

*Summary Report
For the 2nd Annual
Sand Hills Discovery Experience*

July 22, 2003

*Coordinated by
Sand Hills Discovery & Visitor Center Foundation*

*Chairman
Richard Albrecht/Barbara Lamb*

*Conference Co-Chairs
Kevin & Dottie Arent*

Summary compiled by the North Central Development Center

"Providing comprehensive information of the Sand Hill area"



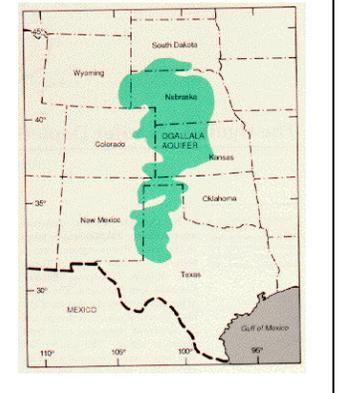
Sand Hills Discovery & Visitor Center Foundation

335 N. Main St, Ainsworth, NE 69210
402-387-2740 ncdc@bloomnet.com

Summary Report ***Sand Hills Discovery Experience*** **July 22, 2003**

There are no waves crashing the shoreline but there is an ocean in Nebraska-technically under Nebraska. The Sand Hills of Nebraska conceals an underground ocean the size of Lake Huron. This ocean is the High Plains Aquifer or, commonly known as, the Ogallala Aquifer. According to the U.S. Geological Survey Fact Sheet FS-068-97, the High Plains aquifer underlies one of the major agricultural areas in the world. This aquifer has been the lifeblood of habitation from plants to animals, from Native Americans to the Pioneers and today's cattle ranchers.

The largest volume of water in the High Plains Aquifer lies under the Nebraska Sand Hills.



Creation of the Sand Hills Discovery Center Foundation and the Sand Hills Discovery Experience

The Sand Hills Discovery and Visitors Center Foundation was chartered in January 2001, with a Mission Statement for "Providing comprehensive information about the Sand Hill area." The foundation members represent a cross-section of ages, occupations and interests combined with a wealth of experience. The committee's primary mission is to develop and sustain a Sand Hills Interpretive Center. The foundation builds on the legacy of community experts including the family of the late, world-renowned paleontologist, Morris F. Skinner and noted state expert on grasslands, local rancher Sid Salzman.

The foundation needs to determine the feasibility of building an interpretive center. A key component in that study will be a community of interest. The Sand Hills Discovery Center Foundation created an event where speakers are asked to present information from areas of interest delineated in the foundation's goals. Specifically paleontology, ecology, geology, hydrology and agriculture and how it relates to the Sand Hills area throughout the ages. Vendors, educational exhibits and guided tours make this a comprehensive "Sand Hills Discovery Experience". The 1st Sand Hills Discovery Experience won the 2002 NCIP Outstanding Tourism Promotion and Development Award.

Assessment of the Sand Hills Discovery Experience

*See also the attached post-event news release

Continuing with the excellence set at the first Sand Hills Discovery Experience, the day began at the registration table where each of the 93 registered participants received a nametag and packet that included the day's program, a list of the vendors/exhibitors, a copy of the resolution establishing a "Sand Hills Recognition Week", an evaluation and a list of registered participants. Experience co-chairs, Keevin and Dottie Arent, made the introductory remarks and introduced the distinguished guests.

Steve Holen, curator of archaeology in the Department of Anthropology at the Denver Museum of Nature and Science, was the leadoff speaker. In his presentation, "The Native American Occupation of the Sand Hills" Holen focused on how the Native Americans utilized the Sand Hills and adapted to their conditions.

The impact of the West Nile virus on the bird population was a question posed to Jim Luchsinger, director of the Middle Niobrara Project for the Nature Conservancy in Nebraska. He stated that the long-term effects are yet to be seen however natural immunities will probably develop in the birds. It is expected that rodent population will not be effected by the current reduction of birds. During his presentation of "Sand Baths, Feather Combs, and Other Essentials: Animal Adaptations to a Sand Hills Existence", he noted that Nebraska has the largest concentration of Blanding Turtles, an endanger species.

Bruce Bailey and Shane Tucker discuss fossils with participants.



north central Nebraska. During breaks he and his assistant, Shane Tucker, were present to explain the fossils and where they were found.

