

The Magazine of the Museum of Texas Tech University



In This Issue | Spring-Summer 2018

Wildlife Photographer of the Year Explore the African Savannah and North American Grasslands The Red that Colored the World Hot! Hot! Hot! Chile Peppers

is for Museum M=eC²

Stakeholder engagement for a university museum is a continuum between the university (Campus) and the Community. The Museum must engage with the Campus; it must engage with the Community; and it must facilitate engagement between Campus and Community.

Museum (M) equals engagement (e) by Campus (C) and by Community (C).

Cover Photo: Bill Mueller



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The Magazine of the Museum of Texas Tech University Spring/Summer 2018

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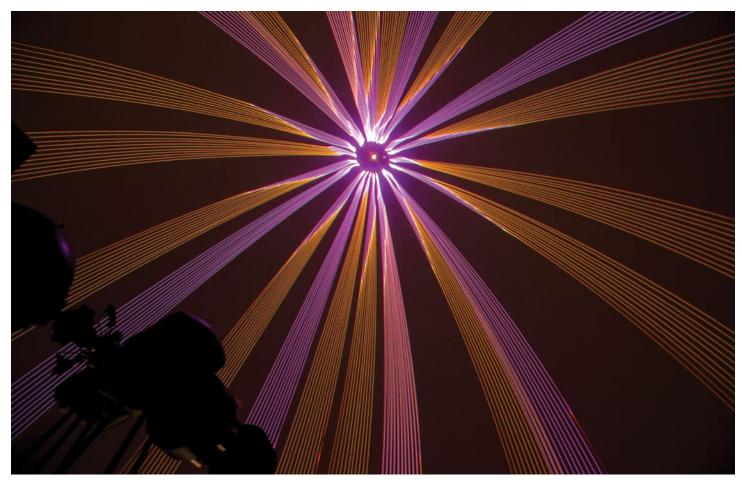
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Moody Planetarium light show. Photo: Ashley Rodgers







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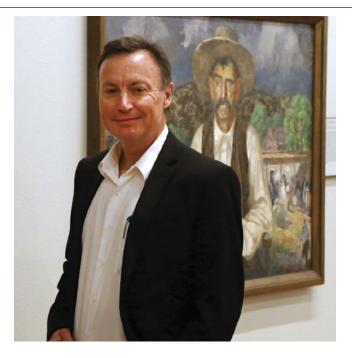
When I talk with people about the Museum of Texas Tech University, the conversation normally focuses on the Museum's public programs – its exhibitions, events, and other public education activities. That is scarcely surprising, as it is through these things that the Museum interacts with most of its audiences. In 2018, we offer a highly eclectic exhibit program that includes a comparison of the *Grasslands of North America and Africa* based on specimens from our own collection; gorgeous nature photographs in the *Wildlife Photographer of the Year* exhibit from the Natural History Museum in London; a history of our favorite consumable, the chile pepper; the story of the Bible in the Middle Ages; and the traveling exhibition, *The Red that Colored the World* about the extraordinary dye cochineal.

In 2017, we presented 19 temporary exhibits in addition to our long-term galleries. This year I expect we will present even more exhibits than in the last.

But I want to highlight another area of the Museum's activities here. The Museum is a very active research institution. Research is possibly the least understood part of our work. It happens mostly out of sight – either in the laboratories and work areas of the Museum, or in fieldwork undertaken around the state and farther afield. The research is carried out by our staff and by many others – faculty and students of Texas Tech, and researchers from institutions around the country and overseas.

Museum research is largely object-based. That means it mostly relates in some way to material heritage, whether that heritage is natural or human-made. In many cases, the research ties closely to our collections. Field activities generate many of the collection objects, especially in natural history and archaeology. Other collection objects, especially in art and history, are donated to the Museum from private collectors and researchers. Financial constraints mean that only rarely can we purchase objects for our collections.

Just what sort of research do we do or support? The answer is that our research is as diverse as our collections. And our collections are very diverse. It is quite possible that the Museum of Texas Tech University has the most diverse collections of any university museum in this country. Spanning art, history, clothing and textiles, anthropology and archaeology, paleontology, and natural history, the collections are a remarkable documentation of the natural and human



-crafted worlds. And all our collections support research. Research is conducted to better document the collections and to better understand their relevance. We study artists, their backgrounds, their motivations, and their style, to better appreciate the art they have created. We study the human settlement of Texas from Paleo-Indian to modern times via the archaeological and historical artifacts that document 12,000 years of human occupation. The fossils of Texas and farther afield, painstakingly excavated from field digs, reveal the early evolution of this planet, but only through detailed analysis. The existing fauna of this country and many others is researched through active field collecting programs that result in collections that are a perpetual library of information for future generations. The whole specimens or tissue samples from them will be the subjects of research for hundreds of years to come.

This research feeds into publications for peer review—where experts in the field assess the quality of the research and its results and incorporate it into their own studies—and into more generally accessible products such as popular publications, exhibits, and educational programs.

The Museum is a center of collections, but it is also a center of scholarship. Everything we do is based on high quality scholarship, and the active tool of that scholarship is research.

Gary Morgan, Ph.D. *Executive Director*

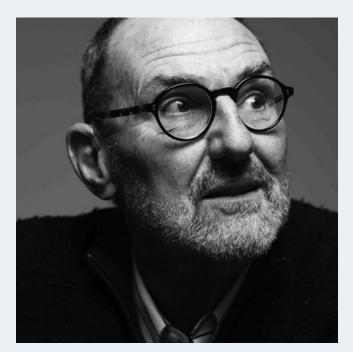
M | News

Master Planning Begins for a New Type of University Museum

Texas Tech University and the Museum of Texas Tech University have selected the architectural firm Morphosis to lead a feasibility study and master planning exercise that could result in an expansion of the Museum to make it a world leader for university museums.

Led by Pritzker Prize-winning architect Thom Mayne, Morphosis will work with Museum staff to architecturally refine functions and facilities that would make the Museum the most programmatically diverse museum in the country.

