairie

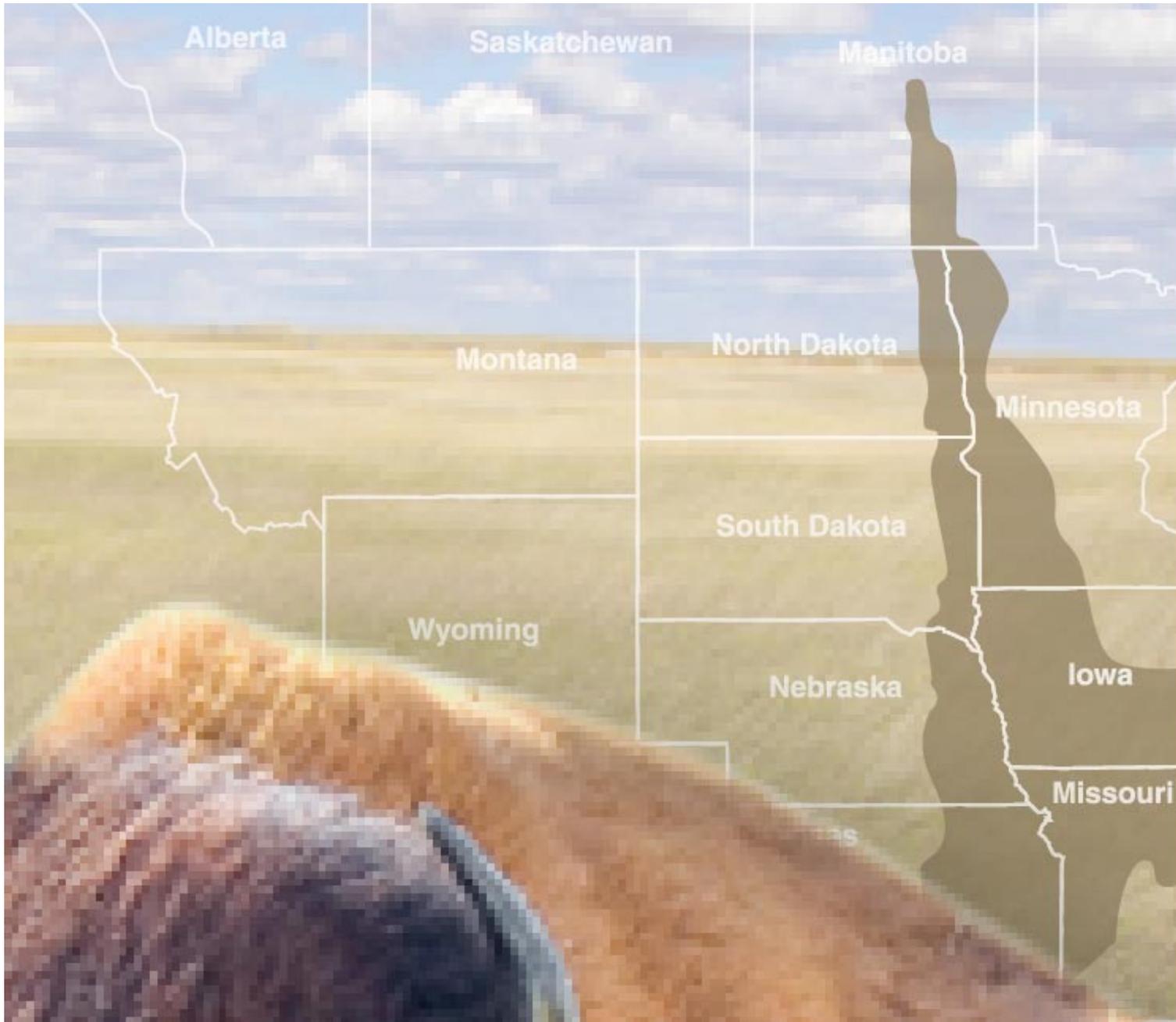
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Map Right: "Grassland Plants of South Dakota and Northern Great Plains", by James R. Johnson and Gary E. Larson, South Dakota State University, College of Agriculture & Biological Sciences, South Dakota Agricultural Experiment Station

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“Holy cow!” Monarch caterpillars feed on...

Photo Courtesy Henry T. McLin

Coyotes’ noses “twitch” while hiding in this grass.

Photo Courtesy Peggy Hanna



Monarchs are “ablaze” getting nectar from ...

Photo Courtesy John Flannery



Rabbits take a “little” cover in this grass.

Photo Courtesy Rosemary Lehan



Dakota Skippers get nectar from this “colorful” flower.

Photo Courtesy Charles Mann

Song birds perch on this “native” grass.

Photo Courtesy Steve Graves



Bees are in their “element” finding nectar in a ...

Photo Courtesy Scott B. Sauer



Migratory birds make this grass their “main dish.”

Photo Courtesy Tish Overton



“Big” bison chew on this grass called ...

Photo Courtesy John Excallour Walker

Squirrels should wear “shades” while eating this.