Following our theme of hydrology, Bruce Bailey discussed "Ancient Rivers and Streams" and the challenges of dating the beds. Although through technology, science is developing methods to date volcanic ashes by the chemical composition, he said the most accurate way of dating the beds is by dating the fossils found in them. Bailey used the Sand Hills Discovery Experience to announce that he is working on a recent find near Bassett, which has proved to be the bed of an ancient river. Bailey recognized Ainsworth resident, the late Morris Skinner, as a leader in paleontology telling with the group about the fossil of a 3 horned deer found by Skinner, which was named *Cranioceras* (*Procranioceras*) SKINNERI in his honor. Bailey was also an exhibitor for the Experience displaying fossils found in

Jim Goeke focused his presentation on hydrology addressing, "High Plains Aquifer and its Regional Affect on the Sand Hills." Goeke's expertise is in groundwater geology and is the Hydrologist at the University of Nebraska-Lincoln West Central Research and Extension Center in North Platte. First he stated that it's really the Sand Hills that affects the aquifer more than the aquifer affecting the Sand Hills. He then defined the eight aquifer states as South Dakota, Nebraska, Kansas, Oklahoma, Texas, Wyoming, Colorado and New Mexico. He said in 1980, with the development of irrigation, water levels were expected to lower so a monitoring system was established to protect groundwater. He illustrated that from 1980-1996 while Texas and other states saw up to 70% depletion in their underground water, Nebraska experienced no change. He attributes this to the composition of the sandy soil allowing the underground water to recharge at a more rapid rate. The rivers in the Sand Hills are the most constantly flowing rivers in the world actually gaining water from the groundwater flow. These are the rivers that feed the well fields in southeast Nebraska.

The final presenter of the day was Jim Van Winkle of the Sandhills Task Force presenting, "Sandhills-Where the People and the Land Are One." Van Winkle began his talk with some statistical information stating the Sand Hills covers 19,300 square miles and has 1.3 million acres of wetlands. In 1997, the average rancher ran 500 head of cattle and owned 7,500 acres of land with a value of \$1.5 million dollars. The average income on a ranch was \$25,000 equaling less than a 2% return on investment capitool. The Task Force assists ranchers with water management and grazing systems. He noted a proper grazing system manages grass to help sustain it through drought periods. Overgrazing causes erosion and allows weeds to move into pastures thus stealing moisture from the native grasses. In some areas, the development of irrigation has brought "unnatural" water to the surface producing additional surface water and stream erosion. He credits the Sand Hills ranchers saying, "The vast majority of the Sand Hills are managed by very good stewards who have adapted to the land."

To enhance the main program, mini-sessions were given that targeted early and present day irrigation, conservation and water quality. Dick Turpin, retired Nebraska Game and Parks officer highlighted the evening, rib eye steak banquet. Mr. Turpin entertained the group with some humorous situations he had experienced as a game warden.

Extra venues were added to the event to make it a more complete Experience. Guided tours were offered on the day prior and the day following the main program. The day prior, participants could choose between a full day tour of the Merritt Dam/Ainsworth Irrigation Project and a half-day tour of Seven Springs Water Bottling or the Nature Conservancy. The half-day tours were offered again on the day following the main program. Vendors and exhibitors enhanced the day by providing unique items for sale and display.

An additional item for this year's program was the announcements of the legislative resolution establishing a "Sand Hills Recognition Week" the first seven days in July. Ainsworth High School student, Branden O'Hare, created the concept of this recognition. He worked with 43rd District Senator, Jim Jones, on developing the resolution and solicited an endorsement from the Sand Hills Discovery Center Foundation. O'Hare received 21 letters of support from the local area and across the state including one from Mary Ethel Emanuel of the Nebraska Division of Travel and Tourism. The resolution was passed on May 27, 2003.

Planning and Implementing the Sand Hills Discovery Experience

The Sand Hills Discovery Center Foundation employs no staff. The Sand Hills Discovery Experience committees are formed from our adult and student membership and include: Finance, Program, Publicity, Vendors/Tours, Food, and Educational Credit.

For the 1st and 2nd Experiences, the finance and publicity committees enlisted the support of outside sources for funding. Grants were written and funded from the Ainsworth Betterment Committee, the Brown County Foundation, Brown County Visitors Committee, Sandhills Task Force and the Nebraska Division of Travel and Tourism. This allowed the foundation to provide a lower registration cost to entice attendance and helped introduce the Sand Hills Discovery Experience. Because of the large attendance at the inaugural 2002 Experience, the 2003 event was moved to the Ainsworth High School Learning Center.

The program committee enlists our community experts and uses their influence to secure noted speakers for the event. The committee working with vendors/exhibitors seeks those with interests that parallel the concept of the event. These displays bring together an assortment of products and exhibits specific to the geographic area of the Sand Hills-clothing, rugs, soaps made from buffalo tallow, art of the Sand Hills and Indian artifacts, to name a few. In addition, guided tours are conducted that showcase areas of interest.