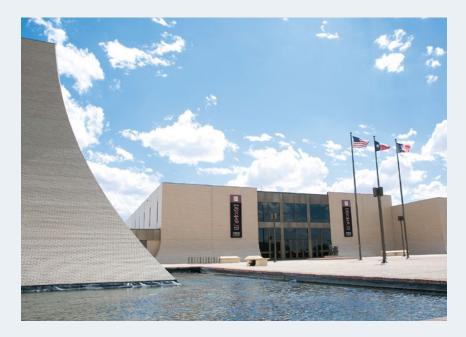
Building on the already highly diverse collections and programs of the Museum of Texas Tech University, the expanded Museum would link with all university colleges to engage audiences with research and creativity that spans the sciences, technology, humanities, the arts, and human health. There would be a heavy emphasis on inter- and cross-disciplinary programming, such as science, technology, engineering, art, and math (STEAM) research and public experiences.



Pritzker Prize winning architect Thom Mayne.

Combining the best in museum and hands-on science center practices, the galleries are envisioned to connect visitors with research as it is happening, and demonstrate the role that a large, research-intensive university has in impacting lives and communities. The project would include major expansions of exhibit galleries and other public spaces, including a public dining area and additional venue rental facilities. The new galleries would include a large traveling exhibit gallery capable of housing major blockbuster exhibits, never before possible in West Texas. As well, there will be scoping of new collection storage and research areas, learning spaces for college and school students, and a community engagement center where Texas Tech faculty and students could work with community groups in partnered projects.

The building expansion and the surrounding landscape are envisioned to be developed to the highest levels of sustainability. Through construction and public interpretation, the expanded Museum would demonstrate the very best practices in how the built environment



can manifest a sense of place and capture the context of living in the awesome expanses of West Texas and the Llano Estacado.

Reflecting the universality of the disciplinary coverage, and the links with all areas of creativity across the university, the project has been assigned a new name to reflect the next stage in university museum evolution – we have begun planning for the Universiteum of Texas Tech.

NSRL Staffers Receive Honorary Membership Awards from Texas Society of Mammalogists

Lisa C. Bradley, research associate in the Natural Science Research Laboratory, and Robert Bradley, Ph.D., director of the NSRL, were elected to Honorary Member Status by the Texas Society of Mammalogists (TSM) at their Annual Meetings in February 2018.

Lisa has served the society as permanent secretary since 2005. As permanent secretary she serves as the historian of the society and maintains its archives; takes photographs to document the history of the society; assists the secretary/ treasurer with the logistics at the annual meetings; works with the secretary/ treasurer to produce the annual meeting program and abstracts; and keeps and prepares the minutes of the executive committee meetings and general business meetings. She also advises the president and other officers on the nuances of running the annual meeting, serves as the authority on the society's constitution, keeps the business meeting running smoothly, and provides an historical perspective as to how the society has conducted business.



Phil Sudman, professor of biological sciences and executive director of the Fort Worth Campus of Tarleton State University and chair of the honorary member committee for the Texas Society of Mammalogists, stated in his nomination, "besides her role as permanent secretary, Lisa has made several other contributions to the society. She co-authored the History of the Texas Society of Mammalogists. She has also made significant contributions to Texas mammalogy through her role as a research associate, since 1996, at the NSRL." Lisa also helped edit three editions of "The Mammals of Texas", as well as "Texas Natural History: A Century of Change", and she has helped advance the significance of natural history collections through her co-authorship of several key scientific publications.



Robert D. Bradley, professor and assistant chair of biological sciences and director of the Natural Science Research Laboratory of the Museum, also was elected to Honorary Member status at the TSM meeting in February. Honorary membership in the society is granted in recognition of distinguished service to the Texas Society of Mammalogists and to the science of mammalogy.

Robert Bradley has attended every meeting of the society since he first attended as a student in 1984, and he has been an active, supporting member since that time. Robert's graduate and undergraduate students have presented more than 100 papers at TSM meetings since 1997, the greatest number of student presenters of any faculty member over the history of TSM. He served the society as president in 2002-2003, and is a permanent member of the executive committee. It was Robert's suggestion while president in 2002 that TSM hold a fund-raising auction during the annual meeting to support the funding of student presentation awards. The auction, for which he has served every year as the enthusiastic auctioneer, has been a tremendous success for TSM, allowing the society to expand both the number of awards presented and the monetary level of the awards.

Winter Tuba Concert

Every December since 2009, Lubbock has joined more than 25 cities across Texas, and more than 200 cities around the world, in celebrating Merry TUBACHRISTMAS. The event, which began in 1973 in New York City's Rockefeller Center, features an ensemble made up of tuba, baritone, and euphonium players of all ages and abilities joining together to perform seasonal music in a festive atmosphere. This is the second year that the Lubbock TUBACHRISTMAS has been held at the Museum of Texas Tech University in the Helen DeVitt Jones Sculpture Court. The event will return in 2018 on Dec. 9.

Kevin Wass, professor of tuba and euphonium in the Texas Tech University School of Music and a former student of TUBACHRISTMAS founder Harvey Phillips, conducts and organizes the concert and rehearsals along with student volunteers from the Texas Tech Tuba Euphonium Association, a local chapter of the International Tuba Euphonium Association. Favorite traditions of the Lubbock TUBACHRISTMAS include an instrument decorating contest and a performance by the Texas Tech University Tuba Euphonium Ensemble of "You're a Mean One, Mr. Grinch" from Dr. Seuss's "How the Grinch Stole Christmas."





Moving of the Quetzalcoatlus

The Museum's Quetzalcoatlus, nicknamed "Q", can now be found flying over the heads of *Tyrannosaurus* rex and *Triceratops* as they engage in mortal combat, before their exit from our planet 66 million years ago.

This spectacular skeleton of *Quetzalcoatlus*, the largest flying animal ever evolved, with a wingspan of 36 feet, spent the last 17 years in the Changing World Gallery. Now one can look at the magnificent specimen from the balcony of the Museum.

Twin meteorite impacts amidst the backdrop of massive volcanic eruptions may have wiped out dinosaurs and pterosaurs in a sudden catastrophic event. Tyrannosaurid, ceratopsian and *Quetzalcoatlus* fossils have all been found in the Big Bend National Park of Texas.

Thanks to the hard work of the Museum's exhibits crew, we can all fly with Q.

