From The Director
by Dr. Kenneth Carpenter

The museum continues to undergo changes. We welcome Dr. Tim Riley as our Curator of Archaeology. Dr. Riley brings a wealth of experience and research that will complement that of his archaeological colleagues in Utah. See his report elsewhere in this newsletter and watch for exciting news in the future. Like me, Dr. Riley hit the ground running and his impact has already been felt in a positive way in the Museum.

The other big news was the return in May of the long lost Pilling Figurine (see Dr. Riley’s Report).

With the homecoming of this wayward clay figure, the opportunity was taken to redo the exhibit case. Other figurines were added from the museum’s collections to show the broad-range of figurines in order to show how unique the Pilling figurines are. To mark the return of the figurine and kick-off the start of Prehistory Week (Archaeology Week throughout the rest of the State), Dr. Pitblado from the Anthropology Museum at USU-Logan, gave a public lecture summarizing her research on the figurines. Dr. Jody Patterson presented a lecture midweek highlighting the archaeological salvage work being done in Nine Mile Canyon. And the week ended with Family Day hosted by the Museum, the Castle Valley Archaeological Society and the Utah Friends of paleontology.

Competition with other events in the area kept attendance less than it has been in the past, but everyone who did attend had a great time. Several door prizes provided by Margene Hackney were awarded.

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I wanted to take this opportunity to introduce myself to the community. As many of you may know, I have been hired as the new Curator of Archaeology at the museum. I am very excited to join this world class facility and add my expertise to the excellent staff already in place. I look forward to meeting many of you at museum events and throughout town.

My family and I come to Price from Bryan/College Station, TX, home of the Fightin’ Texas Aggies (Texas A&M University), where I was formerly an adjunct assistant professor of anthropology. We are looking forward to getting out and meeting our neighbors around town, as well as exploring the spectacular landscapes surrounding Price.

Within the field of archaeology, my specialty is paleoethnobotany, or the study of past human use of plants for subsistence and other aspects of material culture. My particular research has ranged from assessing diet with coprolites in Texas to examining changes in vegetation associated with agricultural intensification along the Mississippi river. I have a strong ecological approach to my research, focusing on how past cultures interacted with their environment. In my position at the Prehistoric Museum, I hope to elucidate patterns of subsistence among the Fremont and other former cultural lifeways encountered throughout Eastern Utah. I am particularly interested in the recovery of starch granules from food processing tools and cooking implements housed in the museum’s archaeological collections. I also plan on actively engaging in field research, as I familiarize myself with the cultural resources located throughout Castle Country.

I am pleased to see such a strong avocational organization, the Castle Valley Archaeological Society (CVAS), active in the region. I have already met many of the wonderful membership and look forward to working with them to encourage even greater community participation. I hope to provide participatory opportunities for interested members of the community in my active curatorial and research projects. This includes volunteer work with the existing collections as well as participation in future excavation projects. I hope to expand this outreach to include more students from USU-Eastern and the local school systems. I would be happy to help teachers at any level develop educational modules focused on exploring the material remains of the former cultures so prominent throughout eastern Utah.

Please, come up and introduce yourself, either at the museum or out in the community. Your participation in the museum is very important to us.

Sincerely,
Tim Riley

Recently, there have been several exciting developments in the Prehistoric Museum’s Hall of Archaeology involving the Pilling Figurines and the Huntington Mammoth.

**Pilling Figurines**

Bonnie Pitblado, an anthropologist at Utah State University-Logan, received a package last year containing what appeared to be the missing Pilling Figurine. This artifact disappeared nearly five decades ago while the collection was on a state-wide tour. Dr. Pitblado has assembled a group of scientists to determine the authenticity of the artifact. This group includes experts in forensics, prehistoric basketry, electron microscopy, and chemical characterization.

According to James Adovasio (Mercyhurst College, Erie, PA), a world renowned expert in perishable artifacts, the basketry imprints on the figurine are identical to the imprints on the other figurines. The figures were impressed with these markings when they were laid out to dry on a distinctive Fremont coiled basket. Dr. Adovasio concludes that there would be no way to duplicate this pattern without access to the very basket on which the figurines had initially been laid by the potter.

