

#### In the Footsteps of Lewis and Clark

On August 25, 2003, a small group made the trek from Cotton Park to Spirit Mound, attempting to follow in the footsteps of the Corps of Discovery. Royce Engstrom led them, and each hiker wore a Spirit Mound tee shirt provided by the W.H. Over Museum. This Corps of Discovery commemorative hike was very different from the original. In 1804 there were no roads, the river was known as Whitestone Creek, and wading was the mode of getting across. The members of the original expedition carried their food or found it in plum trees along the way. The 2003 expedition members walked along back roads and were given a canoe ride across the Vermillion River by Jack Williams. They ate box lunches at the home of Bob and Elizabeth Wood.

Along the route the modern hikers read excerpts from the 1804 journals, and they saw some of the plants that were described. The modern hikers saw numerous native grasses and forbs at the mound. The showy flower of the Rocky Mountain bee plant (Cleome serrulata) was spotted among the flowering forbs. Lewis had collected this species on August 25,1804 at the mouth of Whitestone Creek. At the top of the mound the hikers observed a large assemblage of swallows swooping over the prairie. These must be descendents of those described in the journals by Clark:

... the insects of various kinds are . . . involuntaryly driven to the Mound by the force of the wind, or fly to its Leeward Side for Shelter; the Small Birds whoes food they are, Consequently resort in great numbers to this place in Surch of them; Perticularly the small brown Martin of which we saw a vast number hovering on the Leward Side of the hill, when we approached it in the act of catching those insects; they were so gentle that they did not quit the place until we had arrivd within a few feet of them.

Captain William Clark August 25, 1804

### Spirit Mound's Transformation

In the minds of the modern hikers the abundance of birds alone was enough to induce a deep appreciation of the gift of Spirit Mound Historic Prairie. A few years ago it was a feedlot surrounded by corn and soybean fields. Today it is again becoming a biologically diversified prairie.

The mound has experienced a transformation since Spirit Mound Trust was incorporated on April 14, 1986. The initial Board of Directors consisted of Larry Monfore, Loren Carlson, James Antonen, Amond Hanson, Jerry Johnson, Julia Vodicka, and W.O. Farber. Over time many other members of the community have served on the board. Two board members, Larry Monfore, cofounder and first president, and Charles Wetmore, a board member and a Spirit Mound landowner, died recently. Yet, both lived long enough to see and enjoy the beginning of prairie restoration at the Mound. We miss their guidance, but the community celebrates their accomplishments, as their prairie dream becomes our prairie reality.

It has been a complex endeavor. The 320-acre Spirit Mound site was purchased from five separate landowners in early 2001. There were over 20 buildings, several roads, approximately 1,500 trees and over five miles of fence. All needed to be removed in order for the prairie dream to be a reality. The removal phase began in the fall of 2001.

The process of structure removal, erosion repair, and prairie planting was very complicated, and the Trust welcomed the expertise of a variety of governmental agencies involved in the decision making. Among the agencies were the National Park Service, Corps of Engineers, Fish and Wildlife Service, South Dakota Historical Society, South Dakota Department of Transportation, and South Dakota Game, Fish and Parks Department. The end result will be the birth of the historic prairie.

Visiting our prairie will soon become easier. Widening and resurfacing of Highway 19 will soon be completed, and the broad paved shoulders are an anticipated bikeway. This will promote visits to the mound by those who would like to imagine the events and adventures of Lewis and Clark or simply enjoy a real prairie. A large parking lot is under construction. A vault toilet and picnic tables will soon be provided. The National Park Service will install cultural and natural history signs at the parking lot and along the trail this spring.

A wheel chair accessible trail leads nearly to the top of the mound. Grasses growing beside the path will hide it from all but trail travelers, who'll be surrounded by a sea of native grasses. However, much remains to be done. There are many vehicle tracks that need to be eliminated. In some areas our first plantings have not done well, and will need to be re-seeded. Plant and animal species must be monitored to determine the effects of management strategies. The goal of these strategies is to return the 320-acre site to a semblance of the highly diversified tall grass prairie that Lewis and Clark might have seen 200 years ago.

# Restoring Prairie Diversity

Professor Karen Olmstead of the University of South Dakota will provide the scientific information necessary to develop a highly diversified prairie. The South Dakota Chapter of the Sierra Club gave financial assistance to the Trust to get her studies started. She secured a grant from the South Dakota Department of Game, Fish and Parks, and she and her students have an active presence on the site.

In 2003, students Rusty Vote and Annie Horner made systematic monthly samples of plants throughout the growing season. They have identified over 100 species including nearly all that were planted as part of the restoration effort. Images of the plant species you might see at the mound can be observed at www.usd.edu/prairie. Dr. Paula Mabee and students Jay Carlisle and Heather Hoff conducted a survey of birds from May through July. Among the more than 50 species they saw were prairie birds such as the upland sandpiper, bobolink, savannah sparrow, dickcissel, grasshopper sparrow, and lark bunting (www.usd.edu/prairie/birds).

The detailed biological information they collect will allow adaptive management to supplement the original prairie design. The concept of adaptive management means that plans must be flexible and new information must be incorporated as it becomes available. Mark Steck, of the South Dakota Game, Fish and Parks Department, is the manager of the project. Mark was a central figure in overseeing the removal of unwanted structures. Now, he is directing the prairie restoration. As the environmental information accumulates he decides where and when additional seeding is necessary or where problems of soil quality need to be addressed. One of the most serious problems is eliminating aggressive non-native plant species. The tools for this work in progress are burning, spot applications of herbicides, mowing, interseeding, and in some case planting plugs of desirable native plants.

The eastern face of the mound is very steep and dry and inaccessible to machinery. Dr. Olmstead directed members of the Spirit Mound Trust, the Sierra Club and numerous student volunteers who planted plugs of grasses and forbs in the spring of 2003.

# What you can do

Many future projects will require community assistance. If you would like to be informed of opportunities to help at the prairie please notify a member of the Board of the Spirit Mound Trust and you, or your group, will be placed on our list of workers. We will also need your continuing financial support to purchase seeds and plants. Please continue to assist the prairie project though your membership dues.

We still have some of the original numbered and signed prints of Ron Backer's Lewis and Clark's Spirit Mound as well as Spirit Mound lapel pins. Simply use the accompanying forms to order prints or pins. They are also for sale at the W.H. Over Museum along with a variety of Spirit Mound tee shirts.

It will take many years to have a "truer" historic prairie. In fact, a complete restoration is impossible since some original species are extinct or extremely rare, and some prairie animals require such a large range that it is impractical to attempt to place them on a small piece of land. However, with your continued physical and financial assistance we hope to allow you and future generations to experience the feeling of being in a pristine place.

If you have questions or suggestions contact any member of the board listed below, or write a letter to Spirit Mound Trust, Box 603, Vermillion SD 57069. For a quick response e-mail Jim Heisinger (<a href="mailto:iheising@usd.edu">iheising@usd.edu</a>).

#### Current Board members:

Margaret Cash, Treasurer Loren Carlson, Vice President

\*Wayne Evans

Bill Farber

Amond Hanson

Jim Heisinger, President

\*Jennifer Jones

Jim Peterson

Mark Wetmore, Secretary

\*Norma Wilson

<sup>\*</sup>Denotes members added in 2003