Signed Graffiti Boards

By: Cameron Saffell, Ph.D., Curator of History

In the last phase of the recently completed Life Safety Project, construction workers made an unusual discovery of a unique piece of Museum history. In the DeVitt Wing Galleries, the ethnohistory exhibits and the Native American camp diorama that were part of the first exhibits in the mid-1970s were framed entirely with wood two-by-fours and four-by-fours, something that is not allowed by building code today. The Museum team decided that, in the name of safety, we should demolish all the wood framing, clear the area, and replace it with a simple square gallery with metal stud framing that meets today's code.

The signed graffiti boards are a unique glimpse into our history. The boards were transferred to the History Division and join other material of the Museum's past including a partial cardboard model of the current building that was constructed in 1970. A brick from the buy a brick campaign in the 1940s, and architectural sketches and renderings of the former and current buildings.



Two boards measuring nearly ten feet long were the canvas for people signing their names and dates to indicate they were here. 2017-082-001, photographed by Bill Mueller, February 2018.

As workers pulled down the old walls and ceilings, they worked their way behind the diorama. There, they discovered two wood panels in an area that had not been accessible for about 20 years. Scrawled across the panels were several signatures and dates, most from October 1974. They carefully set aside the panels and called Museum staff to review the find.



Close up of the left-hand board that includes most of the October 1974 signatures. Photographed by Bill Mueller, February 2018.

Those of us familiar with the institution's history

immediately recognized a couple of names. Pat Allgood, then a member of the exhibition preparation team and exhibits curator in the 1970s and '80s, and Kathy Hinson, an exhibits technician, was one of her assistants. Bert Graham, facilities supervisor, was the first carpenter for this building; his custom bookcases are still in use in several curatorial offices in the Museum basement.

Some additional research confirmed that virtually all of the signers were Museum staff members. Frances Stinson, who noted the birth of her son Tobin, was a secretary. Nancy Perkins was a gallery assistant. Pam McLaren was an assistant on the exhibit preparation team. Laura Graves Allen was among the first students in the Museum Science Program. The newest signature, Sparky, we believe was added by university electrician Kevin Sparks, when he wired outlets for the Changing World Gallery during its construction in the early 2000s.



Close up of the signatures for Allgood, Graham, and Haynes. Photographed by Bill Mueller, February 2018.

Division of Art, Museum Association, and Helen Jones Foundation Work Together to Develop Museum's Art Collection

By: Peter Briggs, Ph.D., Helen DeVitt Jones Curator of Art

Forty-three works of art on paper by 17 contemporary artists from the Southwest United States were recently added to the Museum's art collection.

The project, put forward by the Division of Art and the Museum Association, received funding from the Helen Jones Foundation, Inc., to purchase an unparalleled range of original prints by such prominent artists as Eric Avery, David Bates, Ed Blackburn, Otis Dozier, Joseph Glasco, Dan Rizzie, Al Souza, and Robert Levers, all of Texas; Mary Mito, May Stevens, Jane Abrams, Rudy Fernandez, Allen Graham, Betty Hahn, Harmony Hammond, and Jaune Quickto-See Smith, all of New Mexico; and Robert Colescott of Arizona. The artworks span the period from 1978 to 2012.

The artists in this collection represent an array of gender, ethnic, and stylistic backgrounds that add meaningful breadth to the Museum's collection. Six of the artists are women. One of the artists, Jaune Quick-To-See, is an indigenous American of Salish and Kootenai heritage; Robert Colescott is African American; Harmony Hammond and May Stevens are founders of the critically important feminist art journal and collective, Heresies, formed in the 1970s; Rudy Fernandez is Latino; and three of the artists, Eric Avery, Joseph Glasco, and Harmony Hammond, are prominent LGBTQ artists.

For more than six decades the

Museum and the Museum Association have collaborated on the development of the Museum's art collection, now numbering more than 14,000 works of art. During the last 30 years the collection has been especially focused on advancing its representation of post-World War II southwest-based artists. This project unequivocally and generously supports this goal.

This unprecedented acquisition of 43 original prints in a variety of media such as lithographs, monotypes, etchings, and woodcuts, is from the archive of Bill Lagattuta, a renowned American master printer. Lagatutta's career spanned more than 35 years at such important presses as Sette Segura Press, Tamarind Institute, Vermillion Editions, Peregrine Press, and Master's Editions.



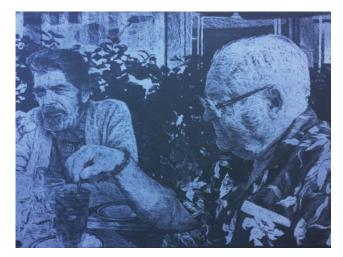
Harmony Hammond, Cry, 1978, Lithograph © Harmony Hammond



Robert Levers, Fans in the Stands, 1987, Lithograph © Robert Levers



Al Souza, Kitchen, 1987, Screen print © Al Souza



Robert Blackburn, People Magazine, 1984, Screen print and lithograph © Robert Blackburn



Otis Dozier, Grasshopper, 1987, Lithograph © Otis Dozier



Jaune Quick-to-See Smith, Theatres of War, 2006, Lithograph © Jaune Quick-to-See Smith



Rudy Fernandez, Indictment, 1984, Wood cut with hand coloring © Rudy Fernandez



Joseph Glasco, Two Figures, 1985, Lithograph © Joseph Glasco



Robert Colescott, Fried Chicken and Fantasy, 1989, Lithograph © Robert Colescott



Betty Hahn, Flowers, 1979, Lithograph © Betty Hahn

Exhibition Highlights World's Best Wildlife Photographers

Wildlife Photographer of the Year is the most prestigious photography event of its kind. For more than 50 years, it has provided a global platform that showcases the natural world's most astonishing and challenging sights.

This world-renowned exhibition, on loan from the Natural History Museum in London, is open through July 1 at the Museum of Texas Tech University. The 100 extraordinary images celebrate the diversity of the natural world, from intimate animal portraits to astonishing wild landscapes.

"The photos tell diverse stories of the natural world and human impacts upon it," said Gary Morgan, executive director of the museum. "But they are also striking works of art, reminders that the world we live in is still a very beautiful place. Anyone who has a love of wild places and wild things should see this exhibition."

One hundred winning images are selected for their creativity, originality and technical excellence. The competition launched in 1965 and attracted 361 entries. Today the competition receives almost 50,000 entries from 92 countries, highlighting its enduring appeal.