Local businesses and organizations graciously work with the foundation to ensure the success of the event. The North Central Development Center coordinates the publicity and provides the contact office for the event. The Chamber of Commerce works with the vendors and exhibitors. A local auto dealership provides transportation for the tours and beef producers contribute funds for the evening meal. Local media, covering an area of over a 100-mile radius of Ainsworth, provides space for news releases and promotions. The local radio station also airs live interviews with presenters at the event.

To assist in planning for future Sand Hills Discovery Experience events, an evaluation form is given to participants. They are asked to rate the speakers, food, vendors/exhibitors, facility and the experience as a whole. A follow-up news release is submitted to all local and regional publications. Regional and state coverage has been provided courtesy of Nebraska Public Radio, Norfolk Daily News, North Platte Telegraph and Omaha World Herald. The event is chronicled through a videotape summary of the day and still photos capture the excitement generated by the event.

Involvement of Educators and Students

One goal of the foundation is to bring educators, from throughout the state and region, an awareness of the Sand Hills. A one-hour college credit course, offered through Wayne State College, has been built around the Experience. Dick Albrecht, foundation director and Director of the Long Pine Continuing Education Center coordinates the college credit students. He designed the course and serves as an adjunct faculty member of WSC. Students are required to attend the conference and a field trip then turn in five lesson plans in which they used the information learned at the event in their classroom.

The foundation also desires to target young people and increase their knowledge and appreciation of the Sand Hills. An incentive is offered to encourage youth participation. Any student, 18 years or younger, can attend the event at no cost if they accompany a registered adult.

Conclusion

Never has the Sand Hills been the focus of an event that interests local residents, travelers, youth, senior citizens and educators. The participation shows the magnitude of interest in the Sand Hills. The presenters are of unparalleled quality; able to speak on the most complex issues and yet present them in terms that the layman can appreciate. Adding to the uniqueness of the experience are specialized tours, vendors and exhibitors along with an evening dinner complete with a relaxing, sometimes humorous presentation.

The success of the 1st and 2nd Sand Hills Discovery Experiences strengthens the confidence within the foundation that there is clearly an intense interest in this region that covers 19,300 square miles of the state of Nebraska. The Sand Hills Discovery Center Foundation continues to strive toward fulfilling the ultimate goal of building an interpretive center and educating the general public on the diverse resources of the largest grass covered dune field in the western hemisphere. Through the continued efforts of the foundation and the participation in future Sand Hills Discovery Experiences, travelers will come to realize what the local population has always known, the Sand Hills are a source of history, abundant grasslands, groundwater and beauty. As stated by foundation charter member, Barbara Lamb, "They convey a quiet dignity."

Hydrology Featured at the 2nd Annual Sand Hills Discovery Experience

"The Great American Desert is a water machine," states Jim Goeke, Hydrologist at the University of Nebraska-Lincoln West Central Research and extension Center in North Platte.

Hydrology was the featured theme of the second annual Sand Hills Discovery Experience held July 22nd at the Ainsworth High School Learning Center. Goeke was only one of five presenters, all experts in their respective fields.

The Sand Hills Discovery Center Foundation was formed by a group of individuals dedicated to educating the general public on the geology and ecology of the magnificent, and sometime fragile, Sand Hills. The group created this one-day "Experience" to provide comprehensive information about the Sand Hills to its residents as well as the many people who have become enchanted by the vast rolling dunes while traveling through the Sand Hills of Nebraska. There is even an opportunity to receive college credit by attending the Experience.

Goeke continued, "If water is the lifeblood of Nebraska then the Loups, Dismal and Calamus Rivers are the arteries. They are the most constant flowing streams in the world. Our (Nebraska's) water resources are the envy of the United States." The Ogallala and High Plains Aquifers stretch from Nebraska south into Texas but the largest portion of the water volume is under Nebraska. While the aquifer has lowered in most areas due to the development of irrigation, Nebraska has seen no depletion in its aquifer. Goeke attributes this to the composition of the sandy soil, which allows the water to recharge at a more rapid rate. Many questions have surfaced about water flowing out of Nebraska into neighboring states. According to Goeke, the Niobrara River on the north and the Republican River on the south cut off the flow of water out of Nebraska. However, he points out that this sustained flow of Sand Hills water is what provides the water for the well fields in Omaha and Lincoln.

