

The Newsletter of Lubbock Lake Landmark Spring 2005

Join us for great summer programs!

Environmental Awareness Family Days

Archaeology Family Day

Youth Programs

Living With History talks

Archaeology Field Season



in this issue:

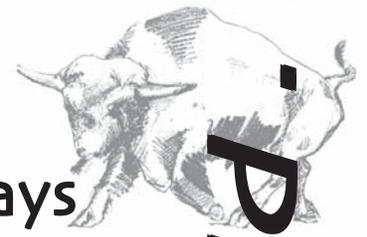
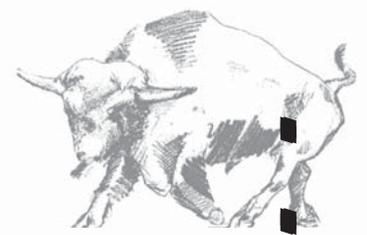
- spring/summer programs
- operations
- plant research
- inside and out
- regional research

top:

Museum educator Cindy Sherman introduces brownie girl scouts to West Texas animals during a recent workshop..

bottom:

A young archaeologist learns how to stake out a grid during a *Kids in Physics* workshop hosted by the Landmark and developed with Texas Tech's Physics Department.



Notes from the field.

Summer Hours: May 1 - August 31
8 am - 8 pm Tuesday -Saturday
1 - 8 pm Sunday



Spring and summer are filled with programs for everyone! Join us on April 23 & 24 as we celebrate National Environmental Education Week. Learn about our local playa lakes through fun activities and playa tales with master storyteller Lucinda Wise.

Get a behind-the-scenes tour of our research facilities on Archaeology Family Day, or participate as a volunteer during the field season! Volunteer information on page 5.

Children ages 6-12 have a variety of opportunities to discover about the world around them during our summer youth programs.

Bill Dunmire, author of *Gardens of New Spain*, brings us a presentation on Old and New World foods on May 1 at 2 pm. Our discussion of regional history continues through November with our Sunday lecture series, *Living With History*.

May 15, 2005

Family Memories, Family Heirlooms
 An interactive panel discussion

June 19, 2005

Agriculture on the Southern High Plains
 Cameron Saffell, Curator of Agriculture, New Mexico Farm and Ranch Museum, Las Cruces

August 21, 2005

Living History Programs: Face to Face with the Past
 Capt. Ken Pollard, Chaplain, Texas Buffalo Soldiers and Program; Supervisor, Texas State Parks, Community Services Education & Outreach Program

September 18, 2005

The National Register of Historic Places in Texas
 Sally Still Abbe, Planner, City of Lubbock Historic Preservation Office

October 16, 2005

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

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

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

FAMILY PROGRAMS

Environmental Awareness Family Days
 April 23 & 24

National Trails Day - June 4

Archaeology Volunteer Field Season
 June 14-August 27

Archaeology Family Day - July 9

Prairie Festival - August 27
 at Lubbock Garden & Arts Center

Celebration 2005 Family Days
 October 14 & 15

ADULT PROGRAMS

Living With History Series
 see schedule left

Our Gift from Spain: Colonial Farming & Ranching Comes to Texas - talk by Bill Dunmire May 1, 2 pm

YOUTH PROGRAMS

AM Adventures (ages 8-11)
 Wednesday - Fridays
 June 4-July 26

Amazing Afternoons (ages 6-7)
 Tuesday - Fridays
 July 18-29

Prairie Explorers (ages 10-12)
 Saturday mornings
 June 4 - August 6

Saturday Discoverdays (ages 6-9)
 Saturday afternoons
 April 30 - August 6

Complete information on all of our programs can be found on our website: www.museum.ttu.edu/III/

WELL JUST WHAT DOES "OPERATIONS" MEAN?

At the recent Texas Association of Museums conference, in a session on historic site maintenance, one of the speakers remarked, "They never told me in college what a lift station is or what it does." Several



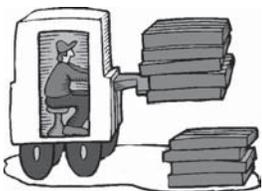
members of the audience laughed in recognition of the truth of her comment. Laughing along with the others, I reflected on the question I am frequently asked, "So what does the Manager of Site Operations *do*?" The simple answer is that a site manager and operations personnel do what they do so that the work of the institution can go forward, and the visitors will have an enjoyable experience. The detailed answer is

much more complex.

Managing a historic site requires the efforts of every employee and committed volunteers. It borrows from the knowledge and skills of many professions. The Lubbock Lake Landmark is an archaeological and natural history preserve covering approximately 315 acres. Obviously, we need the skills of archaeologists, botanists, biologists, and land managers, among others.



