The Newsletter of Lubbock Lake Landmark Fall 2005

CELEBRATION 2005 FAMILY DAYS

SATURDAY, OCTOBER 15 10AM-4PM SUNDAY, OCTOBER 16 1-5PM

Storytelling

with Eldrena Douma Saturday at 11 am, 1 pm & 3 pm Sunday at 1:30, 3 & 4 pm

Lively Demonstrations Throughout the Day

Native American lifeways with Ray Olachia Traditional cooking with Curly Bunting Native American basketry with Dr. Bill Skillman Medicinal plants with Dr. Bill Rosser Spinning & weaving with Barbara Armijo Flintknapping with Ivan Imel and Ray Olachia

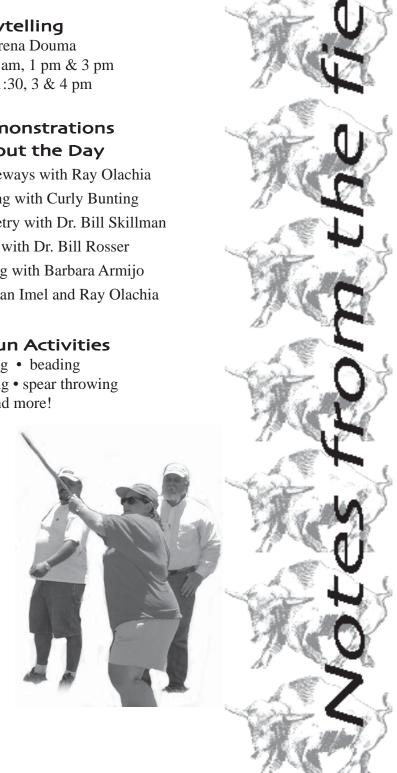
Family Fun Activities

- weaving beading
- basket making spear throwing
 - and more!



in this issue:

- fall programs
- regional research
- operations planning
- historic maintenance
- botanical diversity
- master naturalists



LIVING WITH HISTORY

The *Living With History* series concludes with two outstanding programs by faculty members in TTU's college of Architecture:

October 16, 2005 2PM

Historical Documentation and an Analysis of Two Significant Ranch Headquarters in the Texas Panhandle

Gary Smith, Professor, College of Architecture, Texas Tech University

November 13, 2005 2PM

Documenting Historic Structures: New Technologies Glenn Hill, Associate Dean of Research, College of Architecture, Texas Tech University

Living With History is funded by a grant from Humanities Texas, a state partner of the National Endowment for the Humanities.

SUMMER HIGHLIGHTS

Spring and summer 2005 provided visitors to the Landmark with numerous learning and recreational opportunities. Children ages 6-12 participated in an expanded program of classes and workshops that included explorations of our local prairie ecosystem and



During the Landmark's Summer Educators Academy, Mack Sherman (Lockney ISD) and Tom Thomas (Idalou ISD) found that building an earth oven is no easy task, but the food cooked in it was delicious!

biomes around the world. In addition to our annual Summer Educators Academy, area teachers took part in workshops on

Fourth grade students from Ramirez Charter School work with Historic Maintenance Supervisor Scott Trevey to plant one of the Landmark's flower beds.

playa lakes and K-3 science instruction during the school year.

ON TAP FOR 2006 . . .

FAMILY PROGRAMS

Environmental Awareness Family Days April 22 & 23

Archaeology Family Day July 8

Celebration 2006 Family Days
October 14 & 15

YOUTH PROGRAMS

Spring Break Fest March 14 - 15 - 16

Summer Youth Programs
June and July

ADULT PROGRAMS

Texas Master Naturalists monthly meetings beginning in November. See page 7 for details.

TEACHER PROGRAMS

Project Food, Land & People January 26

Project WET February 16

Project Learning Tree March 23

Project WILD May 4

Summer Educators Academy: Focus Archaeology June 26-30

Exact dates subject to change. Complete information on all of our programs can be found on our website: www.museum.ttu.edu/lll.



LANDMARK EXPLORATIONS

The Lubbock Lake Landmark regional research program has seen a flurry of activity this summer. The lab is processing materials from San Jon, Adair-Steadman, the Yellowhouse system, Post area, and Snyder area in addition to Area 13B and pedestrian survey at the Landmark. This year's international field crew comes from Canada and England as well as the US.

In early spring, field research was completed in the section of Yellowhouse Canyon from East Broadway Avenue to MLK Boulevard. Although land modifications have altered the valley setting (including two rechannelizations of the creek), extensive sections of the late Quaternary valley fill were located. Buried sites were identified, including the multicomponent Hilary-James site. This site exhibited great potential to be significant on a regional scale with its stratum 3 Early Archaic camp and ancient bison (*Bison antiquus*) bone bed and stratum 2 late Paleoindian ancient bison bone bed.