Other presenters at the Experience included Steve Holen, curator of archaeology in the Department of Archaeology at the Denver Museum of Nature and Science, speaking on the "Native American Occupation of the Sand Hills"; Jim Luchsinger, Middle Niobrara Project Director of the Nature Conservancy, talking about "Animal Adaptation to a Sand Hills Existence"; Bruce Bailey, salvage paleontologist for the University of Nebraska-Lincoln, discussing "Ancient Rivers and Streams" and Jim Van Winkle of the Sandhills Task Force speaking on "Sandhills-Where the People and the Land Are One". The hydrology theme was continued in the mini-sessions that included early and present day irrigation, conservation and water quality as well as the tours of the Merritt Dam/Ainsworth Irrigation Project, Seven Springs Water Bottling and the Nature Conservancy. Vendors and exhibitors, whose interests parallel those of the foundation, were present throughout the day to add to the overall experience. After a day of gaining incredible knowledge and an evening banquet of rib-eye steak, retired Nebraska Game and Parks officer, Dick Turpin, entertained the attendees.

Knowledgeable speakers, meals, entertainment and networking combined with the opportunity for college credit made this a comprehensive, well-balanced experience to enhance everyone's awareness and enjoyment of the beautiful Sand Hills region. For more information about future Sand Hills Discovery Experiences and the Sand Hills Discovery Center Foundation access the web site www.ainsworthlinks.com or contact the North Central Development Center in Ainsworth toll free at 1-866-387-2740.

Group aims to share the Sand Hills feeling

BY PAUL HAMMEL
WORLD-HERALD STAFF WRITER

AINSWORTH, Neb. - To Barbara Lamb, Nebraska's Sand Hills are as much a feeling as they are a vast area of grass-covered dunes. It's a sense that comes over her, she said, as she rolls homeward on Nebraska Highway 2 with the windows down on her 1995 Chevy Blazer. "It's a feeling of comfort and a feeling that everything is right with the world," said Lamb, the 71-year-old daughter of renowned paleontologist Morris Skinner, who grew up here.

Lamb and a group that wants others to enjoy and appreciate that feeling formed a foundation two years ago in hopes of establishing the Sand Hills Discovery and Visitors Center. The dream is to educate people about the Sand Hills, the second-largest area of sand-covered dunes in the world, an ocean of grass that covers 19,300 square miles - about the size of New Hampshire and Vermont combined.

Right now, a Sand Hills Center is a distant goal awaiting a feasibility study, and then the money to build it. But for the second straight year, the foundation will hold a "Sand Hills Discovery Experience" event in Ainsworth to prepare.

This year's event, scheduled for July 22 at Ainsworth High School, will focus on the hydrology of the Sand Hills and feature several presenters, including Jim Goeke of the University of Nebraska's West-Central Research and Extension Station, and Dick Turpin, a retired Nebraska Game and Parks Commission educator, storyteller and game warden.

The idea is not only to raise a little money but also awareness, said Dick Albrecht, a retired Ainsworth High School teacher and foundation secretary. "We have to demonstrate that there's an interest in this topic," Albrecht said. "Everywhere we go, people say it's a great idea."

Last year, organizers were surprised by the turnout of 99 people for the first "Experience" event, particularly after some locals predicted that few people would be interested in such an academic presentation. This year, they're planning on 150. Teachers can earn one hour of credit through Wayne State College by attending the event.

People, particularly foreign visitors, enjoy the "quiet dignity" and unique qualities of the Sand Hills, said Linda O'Hare, a member of the Discovery Center Foundation board and operator of the Ainsworth Inn Bed & Breakfast. "It isn't Disneyland," she said, but a place where people can see the stars, breathe clean air and enjoy the Sand Hills' famous hospitality.

This year's water theme was selected because the Sand Hills overlies an aquifer as big as Lake Huron.

Currently, the foundation is trying to raise \$5,000 to \$20,000 for a feasibility study just to see if a discovery center is reasonable. Membership in the foundation costs \$20 a year, and donations are being solicited. "We don't want to build a boondoggle," said Lamb, the newly elected president of the foundation board.

There are no centers or museums dedicated solely to telling the story of the Sand Hills, though the Brown County Historical Museum in Ainsworth does have a display on the area. It includes a photograph of Skinner, a curator at the American Museum of Natural History in New York City for more than 50 years.

Lamb, a retired respiratory therapist who moved back to Ainsworth in 1976 after living in New York City and Oklahoma City, said it may take several years to realize the dream of a Sand Hills center. Some see the center as a way to pay tribute to Skinner, his work and the achievements of a small-town boy who saw something special in his surroundings. He discovered thousands of fossils, including many in the nearby Niobrara River valley.

But such a center mostly would showcase a unique place, O'Hare said. "It really gives us a chance to educate people about how we take care of the land and how we treasure it," she said.

To register for the Discovery event, call (866) 387-2740 or go online at ainsworthlinks.com.