But did you also know that we have six buildings, a tipi, twenty four other outdoor structures, over four miles of fence, over 20 interpretive and other signs, nearly 4000 square feet of exhibits, three trucks, a tractor, a skid steer, two trailers, a water well, and yes, a lift station? So it also helps to have some of the knowledge and skills of painters, plumbers, custodians, mechanics,



ranchers, welders, carpenters, landscape architects, and electricians. We also work with the areas of public relations, community outreach, administration, planning, safety and emergency preparedness,

training, and during our summer field season when volunteers live on-site, running the field kitchen.

With such a variety of tasks, needs, and interests, it is probably no surprise that during recent weeks, I have attended the ServSafe training of the National Restaurant Educational Foundation, Historic Maintenance Supervisor Scott Trevey has completed the annual courses to update his Texas Department of Agriculture pesticide applicator license, and Operations Technician Blake Morris has worked with personnel from Texas Parks and Wildlife on a pedestrian survey of Caprock Canyons State Park.



This spring and summer, we will be adding improvements to the kitchen, painting, planting, building fence, spraying, pruning, mowing, conducting employee training sessions, planning for next year, and greeting visitors during our extended summer hours. Come see us!

*Deborah Bigness
Manager of Site Operations*

We 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.

COLLECTIONS: ITS NOT ALWAYS JUST THE OLD STUFF!

In the process of excavating an archaeological site, plant remains may be uncovered that can provide clues as to what climatic conditions may have existed in the past. As one might guess, very little plant material will survive buried in the ground for very long periods of time. Commonly, what does survive is the seed. Seeds may have a durable shell that allows the embryo inside to survive until conditions are right for germination. It is this shell that may give scientists a clue to environmental conditions that existed at different time periods.

Identifying plants can be a difficult process even when one looks at the complete plant. Botanists use a dichotomous key to help them identify a plant. This key includes vegetative characteristics such as the shape of a leaf or the length of hairs on a stem to arrive at an identification. The seed is rarely used as a characteristic for identifying the plant.

Hence lies the conundrum for the scientist who has only a seed by which to identify what kind of plant was growing at a site in the distant past. One solution to this problem is to build a comparative collection. With a comparative collection, one can identify what plants were at a site in the past by comparing modern seeds that come from plants that have been identified by their full vegetative characteristics. Lubbock Lake Landmark personnel currently are in the process of building such a comparative collection. To date, 20 species have been collected, including species already identified from the archaeological record, such as hackberry (*Celtis reticulata*) and buffalo bur (*Solanum rostratum*).

Thousands of species are to be collected, identified, stored, and entered into a database in order to make the comparative collection useful. It is also important to record where in the landscape a specimen comes from, as variations based on location (ecotypical variation) occur. Collecting large numbers of seeds make it possible for scientists to compare seeds that have been burned partially or otherwise altered by human activity. This allows for the charring of some seeds while others are left alone.

With an abundant amount of precipitation over the last year, this growing season should be an ideal time in which to build Lubbock Lake Landmark's comparative collection for seeds. Of course, care is always taken to protect our plant resources, as overcollection can diminish the abundance of certain plants. In this way, the resources are managed in order to continue to learn about and enjoy the natural flora of the Southern High Plains.

Blake Morris
Historic Maintenance Technician

SPECIES SPOTLIGHT:

13-LINED GROUND SQUIRREL
Spermophilus tridecemlineatus



This small ground squirrel typically weighs from around 5.5 oz – 7.7 oz. The average length is around 9.5 inches, that includes a 3-inch long, slightly bushy tail. The squirrel is tan on its belly and arms and legs. It is marked with an alternating series of dark brown and light tan stripes running down the top of its head to its tail. Light tan spots run evenly down the middle of each dark brown stripe. These squirrels have large, dark eyes and small, close-set ears.

Thirteen-lined ground squirrels were originally found in short-grass prairie, but with the clearing of most of the tall-grass prairie in North America, its territory has expanded. It can now be found throughout most of central North America, from southern Canada down to southeastern Texas, east to Ohio, and west to Wyoming and Montana. In Texas, they range from the Panhandle and Llano Estacado, to north-central Texas, down to southeastern Texas.

These squirrels create underground tunnels – burrows – that are about 2-4 feet deep, and run up to 23 feet long. The diameter of the burrow entrance is only about 2 inches wide. Each burrow may have 2-3 openings. Shallow escape burrows often are built near

continued on page 5

LANDSCAPE CHANGES CREATE NEW LANDMARK VIEWS

The historic maintenance crew at the Landmark has been working on a variety of projects during the last few months. Brush control, planting, and reconstruction have been the priorities at hand. Last year, approximately 10 to 15 acres of mesquite was chemically treated, along with an estimated 5 acres of Siberian elm trees. Currently, more work is being done to cut out and remove the rest of the areas of mesquite that have been treated. By the end of April, approximately 53.6 acres of mesquite will have been cleared from the landscape. A partial area of our elm tree space has been cleared out to obtain a better visual appearance up the draw.