The regional research crew followed this work with the annual investigation at the Adair-Steadman site near Noodle. This year, pedestrian survey took place within the defined site boundaries and shovel-testing was undertaken outside the eastern boundary. The results of the 1970s work by the Texas Historical Commission and the research by the Landmark's crew were compiled into a GIS database. This approach indicated the possibility that the site extended beyond the designated eastern boundary. The minimal shovel-testing yielded in place lithics and bone in intact deposits. This exciting result lays the groundwork for additional investigation next spring.

May found the crew at San Jon (New Mexico), continuing work in the Early Archaic campsite in Area 2. Exploratory test excavations in Area 5 revealed the potential for another Early Archaic camp, based on stratigraphic correlation. Numerous charcoal samples were gathered for radiocarbon dating and tree identification. The recovery of what appears to be daub potentially was significant. Daub usually is associated

with structures from much later periods. This material may represent the earliest known structure on the Llano Estacado.



Taking a GPS reading on a topographic high spot at the quarry; note the Llano Estacado escarpment in the background.

Continuing the investigation of the upper Brazos River system, explorations began this summer at two new research locations, one near Post and the other near Synder (Texas). The Post location, on a section of the historic U-Lazy-S Ranch, has numerous archaeological sites along tributary drainages of the South Fork of the Double Mountain Fork of the Brazos River. Potential sites were reported and with landowner permission for access, several visits confirmed they were indeed sites, some of which having great regional potential. Two major site types were identified from this first field season, that of toolstone quarries and camps. The quarries were of particular interest as they are the first ever recorded involving the Ogallala Formation gravels. These gravels yield quartzites and cherts used extensively on the Southern High Plains, but very little is known about their procurement. The field crew initiated the mapping of a particularly large quarry that contained abundant evidence of discarded aboriginal technology over thousands of years of quarry activities. Mapping an extensive camp situated at the confluence of a small drainage tributary to the South Fork also was begun.

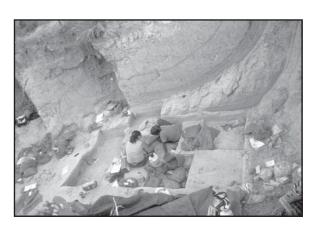
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Further downstream, the Snyder location focuses on a Pleistocene paleontological locality along Turtle Creek, a tributary drainage of the Clear Fork of the Brazos River. This locality on the Roland Springs Ranch holds great promise for generating new information about the animals and climate of that time. Excavations focused on Locality 1 and took place within Pleistocene sands in an arroyo. At least 28 different animals from all classes were represented in the material recovered. The field crew camped out on the ranch and used the ranch house as a lab/kitchen.

Excavation also continued in Area 13B at the Landmark to expand the area exposing the late Ceramic bone bed. While some units still were excavating the hoof print surface higher up, other units reached and exposed the bone and caliche pavement. Butchered bison bones were recovered along with lithic tool resharpening debris. Results from the pedestrian survey indicated that the Landmark's surface was stable and the revegetation program a success. Very little material was located – a good sign.

Thanks are due the landowners of the Post and Synder locations for access onto their land and gracious donation of the collections generated to the Museum of Texas Tech University. A special debt of gratitude is owed Robert and Tyna Roland for providing a field camp, food, equipment, expertise, and friendship that facilitated and ensured the success of the fieldwork.

Eileen Johnson, Director, Lubbock Lake Landmark and Terri Carnes, Collections Manager



Fieldwork at the new research location near Snyder.



Cast being prepared during exploratory excavation at the new research location near Snyder.

LOOKING AT THE PAST, PLANNING FOR THE FUTURE

If you are planning for a year, sow rice; if you are planning for a decade, plant trees; if you are planning for a lifetime, educate people.

—Chinese proverb

Preservation requires planning and patience. As this Chinese proverb suggests, it is sometimes necessary to look at the possibilities for the future through the lens of time. When the archaeology at Lubbock Lake was accidentally discovered in 1936, initial investigations sought to answer some immediate questions. What was here? What history did it represent?

Over the next 50 years, the significance of the site became increasingly apparent and acknowledged. As more and more discoveries were made, people began to consider the future and preservation efforts began. Lubbock Lake was declared a National Historic Landmark in 1977, and a State Archeological Landmark in 1981. In 1992, the City of Lubbock, who had owned the land since the early 1900s, transferred possession of over 300 acres of Yellowhouse Draw so that it could be preserved in perpetuity. Owned and operated by Texas Tech University, the Landmark is a unit of the Museum of Texas Tech University. The Landmark is today an



Members of F.E. Green's crew (1951) pose after a long day's work at Lubbock Lake.

important research institution as well as available for the education and enjoyment of the public because many people planned for a lifetime and not for a year.