"I am thrilled the Museum of Texas Tech University is able to bring to West Texas what is possibly the world's most famous annual exhibition of wildlife photography," Morgan said. "Each year, these photos are presented by some of the foremost natural history museums around the planet, and here in Lubbock we are able – thanks to support from the Helen Jones Foundation – to present them with free admission."





This year's 100 award-winning images will embark on an international tour.

Sir Michael Dixon, director of London's Natural History Museum, said *Wildlife Photographer of the Year* is one of the most successful touring exhibitions, enjoyed by millions of people all over the world.

"The awarded images shine a spotlight on nature photography as a work of art while raising questions about our crucial role in shaping a sustainable future," Dixon said.

Local Amateur Wildlife Photography Contest Winner

In conjunction with the Wildlife Photographer of the Year exhibition, the Museum hosted an amateur Texas Wildlife Photography competition. The grand prize of \$500 went to Ashton Darrow of Lubbock for her image of a roadrunner.

The Museum's Education Division sponsored the contest with support from the Helen Jones Foundation, Inc. Forty-four photographers entered the competition. The top 20 photos are on display at the Museum through July 1.

Darrow said she saw the bird while hiking the Boquillas Canyon Trail in Big Bend National Park.

"I came around a bend in the trail and he was stopped in the middle of the trail," she said. "He was about 15 yards from me. He moved a little bit as I got my camera out, but held still for a few seconds and I was able to get the picture."

Darrow says she did nothing special to capture the image.

"It was nearing sunset and I was lucky to have great lighting."

Darrow became interested in photography her senior year at Abilene Christian College. She taught herself photography using her father's camera and bought her own a couple years ago. The roadrunner is an example of the type of photography she prefers.

"I love to travel, go camping and hiking," she said. "I love the outdoors and wildlife and I try to capture the beauty around me."





By: Amanda Castro-Crist TTU Communications and Marketing

Native grasslands once covered nearly half of the contiguous United States. As the human population in the U.S. has grown, much of the prairie land has been replaced by crops and urban areas.

But why are these North American grasslands important? How do they compare to the grasslands in other places like Africa? And why is the biodiversity, or lack thereof, of each important?

These are the questions the Museum of Texas Tech University intends to answer in the exhibit, *From the African Savannah to the North American Grasslands: A Comparison of Mammalian Biodiversity and Natural History.*

"In this exhibit, we look at the biological importance of grasslands in the two continents, how they are similar and how they differ," said Gary Morgan, executive director of the Museum. "For example, why are there so many more species of mammals living in African grasslands than in the United States?"

The exhibit was developed by the museum with funding support from the Helen Jones Foundation, Inc., and features the underutilized and little-known taxidermy collection of the Museum's Natural Science Research Laboratory (NSRL). "I like that this exhibition is so rich in specimens from the Museum's own collections," Morgan said. "Many of these specimens have not been on public display before. Their origins are varied, but many have been donated by friends of the museum, including those who have hunted big game in Africa."

NSRL Director Robert Bradley said the exhibit, which has just over 30 taxidermy specimens, is just a fraction of the laboratory's mammal and taxidermy collections.

"The NSRL has one of the largest collections of mammals in the United States," Bradley said. "We have about 138,000 mammal specimens. Most of that collection is research material that scientists and faculty members at Texas Tech have collected over the years.

"The taxidermy collection represents a small fraction of that. We probably have less than 1,000 taxidermy specimens.

That collection is not used very often for research, but it has an extremely valuable and important educational component. For example, we use it in the classes we teach on the main campus, like biology, natural resources management, and mammalogy classes."

In addition to students at Texas Tech, children and adults of all ages will be able to see and learn about these rare and charismatic species, including many herbivores and carnivores of the African Savannah and the North American prairies. It will also give them the chance to ask about other issues related to these animals and their natural habitats.

"The best part about museums, the goal, is to show you something, to give you some data, tell you a story, then make you ask your own questions," Bradley said. "I think one of the great things about this exhibit is the tangential information we're able to discuss, to bring up some topics people oftentimes don't think about."

Building the exhibit

Walking up to the exhibit, visitors are welcomed by a giraffe, on loan from the natural history collection at Angelo State University. Just a few steps into the exhibit, visitors will come face-to-face with a massive elephant specimen, donated to the museum in 1983 by William C. McMillan, Jr.

"The elephant is really cool just because of how big he is," Bradley said. "You see pictures of elephants, you see elephants on TV, but until you get up close to this guy, you don't realize, 'Holy cow, these things are huge.'

"The giraffe is the same way. We tried to mount him lifelike in terms of how tall he would be, and we didn't have room to do it. The top of his head and the top of the elephant, both of those are actually higher than we could put them. To me, that's amazing, just how big they are. When you stand underneath them, you think, 'Oh my goodness, they're enormous.""

Venturing further into the exhibit reveals animals of all sizes, familiar and unknown, from the dik-dik, an 18-inch-tall African antelope to a bison. Bradley said the specimens come from all over Africa and North America and were chosen based on the theme of comparing the mammal biodiversity in each area.

"What's really neat about this exhibit is how few big-bodied species there are in North American grasslands compared to Africa, and that's kind of the big focus in this exhibit," Bradley said. "If you look at North America, we have the American bison and that's it. Yes, we have a few species of deer, like the white-tailed or the mule deer. "But if you look at Africa, there's so many more. If you take a very broad view there are about 10 ungulate, or hoofed, species in North America and if you look at Africa, it is 60-something. So that's the question: why did the African grasslands get so much more biodiversity, particularly in ungulates, than North America?"

While plans for the exhibit began with 50 to 60 specimens, Bradley said it opened with just 34 specimens. That number may continue to change as they receive feedback from visitors and as more collections arrive.



"We're hoping there will be a handful of things there that would be nice to add to this exhibit," Bradley said. "Exhibits are never really done. They continue to evolve and even as a curator in charge of an exhibit, you put it all together and you look at it and go, 'Oh, we should have done this, or we should have done that.' I would like to have as many things out here as possible because the goal is to let kids and adults be exposed to biodiversity, to be exposed to some of these really cool animals and species they don't often get to see."