Photo Courtesy Alan Estep





“Holy cow!” Monarch  
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*Photo Courtesy Henry T. McLin*

Monarchs are “ablaze”  
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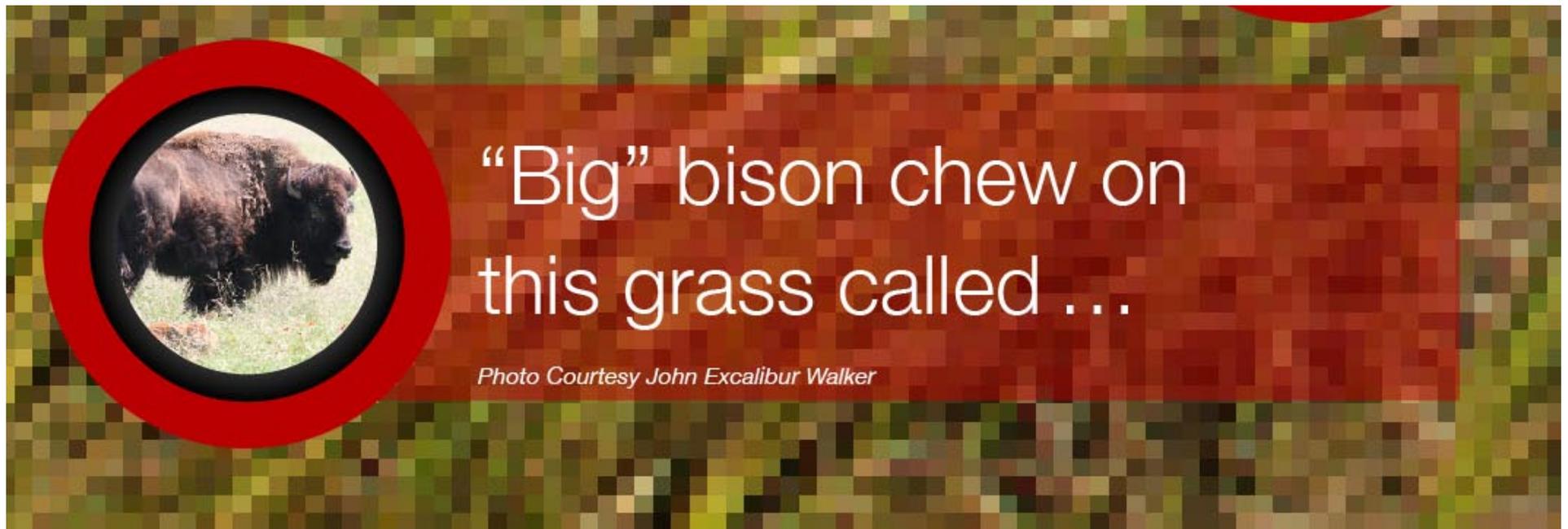
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from this “colorful” flower.

*Photo Courtesy Charles Menn*

Bees are in their “element”  
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*Photo Courtesy Scott B. Sauer*





Coyotes' noses "twitch"  
while hiding in this grass.

*Photo Courtesy Peggy Hanna*



Rabbits take a "little"  
cover in this grass.

*Photo Courtesy Rosemary Lehan*



Song birds perch on  
this “native” grass.

*Photo Courtesy Steve Greaves*



Migratory birds make this  
grass their “main dish.”

*Photo Courtesy Trish Overton*



Squirrels should wear  
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*Photo Courtesy Alan Estep*









# Swamp Milkweed

*Photo Courtesy Lisa Sheirer*



# Blazing Star

*Photo Courtesy Robert Neidlinger*



A photograph of Sideoats Gramma (Tripsacalopsis danielliana) showing its characteristic long, drooping seed heads. The background is a blurred field under a clear blue sky. A white circle is positioned on the right side of the image.

# Sideoats Gramma

*Photo Courtesy Jim Madsen*

A photograph of Purple Coneflowers (Echinacea purpurea) with vibrant pink petals and dark brown, spiky centers. The flowers are surrounded by green foliage. A white circle is positioned on the right side of the image.

# Purple Coneflower

*Photo Courtesy Jinjian Liang*



# Big Bluestem

*Photo Courtesy Jim Madsen*



# Indiangrass

*Photo Courtesy Jim Madsen*

# Thank You

*Working together, these groups contributed to the displays in this room, showing education is the key to conservation.*

The mission of the **Codington Conservation District** is to make technical, financial, and educational resources available to ensure the conservation and wise use of soil, water, and related natural resources for the benefit of its residents.

The **Izaak Walton League** works to conserve, maintain, protect and restore the soil, forest, water, and other natural resources of the United States and other lands, and to promote means and opportunities for the education of the public with respect to such resources and their enjoyment and wholesome utilization.

**Lake Kampeska Water Project District**, a local agency tasked with protecting the water resources of Lake Kampeska, implements projects to improve water quality and flood protection.

The **Lake Pelican Preservation Society's** mission is to preserve and protect Lake Pelican, promote understanding and information on all aspects of the lake management, assist in the restoration and protection of the lake, and support other organizations with similar interests and concerns.

The mission of the **Lake Pelican Water Project District** is an integrated natural resources and watershed-based approach to provide surface water management through the Upper Big Sioux watershed basin.

The **South Dakota Community Foundation** cares about one thing - South Dakota. In particular, it cares about the people and the future of our state. For over twenty years, it has been working for South Dakotans by supporting and encouraging philanthropy, serving both donors and nonprofits.

**South Dakota Game, Fish and Parks**, through a wildlife diversity grant, continues a mission to perpetuate, conserve, manage, protect, and enhance South Dakota's wildlife resources, parks and outdoor recreational opportunities for the people of this state and its visitors, and to give the highest priority to the welfare of the state's environment in planning and decisions.

The **U.S. Fish and Wildlife Service's** mission is to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people.

The **Watertown Community Foundation** promotes philanthropy, receives and administers charitable gifts and invests in programs that improve the quality of life in Watertown by promoting charity, education and culture in the community.