Taking the long view is still an important aspect of our planning today. One question we are frequently asked by visitors is why some spots here at the Landmark are covered with black plastic. They are surprised to learn that it is used to protect past excavations and preserve them for the future. When the Landmark was discovered, radiocarbon dating and global positioning systems technologies did not exist. By preserving archaeological sites for the future, we also are preserving information that may be accessible with technologies that have not yet been invented!

There are times when an important step in realizing a plan is simply waiting for nature to take its course. Last fall, Scott Trevey, the Landmark's Historic Maintenance Supervisor and Blake Morris, Operations Technician, built two brush arbors in our outdoor interpretive area. Over the winter, they traveled to the area of the Caprock around Crosbyton to collect native grapes that will eventually cover the arbors.

Through the spring and summer, we have watched as the grapes and gourds planted at the same time took root and began to grow. When you visit during *Celebration Family Days* on October 15 and 16, or at any time during the pleasant fall days, notice the progress of this project. We anticipate that the arbors will be completely covered in a few years and provide

comfortable shade for demonstrators and visitors during special events.

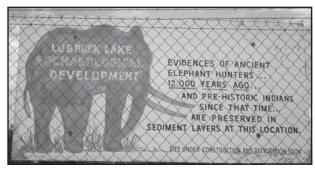
But, there are times when planning for the future requires more active intervention. During the 1960s and 1970s, this part of Yellowhouse Draw was a favorite spot for outdoor enthusiasts, many with off road vehicles. An informational billboard that stood along the road leading to the Landmark let the public know what was being found here and promised, "Site under construction and restoration soon."



One of two brush arbors constructed by the Landmark's historic maintenance crew.

The restoration of the landscape reached an important milestone this summer. For the first time in many years, the vista of Yellowhouse Draw north of the Interpretive Center is free of invasive mesquite brush. While the piles of dead brush that has been cleared are still there now, someday soon they will be gone, and we will be an important step closer towards the goal of restoring Yellowhouse Draw to its historic appearance. The next phase will be to reseed that area with native grasses. Preservation requires planning and patience.

Deborah Bigness Manager of Site Operations



A billboard seen at Lubbock Lake in the early 1970s.

nside and out

HISTORIC MAINTENANCE IN FLAMES?

Fires on native grasslands and prairies have occurred throughout the history of time. Wildfires used to be as natural as rain, wind, or snow. Native Americans learned that fire could be used to encourage buffalo habitats. These wildfires were once a major contributor to the ecology of the Great Plains region.

Today, when one hears the word fire, imaginations seem to immediately transition to thoughts of tragedy, darkness, smoke damage, destruction, and death. Furthermore, if a wildfire occurs, the risk of these mentioned thoughts actually happening are increased. Although wildfires often are harmful, prescribed fires are beneficial. A definition of a prescribed burn is the application of fire under predetermined fuel loads and prescribed weather conditions, with a primary objective, of a specific vegetated site. There are several benefits to prescribed burning. Once a vegetated site has been burned, the vegetation becomes more abundant and palatable for wildlife, such as deer. It also creates a greater surface area for seeds and seedling germination. Burning

helps to stimulate and promote new growth to native grasses and forbs. After a burn, nitrogen is released back into the soil, thus improving the soil's fertility on the site. Unwanted brush also can be controlled, not necessarily killed, by prescribed burning. Most importantly, heavy fuel loads of vegetated litter and thick layers of thatch, that can contain plant diseases, are burned off. This situation greatly reduces the risk of a potential wildfire, whether started naturally or maliciously.

Here at the Lubbock Lake Landmark, plans for pile burning and a prescribed burn are in the works. Time and dates for burning are not yet set in stone, but our objective is to begin the pile burning process this winter, and to follow that up with a prescribed burn in late winter/early spring. We're on fire about fire!!! Hope to see you soon!

Scott Trevey Historic Maintenance Supervisor

SEASONAL CHANGES HIGHLIGHT BOTANICAL DIVERSITY

When a person first sets foot on one of the hiking trails at Lubbock Lake Landmark, he or she may not notice the botanical diversity that exists in Yellowhouse Draw. In early fall, a person can take a look up the draw and see nothing but the brown, dead stalks of once magnificent stands of basketflowers. But, when he or she walks down the trail and takes a closer look into that stand, they can see an amazing variety of grasses flourishing. They will of course find blue grama and buffalograss, but many others with colorful names also are present. Alkali sacaton, creeping muhly, vine mesquite, little bluestem, hairy grama, curly mesquite, Arizona cottontop, plains bristlegrass, and green sprangletop are just a few. There are even wildflowers that continue to bloom after the summer heat, most notably chocolate daisy, Missouri evening primrose, and typical fall blooms such as gayfeather and curly cup gumweed. As the weather continues to cool, one can enjoy the rich blue green meadows of western wheatgrass.