Discussing the exhibit

In addition to allowing visitors a chance to see these animals, the exhibit provides a chance to discuss related issues like adaptation, conservation and hunting. How do these species coexist in the grasslands? What advantages do legal safari hunts have to nearby communities? What responsibility do humans have in regard to these animals and their habitats?

Bradley said information within the exhibit pushes visitors to think about these topics, formulate their own questions and continue the learning process on an even bigger scale.

"It's thought-provoking, and that's what education is really all about, it's what universities are about," Bradley said. "They give you some information and have you go off and think of your own questions. Any time you learn something new, when you get some new data, you stop, you think about it and you adjust. That's the way science should work."

Some parts of the exhibit may make some visitors uncomfortable, but Bradley said that also is part of the educational process.

"As humans, we're all responsible," Bradley said. "Our job as humans is to try to protect things that are threatened and endangered, to try not to destroy all the habitats, to try to make room for all the biodiversity and to try to be sensitive."



Morgan said the grasslands exhibit is one way of reminding visitors that the future of the planet rests in their hands.

"We are stewards of this world and all of its biodiversity," Morgan said. "The elephant head in the exhibit is a spectacular animal, almost unbelievably huge. But a human can kill that animal so easily. It is a metaphor for what we could do to the Earth if we are not aware that we and all of the animals and plants are part of one great ecosystem. We are dependent on each other to survive."



By: Bill Mueller, Ph.D.

Collections Photographer / Assistant Curator of Paleontology

iddlife and nature photography can be very rewarding and enjoyable. It doesn't have to require extremely expensive equipment -- some of the small cameras can work very well. And wildlife and nature photography provides an excellent excuse to get outdoors and get some exercise!



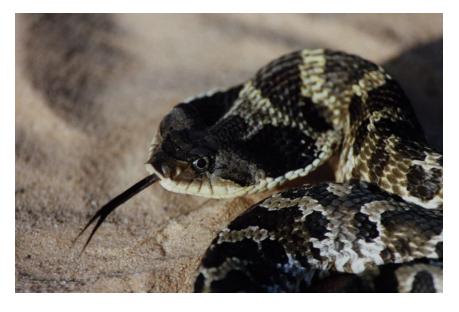
Good wildlife and nature photography requires several things, as do all good photographs. First is proper exposure of the image. You need to learn how to control the exposure for different lighting conditions.

Second is good composition in the image, for example using the Rule of Thirds, a basic rule of painting and photography. The technique helps build interest in a photo. Using the Rule of Thirds, one would divide the object to be photographed into nine squares of equal size, with two horizontal lines intersecting two vertical lines. The eye gravitates to intersection points that occur when an image is split into thirds so you frame your subject to occur at these intersections.

The third requirement is familiarity with your subject. Whether it is an animal, insect, or landscape, the more familiar you are with the subject, its movements and mannerisms, the more likely you are to obtain good images. One may get lucky and be in the right spot at the right time, as I was when I was able to photograph a sandhill crane skeleton containing an unbroken egg. Two days later, the skeleton was under four feet of water.

the Wild

Photog













For wildlife, it is important to understand what time of day your subject is most active and where it is most likely found. For landscapes, you should be familiar with how your subject looks under various lighting or weather conditions. A website that can



be helpful is www.sunrisesunset. com. There you can pull up a calendar that will tell you the time the sun will rise or set, and the same for the moon. It can also provide the lunar phases.

There are a few tricks of the trade for photographing wildlife. Let me illustrate this with an example: It was late in the evening when an artist and I approached the area where we expected to find the subjects I was going to photograph. I had been photographing "The method involves slowly zig-zagging back and forth, as if you were looking for a lost wallet, getting closer and closer to your desired position, but never looking directly at the subject."

this pair of great horned owls since before the day they hatched. It turned out that this was the first day they had left the nest, so they were not exactly where I expected to find them. After we spotted them nearby, I quickly made an image in case the two owls fled, then I instructed the artist with me that we were going to approach the owls using the lost wallet technique. We approached the owls and got to within about 10 feet. The artist could not believe how close we were able to get to the owls. After photographing the owls, we slowly turned away and left so we wouldn't disturb the owls.

I learned the lost wallet technique from nature photographer Wyman Meinzer. The method involves slowly zig-zagging back and forth, as if you were looking for a lost wallet, getting closer and closer to your desired position, but never looking directly at the subject. When you are in position, raise your camera pointing towards the subject, then turn your head so you can look through the camera at the subject. The subject should interpret the camera as a single eye and may not feel threatened. If you look directly at your subject and it sees both of your eyes, it is much more likely to flee. I usually take an image when I initially spot my subject, and then some more images during the approach, in case the animal flees before I get into the position I want.

The image of the windmills at night, Double Double, took me more than four months to capture. I was trying to photograph lightning behind the windmills, with the windmills facing the right direction to form a good composition. Each time a thunderstorm came up I would go out to photograph the windmills.



Finally, one evening I got six images with the lightning behind the windmills. And then, while sitting on my ice chest only about 30 yards away from the structures, the windmills were stuck by lightning!

Photographing lightning at night is fairly simple if you utilize a tripod. You simply compose the scene and open the shutter until lightning strikes one or more times. One key is not to use an f-stop higher than f-8, or the lightning in your photo will appear as very thin lines and there will not be any glow to the lightning bolts.

Almost every year, people get injured after getting too close to bison and bears in their attempts to photograph or simply observe them. Always approach wild animals with caution and don't do anything stupid! But, do as I say, not as I do.

I had worked for several months to photograph the western diamondback rattlesnake shown in the accompanying image. This snake had grown accustomed to me and behaved as if it did not feel threatened. I may have got a little too close to take the photo -- a risky move that I would not recommend!