Dr. Pitblado also recruited several scientists from Brigham Young University to engage in specialized study of the recovered figurine as well as the rest of the Pilling figurines. Scientists are using scanning electron microscopy (SEM) to detect the presence of Alvar, an adhesive added to the figurines for stabilization by Harvard University’s Peabody Museum in 1954. Identifying the presence of this known
alteration on the returned figurine would further confirm that the artifact is, in fact, the missing Pilling Figurine and not a similar artifact or expert reproduction. Other studies include the use of X-ray fluorescence (XRF) to chemically characterize the clay matrix used in the manufacture of the figurines. This technique is frequently used to source fired ceramics and stone tools in archaeology.

While the final results of these analyses are still pending, the missing figurine has been returned to the museum. A new exhibit on the Pilling Figurines has been designed and re-opened. This display incorporates a number of other Fremont figurines housed by the museum, emphasizing the unique nature of this spectacular collection. Dr. Pitblado gave a public lecture on the USU-Eastern campus on May 5th in association with the rededication of the Pilling Figurine exhibit. A final report of the analysis should be available sometime this fall and we will keep you apprised of the results.

I have included a link to a Salt Lake Tribune article about the analysis. Dr. Pitblado gave a public lecture on the USU-Eastern campus on May 5th in association with the rededication of the Pilling Figurine exhibit. A final report of the analysis should be available sometime this fall and we will keep you apprised of the results. I have included a link to a Salt Lake Tribune article about the analysis.


Huntington Mammoth

A recently published article in the journal Genome Biology presents the first complete mitochondrial genome for the Columbian mammoth. The star of the show is our very own Huntington Mammoth! Not only is this specimen the most complete Columbian mammoth skeleton ever excavated, it also exhibits a high degree of molecular preservation. This study further highlights the Huntington Mammoth as a truly spectacular find. This recent article suggests that the larger Columbian mammoth may have interbred with the periglacial Wooly Mammoth. Previous researchers have viewed the two species as divergent and ecologically distinct. The genetic evidence of interbreeding forces a reconsideration of that view. I have included a link to the article, which is published in an open access journal. Much of it is highly technical, but the results are very interesting. Come by, visit with the Huntington Mammoth and think about this beautiful animal roaming the Castle Country during the end of the Pleistocene.

http://genomebiology.com/2011/12/5/R51

We are very proud to see such cutting edge archaeological science applied to the collections housed in the Prehistoric Museum. We are focused on providing interested researchers access to the best collection of archaeological materials from Eastern Utah.

Upcoming Exhibits

Moving forward within the museum, I hope to bring some new approaches to some of the exhibits. We are re-tooling our exhibit on prehistoric footwear to highlight the temporal diversity of sandal types across the Colorado Plateau. We also plan on adjusting our exhibit on prehistoric subsistence to reflect a broader range of paleosubsistence patterns and highlight ongoing research in the region.

Outside the Museum

As a part of the road improvements out in Nine Mile Canyon, Montgomery Archaeological Consultants have encountered a number of Fremont sites deeply buried in the canyon. Despite the excellent prior research conducted in the cultural resource treasure box known as Nine Mile Canyon, these new excavations add another element to our understanding of Fremont use of this archaeological landscape.


The University of Utah’s Range Creek Field Station has started their annual field school and will be out in the canyon through the end of July. This would be a great time to get out to the Field Station and view some archaeology in action. I have included links to the field school as well as permits for day access.

http://www.anthro.utah.edu/undergraduate-study/archaeology-field-school.html
http://nhmu.utah.edu/range-creek/visitor-permits

Please feel free to contact me if you have any information you would like to see included in the archaeology section of the next Prehistoric Museum Newsletter.
FROM THE DIRECTOR

A very nice giant (52” wide) clam was recovered by the museum crew. The specimen is being worked on in the dinosaur pit. While excavating the clam, a baby (called a “spat”) was also found. Its shell is the size of your pinky-nail. Hard to image that it might have grown into a four-foot monster. Progress continues on the Camptosaurus skeleton in the viewing preparation lab. We hope to have it finished and installed by next Newsletter.

The first Members Only field trip to the Cleveland Lloyd Dinosaur Quarry and surrounding areas was a great success. Over a dozen members toured the visitor center and heard Mike Leschin of the BLM discuss the exhibits, then followed Dana Truman, Range Specialist of the BLM, on a wildflower tour. Tentative plans for the next Members Only field trip will have an archaeological theme. Another trip was for Museum Board members to a dinosaur dig near Green River. This hands-on opportunity helped them understand what field work is like for the museum staff. I was aided by John Bird and Yvonne Wilson.