It is all this diversity within the generally homogenous urban and agricultural environment, that makes Lubbock Lake Landmark significant aside from its profound archaeological importance. For years, natural environments within urban settings have been tamed or ignored. Examples of areas such as this are the Great Trinity Forest in Dallas,

and Buffalo Bayou in Houston. Those cities are beginning to recognize the value of natural landscapes, and it is good that many members of our community are recognizing what Lubbock Lake Landmark has to offer. Any open green space such as our city parks and the canyon lakes system are good, but Lubbock Lake offers a

relatively unchanged landscape and a rich diversity of flowering plant species. It is a setting that offers an excellent learning opportunity for students from grade school through college in the Southern High Plains region.

With winter coming on, vegetation becomes dormant, and the botanical diversity at the Landmark will not be so evident. However, mild winter days are an excellent time for walking the trails. One may observe a variety of hawks, a coyote, a fox or a mule deer while looking forward to the colors of spring.

Blake Morris Historic Maintenance Technician

BECOME A CERTIFIED MASTER NATURALIST!

The natural Texas is home to all of us, no matter where in the state we live. The natural Texas, the real Texas, is still to be found all across out state - from the wilds of rural areas to the squirrels in a city park to a wildflower in our backyard.

But as Texas grows more urban, we hurry to keep up with the hectic pace of urban and even suburban life. And we do not take the time to notice, to enjoy, and ultimately conserve the natural resources around us.



Through the Texas Master Naturalist volunteer program, you can help children and adults in your community learn about Texas's natural resources, in-

spire them to a new appreciation of their environment, and ensure that others will be able to enjoy the natural Texas for years to come.

In the Texas Master Naturalist program, you will enhance your love of nature with research-based, scientific knowledge. You will receive in-depth training in wildlife and natural resource management taught by recognized experts in the field and customized to focus on the native ecosystems of this region. You will also have the opportunity for advanced training in special subjects that interest you.

In return, you will provide your community with volunteer service in the form of educational activities, projects, or demonstrations. You might serve on a speakers bureau

Lubbock Lake Landmark would like to acknowledge the Fondren Endowed Fund of the National Trust for Historic Preservation for their assistance in helping to preserve the archaeological and natural resources of the Lubbock Lake Landmark; and the Helen Jones Foundation, Inc. for their continuing support of educational and public programming.

to make presentations to community organizations, or you might introduce children to local plants, insects, and animals through an after-school project. Opportunities to serve as nature trail guides and to assist with trail building will be available through Lubbock Lake Landmark. The possibilities are endless, limited only by your imagination!

As a Texas Master Naturalist, you will be helping people appreciate the natural environment around their homes, while you enhance your own knowledge and skills. And, perhaps most satisfying of all, you will have a chance to build friendships and work with others who share your love of the natural Texas.

Join us for our first organizational meeting!

When: Thursday, November 3

7:00 pm

Where: Lubbock Lake Landmark

Information: Sue Shore

742-1116 or lubbock.lake@ttu.edu



CURRENT VOLUNTEER OPPORTUNITES

Volunteers are needed to help with activities at the following times:

Celebration Week Family Days

Assist with children's arts and crafts activities. Sign up for a two-hour shift! Students 13 years and older also welcome!

When: Sat. October 15 10am-4pm Sun. October 16 1-5 pm

For information or to sign up, please contact Sue Shore at 742-1116 or lubbock.lake@ttu.edu

Notes from the field...

Museum of Texas Tech University Lubbock Lake Landmark Box 43191 Lubbock, TX 79409-3191

Non-Profit Organization
U.S. Postage
PAID
Lubbock, Texas
Permit #719



Visitor Information

Bob Nash Interpretive Center

- Exhibition Galleries
- Learning Center
- Landmark Gift Shop

Sculpture Garden

- Ancient Bison Giant Pampathere
- Short-Faced Bear Columbian Mammoth

Hiking Trails

- One-half mile Archaeology Trail
- Three-miles of Nature Trails

Location: 2401 Landmark Drive (at North Loop 289 & Clovis Hwy)

Regular Hours: 9AM-5PM Tuesday-Saturday 1-5PM Sunday Closed Monday

Program information and tour scheduling (groups of 10 or more): $(806)\ 742-1116$

http://www.museum.ttu.edu/lll



The western caprock escarpment at San Jon, New Mexico.

Contributors to this issue of *Notes from the field*... Deborah Bigness, Terri Carnes, Dr. Eileen Johnson, Blake Morris, Susan Shore, Scott Trevey Photography: Tara Johnson Backhouse, Susan Shore All material copyright ©2005 Museum of Texas Tech University