Wildlife and nature photography can be rewarding. There are many public places in and around the Llano Estacado to practice wildlife and nature photography. One just needs to be observant. For example, on the grounds of the Museum, I have photographed insects, Mississippi kites, ducks, prairie dogs, rabbits, and a fox. There are numerous playa lakes in and around Lubbock, and the Lubbock Arboretum is a great place for photography. The hiking



trails around the Lubbock Lake Landmark offer a variety of opportunities for nature photography. Buffalo Springs Lake has a hiking trail that is popular with bird watchers and can provide photographic opportunities, and the wildlife mitigation area at Lake Alan Henry has a variety of wildlife. Caprock Canyons State Park has been one of my favorite places. It hosts a bison herd and a variety of wildlife, including waterfowl on Lake Theo. And of course, Palo Duro Canyon offers scenic vistas as well as abundant wildlife. Muleshoe Wildlife Refuge provides opportunities for photographing sandhill cranes and waterfowl, and the areas around Lake Meredith, Greenbelt Reservoir, and White River Lake also provide opportunities for wildlife photography. So, there are plenty of nearby options for you to work on your wildlife/nature photography skills and enjoy the great outdoors right here on the South Plains.

Photos courtesy of Bill Mueller

Staff Profile **Bill Mueller, Ph.D.**

Collections Photographer / Assistant Curator of Paleontology

I started collecting fossils when I was about 6 or 7 years old, so I am approaching 60 years of collecting fossils. My research is currently focused on Triassic vertebrates from the Lubbock area and those in the Museum's collection. I have now been collecting for the Museum for 20 years, and I also donated to the Museum the materials in my personal collection that fit within the scope of our collections.

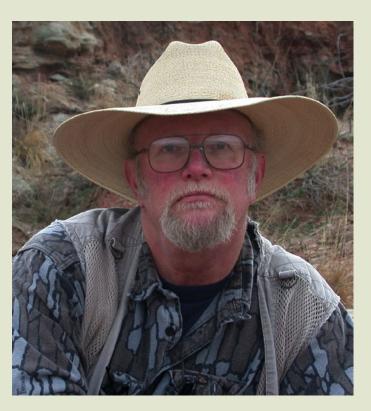
I began to pursue photography seriously while I was studying geology as an undergraduate at Sul Ross State University. Big Bend National Park, Black Gap Wildlife Management Area, and the Trans-Pecos provided many opportunities for wildlife and nature photography. I expanded my photographic horizons during this time to include fine art photography.

I spent about 25 years as a consulting geologist while continuing to develop my photographic interests. I moved to Lubbock in 1993, and while continuing my consulting business in the petroleum industry, I opened a photography studio in 1995. I began working at the Museum as the collections photographer in 1998, and I have now been here for 20 years. In 2004 I took over the duties of the collection manager in the Paleontology Division while remaining the collections photographer. In 2008, I became a half-time collections photographer and the half-time assistant curator for the Paleontology Division. I truly love doing field work and going out to collect fossils.

It has been very interesting working at the museum because I am often doing different jobs. I have done photography assignments for every division in the Museum, so I have been fortunate in getting to see so much of the Museum's collections.

I have worked with Museum Science students in the various divisions as well as with geoscience graduate students studying specimens in the Museum's collections.

I have had the opportunity to work with visiting researchers from all over the world working on specimens in our collections. I have been fortunate enough to travel for the Museum doing photography, researching specimens in the collections of other museums and universities, and presenting our research at conferences. I am very fortunate to be able to work at the Museum, doing what I have dreamed of since I was a child.





Heritage and Museum Sciences Student Spotlight Ivana Montenegro and Shannon Carr

By: Megan Reel / Assistant Collections Manager, Ethnology

and

Rachel Gruszka / Collections Manager, Anthropology

Ivana Montenegro and Shannon Carr began their studies toward master's degrees in Heritage and Museum Sciences in the fall of 2016. As part of the student apprenticeship program, they both were assigned to the Anthropology Division. Within the Anthropology Division, Ivana was assigned to the Ethnology Collections and Shannon to the Archaeology Collections.

Throughout their time in anthropology, Ivana and Shannon have collaborated on multiple projects. In a year that was largely dominated by the Life Safety Project, a renovation of the building's safety features, such as sprinklers and lighting, they were involved in several large-scale moves of collection objects as exhibit spaces and collections rooms underwent construction. They also worked together and separately on a variety of tasks such as cataloging, inventory, and creating custom archival housing for collections objects to ensure their preservation.

The projects Ivana and Shannon completed in the Anthropology Division formed the basis for a poster they presented at several academic and professional conferences. Their poster, titled "Breaking Boxes: Creating Suitable Packaging for Objects by Reusing their Previous Packaging," was inspired by a large and technically challenging packaging project. This project included making outer packaging and internal supports for large and fragile traveling bags of Qashqa'i culture, to prevent damage while in storage. The Qashqa'I is a group of Iranian clans made up mostly of Turkic peoples, but also includes Lurs, Kurds and Arabs. The pair also implemented a system to house katsina figures, these are carved wooden figures representing the spirits of the Hopi tribe.

A focus of their project was to utilize existing archival packaging, as much as possible, to create cost effective solutions. Ivana and Shannon placed second at both the March 2017 Texas Tech Graduate Student Research Poster Competition, and at the Mountain Plains Museums Association Student Poster



Ivana Montenegro and Shannon Carr with their awards after the Graduate School Student Research Poster Competition

Competition in October 2017. Professional conferences and presentations, along with the apprenticeship program, form an important complement to academic studies in the Heritage and Museum Sciences graduate program, providing students with practical experience and in-depth knowledge of the profession.

Ivana and Shannon currently are in their last semester of coursework in the program and are preparing for internships that constitute the final part of their degree. Through their experience in the Anthropology Division, their commitment to professional development, and their graduate coursework, both students have demonstrated the professionalism and enthusiasm necessary for a career in the museum field. Their presence in anthropology for the last year and a half has been a great benefit to the division, and their dedication and energy have been greatly appreciated by the division staff. -----

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RED TO BLANKET the Museum

Marian Ann Montgomery, Ph.D. Curator of Clothing and Textiles

San Agustin, Melchior Perez de Holguin, Potosi, Peru, late 17th century, Oil on canvas, New Mexico History Museum, 2005, 27, 31. Three exhibits related to the color red will open at the Museum in September 2018. They include *The Red That Colored the World*, which comes on loan from the Museum of International Folk Art in Santa Fe, New Mexico; *Ladies in Red: Selections from the Clothing and Textiles Collection at the Museum; and Red, Hot* & Quilted, creations by the Caprock Quilt Artists. The exhibits are scheduled to open in September and continue into January 2019.