The Landmark has been working to revegetate an area located by the access road and Loop 289. An acre of land will be seeded that was disturbed by Valero Energy when repairing a gas line. Also, four new native desert willow trees have been planted in the flower bed located at the staff parking lot area. Along with the new trees, native wildflower seeds will be sown for seasonal color.

Two brush arbors were constructed last fall for use as interpretive spaces during special programs. Native grapes and gourds recently were planted, and it is anticipated that by this fall, these two plant specimens will “vine” up the arbors, enhancing their overall appearance.

Inside the research compound, the breezeway that serves as a dining and break area for our crews has been undergoing some needed renovations. The breezeway was constructed 30 years ago by two individuals known as Burt and Ernie. Time and weather have caused this open structure to settle significantly, requiring a major reconstruction effort.

Over the last few months, portions of the Landmark’s perimeter fence also have been rebuilt. Overall, 9,645 feet of barbed wire fence has been rebuilt since the year of 2000. Currently, 4,000 feet of fence is under construction. Nevertheless,

one needs to keep in mind that the figure given is in linear feet only, it does not add in the remaining 4 wires to a 5 wire fence. So, in general, it will take at least 20,000 feet of new barbed wire to complete a 4,000 ft long space!

The spring and summer months are a great time to visit and walk the trails. With the abundant rainfall that the Landmark has received over the winter, this year should be an outstanding wildflower season. Hope to see you on the trails soon!

*Scott Trevey
Historic Maintenance Supervisor*

SPECIES SPOTLIGHT, CONT.

their actual tunnel. Unlike prairie dogs, whose dome-topped burrow entrances usually are easy to see, thirteen-lined ground squirrel holes are unobtrusive and often difficult to locate.

Though several thirteen-lined ground squirrels may live on just one acre of land, they are not colonial, social squirrels like another Western Texas native, the black-tailed prairie dog. Look for these little striped, spotted Lubbock squirrels around town in school playgrounds, soccer fields, cemeteries, and wherever large areas of grass are regularly cut short. They are rarely out after the sun starts to set, preferring to forage during the bright, sunny parts of the day where they can use their keen eyesight to look for predators. Listen for their high, chirping whistles, a very different sort of warning call when compared to the sound that prairie dogs make.

The thirteen-lined ground squirrel has a long history at the Lubbock Lake Landmark. Skeletal remains of this little squirrel at the Landmark have been found throughout the stratigraphic section back to 11,000 years.

*Cindy Sherman
Museum Educator*

inside and out

WINTER, SPRING FILLED WITH ARCHAEOLOGICAL ACTIVITIES

This fall and winter, the field crew led by Crew Chief James Beavis has been involved in excavations at 41LU118, a large valley margin camp site in Mackenzie Park. This site has defined occupation levels within well-stratified deposits. Investigation has focused within stratum 5, the youngest geological



deposit (ca. 1200 BP-present). Excavation has extended over a 14-week period, yielding over 10,000 bags of trowelled, provenienced sediment returned to the Lubbock Lake Landmark for fine-mesh water processing, plus over 12,500 artifacts plotted and mapped in place. This rich and diverse assemblage will facilitate a greater understanding of past lifeways of people within Yellowhouse Canyon. This site is a great complement to Lubbock Lake where the hunting and processing of bison was occurring at the same time.

While the field crew was hauling in sediments to the Landmark, the matrix team was busy washing the various sediment samples from Mackenzie Park, Broadway to MLK, and 41LU118. The team averaged 100-150 bags of sediment per day.

Spring at the Landmark brings lots of activity for the Quaternary Research Center lab and the regional research program. On Saint Patrick's Day, the matrix team finished washing the hundreds of piles of sediments and thousands of bags generated over the past year. A real celebration was in order. Now, attention in the lab is focused on sorting the hundreds and hundreds of bags of matrix concentrates, plus processing the hundreds to thousands of microcultural and microbiological objects they yield. Lab processing consists of sorting the matrix, identifying the objects from excavation and matrix concentrates, cataloging, labeling, packaging, and housing.

Intensive survey continues in the Yellowhouse system. Another very large valley margin site has been identified, having the potential of being one of the most significant sites discovered so far. The data collected from this segment of the canyon will be added to information from other segments in the system to aid in the continuing interpretation of the evolving landscape, climate, and culture of the Llano Estacado.



*Terri Carnes, Collections Manager
Photos by Tara Johnson Backhouse*

VOLUNTEERS! HERE'S YOUR OPPORTUNITY TO CONTRIBUTE TO OUR RESEARCH!

Applications are now available for community and youth volunteers for the Landmark's Summer Field Research Program, June 14 – August 27. This program provides an opportunity for interested volunteers to work side-by-side with professionals at an archaeological site that has yielded evidence of human presence spanning the past 12,000 years.