Finally, your museum staff was hosted by the Natural History Museum of Utah. The visit allowed museum staff to meet one-on-one with their counterparts to discuss a range of topics, including the pros and cons of their new museum. All of the staff agreed that the meetings were very productive and will help shape our new museum.

MEMBERSHIPS

The museum has revised the levels of business membership as well as the levels of general membership. We are pleased to announce these higher levels of participation that should fit any business needs. This is a great way for a business to offer its employees a wonderful perk.

Beyond standard membership we offer Business Memberships that range from $500 - $2,000

All business, nonprofit and corporate memberships include:
- The business name on the donor plaque for the duration of the membership
- Access to the museum for employees/members and their immediate families (living in same residence) for the duration of the membership, during regular business hours. Company ID or other appropriate identification must be presented.
- Subscription to the Museum Newsletter
- 10% Discount at the Museum Gift shop
- 10% Discount on select fee programs, field trips, etc…
- Priority Invitation to special events
- Priority Handling of special event reservations
- Special Invitation to select lectures

There has never been a more exciting time to become a museum member! We have new exhibits, Special Members Only Events and a variety of membership benefits to enthrall museum lovers of all ages. Join our membership family today.

For more information or to make application please contact:

Christine K. Trease
Director of Public Relations, Gift Shop Manager, Memberships
(435) 613-5757 or christine.trease@usu.edu

LAB & FIELD

Tracking the Illusive Fossil
By John Bird

Another field season is here and we have been busy searching for new fossils. Our search in the Chinle Formation has met with some success. We are also searching the Mancos. We are hoping for a vertebrate of some kind. They are very rare, but they have been found in other areas. We hope to get lucky. The Suarez Site is still yielding its treasures. Ken and I have been looking at other areas for future exploration and collection. One area is Bonanza, south of Vernal, known for its leaf and insect fossils.

The Weather has been great this year for field work. Last year we were rained out more than once.

We do accept help. If you would like to join us on one of our excursions, contact Ken or me (John Bird) at the museum.

Come Join the Fun.

John
The exhibit shows in near real time, where earthquakes have occurred. The Museum gets updated information hourly from IRIS, the Incorporated Research Institutions for Seismology, and displays it on a global map. The map shows the location and strength, or magnitude of earthquakes for the past 2 weeks.

Recently there has been much emphasis on earthquakes in our region. This year, Utah Gov. Gary R. Herbert declared April 3rd - 9th to be Earthquake Preparedness Week. Much was learned from the earthquake drills and reenactments and much can be learned from this incredibly informative exhibit.

This exhibit is located in the upper level of the Hall of Paleontology. Stop by the museum and check out this impressive new addition to The Prehistoric Museum. 155 East Main Street - Price, Utah – Open 9 am - 5 pm Monday through Saturday, closed Sunday Adults $5.00, children 2-12 $2.00 children under 2 free, $15.00 for a family, or FREE with museum membership.

Newly hired Archaeologist Dr. Timothy Riley has arrived at The Prehistoric Museum, USU Eastern, and is ready to literally dig in.

The long awaited arrival of an archaeologist for the museum has come to an end. It is with great enthusiasm that the museum welcomes Dr. Riley as the newest member of The Prehistoric Museum team.

Dr. Riley comes to us from Texas A&M University where he was an adjunct professor in the Department of Anthropology. Upon his arrival, he has hit the ground running with an array of projects that have been waiting for just the right person to tackle them.

This fits in perfectly with the pace that Dr. Carpenter, Museum Director and Paleontologist, has kept the museum running at since he came to the museum nearly two years ago. Keeping the museum fresh and new has been a primary goal of Dr. Carpenter and he has been incredibly successful in his endeavors.

When asked how he feels about the archaeology position being filled, Dr. Carpenter said, “Dr. Riley brings a well-established reputation in archaeology and we are lucky to have him. I look forward to seeing some cutting-edge archaeology done at the Prehistoric Museum.” It seems to be a unanimous conclusion that this recent event will be a grand adventure for all.

The museum looks forward to seeing the exciting new things waiting just over the horizon for archaeology and the museum. Stop by and say hello.
Prehistoric Museum
155 East Main Street
Price, Utah 84501
Visit us on the web at
http://museum.ceu.edu

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