The Red That Colored the World presents new research and original scholarship to explore the history and widespread use of cochineal, an insect-based dye source for the color red whose origins and use date to the pre-Columbian Americas. The exhibition translates the cochineal story into three dimensions, following the insect juice and its use in art from Mexico, to Europe, to the U.S., and beyond.

The American cochineal is a tiny-scaled insect that produces carminic acid. The dye from the insect was discovered and used by the Mayans prior to the arrival of Europeans. It was colorfast and the brightest red dye that could be created at the time. When the Spaniah arrived searching for riches, they found it in this unlikely treasure. By controlling this source of the valuable dye, the Spaniards had a monopoly on the brightest and best red dye in the world -- until the Dutch invented the microscope and the rest of the world learned that the dve was created by an insect and not from a plant as most thought.

Objects colored by American cochineal have been the focus of recent research at major museums such as the Metropolitan Museum of Art. Curators have been fascinated to discover which paintings and textile objects have included the cochineal red dye.

The Red That Colored the World highlights more than 60 objects including textiles, sculptures, paintings, decorative arts, clothing, and more from the Museum of International Folk Art, private lenders, and museums around the country. The exhibition explores the



2-piece formal silk faille dress designed by James Galanos, 1970s. Gift of Myrl Sawyer Good (Mrs. Jeff), TTU-H1984-027-002.

history of cochineal and the seductive, visual nature of red. The objects in the exhibit reflect the unique international uses of color, revealing its role in the creative process, and the motivations of artists in their choice of materials.

To supplement the exhibit experience, *Ladies in Red* will showcase some of the finest selections from the Museum's Clothing and Textile Collection. Former First Lady Laura Bush and Terri Duncan, the wife of Texas Tech University System Chancellor Robert Duncan, have agreed to loan red garments to the exhibit. The garment loaned by Mrs. Bush is an Arnold Scaasi gown that she wore in December 2003 for the official White House Christmas Portrait of President and Mrs. George W. Bush.

In addition to exquisite examples of garments worn by notable Lubbock women such as Margaret Talkington and Louise Underwood, visitors will see early Texas Tech cheerleading uniforms and other garments.

Inspired by the upcoming red exhibits, the Caprock Art Quilters have challenged themselves to create quilts based upon the theme of red. The results comprise *Red, Hot & Quilted*. Museum visitors have previously enjoyed the group's work in other exhibits in the Museum. The creations around red promise to be creative and fascinating and are a wonderful example of the museum and community working together.



President George W. Bush and Laura Bush pose for their official Christmas portrait in front of the White House Christmas Tree in the Blue Room, Dec. 7, 2003. *Courtesy of the George W. Bush Presidential Library and Museum. White House photo by Eric Draper.*

A beautiful exhibit catalog, "A Red Like No Other: How Cochineal Colored the World," will be for sale in the Museum Shop. Other sources on the subject, popular books, such as "A Perfect Red: Empire, Espionage, and the Quest for the Color of Desire," by Amy Butler Greenfield, are available as is the Metropolitan Museum of Art's fascinating publication on this research, which really started the efforts to determine which objects were colored with American cochineal. It can be read on-line by searching for Metropolitan Museum of Art Cochineal Bulletin or typing in this link: https://books.google.com/ books?id=sHgkwaFhxv4C&printsec=frontcover#v=onepage&q&f=false.

The exhibits will open on a staggered basis, with Ladies in Red opening on Sept. 11; The Red That Colored the World opening on Sept. 18; and Red, Hot & Quilted opening on Sep. 25. All three exhibits will run through Jan. 17, 2019.

The Red That Colored the World, organized by the Museum of International Folk Art in Santa Fe, New Mexico, and circulated through Guest Curator Traveling Exhibitions, has been made possible in part by a major grant from the National Endowment for the Humanities: Celebrating 50 Years of Excellence as well as funding from the Helen Jones Foundation.

Editor's Note: Any views, findings, conclusions, or recommendations expressed in this exhibition do not necessarily represent those of the National Endowment for the Humanities.



"Octopus" Bag, Taltan Tribe, Northwest Coast, United States, c. 1860-1870. Wool, cloth, and beads. Collection of the Ralph T. Coe Foundation for the Arts, NA 1119.



Nina Arroyo Wood, Altar cloth and cochineal dyed wool yarn, Santa Fe, New Mexico, 2013. Handspun New Mexico churro wool, vegetal dyes, and cochineal, 14 Đ x 38 in. Museum of International Folk Art, IFAF Collection. Courtesy Museum of International Folk Art. Photograph by Addison Doty.

Ladies in Red - Sept. 11 - Jan. 17, 2019 The Red That Colored the World - Sept. 18 - Jan. 17, 2019 Red, Hot & Quilted - Sept. 25 - Jan. 17, 2019



Sewing box and cover with cochineal dyed wool yarn (detail). Box, Pátzcuaro, Michoacán, México, late eighteenth century. Wood, paint, metal, gold leaf, 4 Đ x 17 5/16 x 5 in. Museum of International Folk Art, IFAF Collection.



Chest and diamond-twill skirt fabric. Chest, Olinala, Guerrero, México, ca. 1850. Wood, paint, 15 x 33 x 13 in. Museum of International Folk Art, IFAF Collection, FA.1979.25.1. Skirt fabric, ca. 1950s, Teotitlán del Valle, México, wool dyed with cochineal, Courtesy of Walter Anderson.

Interview with

Eileen Johnson, Ph.D., is director of the Lubbock Lake Landmark, director of academic and curatorial programs at the Museum of Texas Tech University, and Horn Professor and chair of Heritage and Museum Sciences. She is internationally known for her work at the Landmark, a site of one of the oldest records of human existence in North America, dating back about 12,000 years. Her arrival at Texas Tech was a sort of a happy coincidence that has led to an eclectic and rich career. She sat down with M Magazine to talk about what brought her here and why she's still passionate about her work.

M: What sparked your research interest?

EJ: I had an incredible seventh grade teacher. I don't remember what the course was called, but it was very interdisciplinary. We looked at a broad range of subjects, primarily in the sciences. I remember him talking about volcanology, paleontology, and I thought "this is what I want to do."