Working hours during the summer season are 8 am – 4:30 pm, Tuesday through Saturday. Volunteers receive an orientation session and detailed on-the-job training. Individuals may choose the days they are available to work and select either a morning shift (8 am – 12 noon) or an afternoon shift (1 – 4:30 pm), or come for the day. Each community volunteer is requested to work a minimum of 60 hours during the 9 week summer season.

Interested volunteers must be at least 15 years of age to excavate, while volunteer opportunities in the lab and matrix areas are available for those 13 and 14 years old.

“The Landmark’s summer program is a unique opportunity,” according to volunteer coordinator Sue Shore. “The fact that Lubbock has an active archaeological excavation that accepts both adult and youth volunteers from the community really sets us apart. Our crews come from all over the world and, while it can be hard work, everyone enjoys meeting new people and working together on such an important investigation.”

Applications may be obtained by calling 806-742-1116.

The Lubbock Lake Landmark crew consists of:

Collections Manager/Lab Manager:

Terri Carnes

Lab Coordinator: Tonya Brown

Matrix Coordinator: Donna Chafin

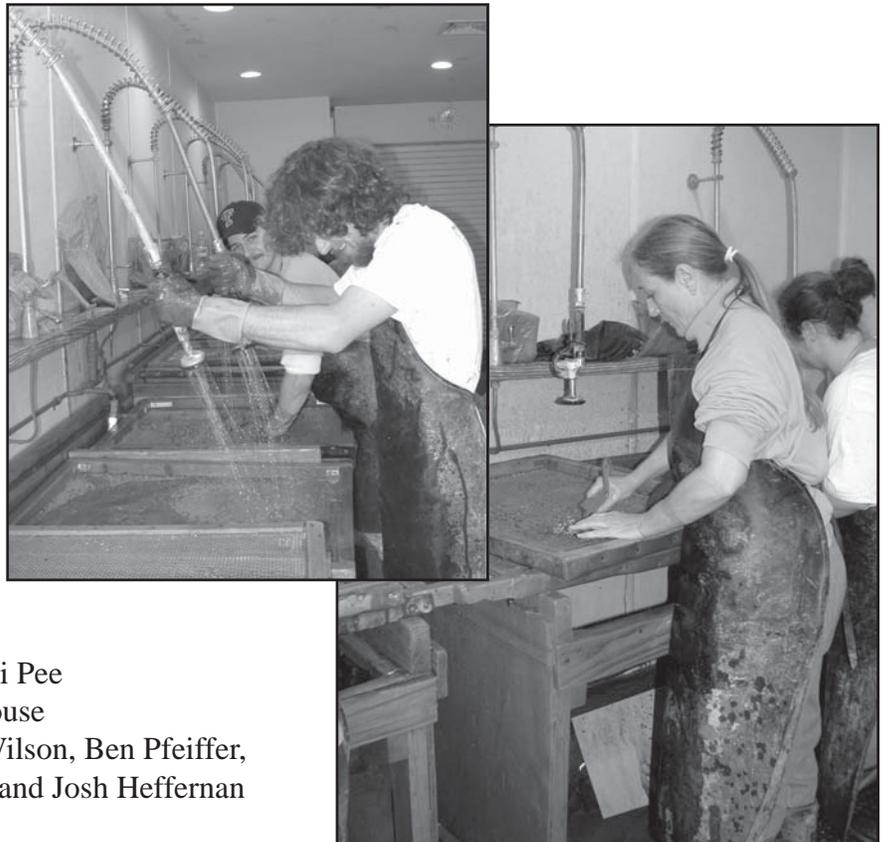
Lab Assistant: Julie Guerrieri

Field Crew: James Beavis, Hilary Gafford, Jon Moretti, Amy Whynott, Sophie Fisher, and Ricci Grossman

Report Writers: Paul Backhouse and Nicci Pee

Field Photographer: Tara Johnson Backhouse

Student Assistants: Katherine Bell, Tara Wilson, Ben Pfeiffer, Chris Carr, Nicole Poulsen, Nathan Peters, and Josh Heffernan



Notes from the field...

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

Non-Profit Organization
U.S. Postage
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Visitor Information

Bob Nash Interpretive Center
• Exhibition Galleries
• Learning Center
• Landmark Gift Shop

Sculpture Garden
• Ancient Bison • Giant Pamphater
• 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:	Summer Hours (June-August):
9AM-5PM Tuesday-Saturday	8AM-8PM Tuesday-Saturday
1-5PM Sunday	1-8PM Sunday
Closed Monday	Closed Monday

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

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

Contributors to this issue of *Notes from the field* . . .
Deborah Bigness, Terri Carnes, Blake Morris, Cindy Sherman, Susan Shore, Scott Trevey
Photography: Tara Johnson Backhouse, Susan Shore
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