I was raised in California, but I've known for decades, since I first came onto the Great Plains, that I was a grasslands person. I like the feel of the region, especially in this area where you can see for miles. I feel comfortable and not closed in—because I am very interdisciplinary in my view, and I think that makes me very eclectic in my work.

M: Your work at the Landmark doesn't pigeon-hole you into one area?

EJ: I'm a Quaternary scientist, looking at the last 2.6 million years. So, I'm combining anthropology, paleontology, geology, stratigraphy, soils, and the people of the era. Some people think of me as a Paleoindian researcher, and I am interested in that, but I'm interested in the time before people came into the New World, right up to the early settlement of this region. I have a co-authored paper coming out soon on cowboy archaeology that deals with the 1880s and 90s. Every time period has interesting questions to research. So I am not focused on any one thing.

M: What brought you to Texas Tech?

EJ: I have a bachelor's degree in anthropology from the University of California and a master's degree in anthropology from the University of Kansas. My mentor at Kansas was Craig Black, a vertebrate paleontologist, who moved to the Museum of Texas Tech in the early 70s as director. Before he left Kansas, he asked me if I had ever heard of Lubbock Lake and did I think I could do anything with it? So, I moved to Texas Tech with him. He and I both thought I'd be here for three

Eileen Johnson, Ph.D.

Director of Lubbock Lake Landmark

Director of Curatorial Programs

Horn Professor

Chair of Heritage and Museum Sciences master's program

years, get my doctorate in zoological sciences, and then move on. It didn't work out quite that way.

In the 70s, Lubbock Lake was thought to be only a Paleoindian site, but even at that I thought "what a great research opportunity." Now we know that what currently is known as the Lubbock Lake Landmark is so much more. It contains the entire history of the people of the New World. It also is a rich site in that its geography, climate record, and animal and plant remains give us a virtually unparalleled record for North America. For all those reasons, the Lake is a National Historic Landmark, hence the name Lubbock Lake Landmark.

M: Why are museums and sites like the Lubbock Lake Landmark so important?

EJ: Museums are a repository of knowledge, some of it is known and some of it is waiting to be known. So many discoveries are still waiting to be made.

If you look at the evolution of museums in this country, we have become education-orientated, and university museums are not just public education orientated but also academic education-oriented. In order to create exhibits, you have to do research in the collections. You have to know your collections. Even if you're not doing academic research, you still need to know what your collections are telling you. If you don't, how can you inform the public?

Museums are recognizing that they are more than just education, but also community partners. We have to ask what the value of a museum is to its community. The Landmark is a good example. We wouldn't exist without the community, and the Landmark belongs to the community. One thing Curry Holden, the first director of what was then the West Texas Museum, was very adamant about is that to preserve the Landmark we had to have community buy-in, and it has worked. Curry started giving tours in the 1930s, and we're still giving tours today. We have had a community program since the 70s. We have had kids as young as age 13 volunteering in our labs, and we've had people in their 80s and 90s be involved in the research. The museum as a strong community partner is important, and the added value we bring is our collections and what they can do to inform and represent the community.



M: What gets you excited about your work today?

EJ: I think it's still the same, the interdisciplinary aspects and the breadth of time covered by the Landmark. We're doing some new things, using new technology like drones in our research. The exhibit we're planning now is on Pleistocene or Ice Age animals. We'll show the Ice Age animals from this region, and through the use of augmented reality we'll be able to put the public with those animals out on the range.

M: Are there moments that stand out from your career?

EJ: I don't really think in terms of myself, but rather in what we all have accomplished at the Landmark and the region. I've been fortunate on all my National Science Foundation grants that I could make a convincing argument that the research it would fund would tie back to the Landmark.

I guess one thing that struck me is on one trip to Argentina to look at late Quaternary soils and how people were using the large animals there, and how the Landmark's record could inform what was the record there and how Argentina could inform the record at the Landmark. On one trip, I was walking by a graduate student's desk in the lab and I just stopped dead in my tracks and asked, "Where did you get that?" The object was a ginger beer bottle with a maker's mark from the Barrowfield Pottery Works in Glasgow, Scotland, excavated from one of the Spanish forts. There are similar records of Argentinian and U.S. movement of forts going across the frontiers and their encounters with native South Americans and native North Americans. But what stopped me was that we have the exact same ginger beer bottle with the same maker's mark coming out of the Singer Store (early 1880s) at the Landmark. Frontier global economy!

My Horn professorship is another seminal moment. The Horn professorship is the highest academic honor awarded by the Board of Regents and involves the national to international significance of research efforts. I was quite amazed, excited, and also humbled to be joining the ranks of such scholars as Doc Wade. Doc Wade, a famed Antarctic explorer, was among the very first group of Horn Professors named. He was a Research Associate of the Museum and had his office there when I first came. The hours I spent with him had a major impact on me.

I've been fortunate to travel for my research, but I'm more focused now on our work at the Landmark and in the region, particularly at a research location near Snyder where we're investigating an animal assemblage that's about 2 to 2.6 million years old—at the very opposite end of the Quaternary from the cowboy archaeology we're also investigating. There is so much here and so little time. I suppose I feel my mortality. There is still so much out there and so many questions that still excite me. This area is incredibly rich in Quaternary resources. Discoveries are made every day. Of course, the level varies—you don't discover King Tut's tomb every day. But there are small discoveries that, as they get pieced together, can lead to an "aha" moment. It is that hunt for discovery that keeps me going.







Land Less TRAVELED



By Amanda Bowman TTU Communications and Marketing

or many students, traveling to an exotic country to study abroad is a bucket-list item. Immersing themselves in another culture's food, sights, and sounds gives

them a deeper appreciation for not only the country they're visiting, but also for how they are able to adapt to new challenges. What many students might not know is that the exotic country could be the United States.

Texas Tech University's College of Architecture (CoA) offers the Land Arts of the American West program whereby students are better able to appreciate the North American West by studying abroad in their own backyard. *The Land Arts 2017* exhibition was on display in the Museum's Leonardo's Kitchen Gallery through April 29.

"One of the reasons it's common in universities to have a semester or summer abroad experience is to make the world part of the education and to say, 'It's one thing to study ideas of the world and the history of the world; it's another thing to put yourself in contact with other cultures and other places and to have a first-person experience," said Chris Taylor, director of the Land Arts program and an associate professor in the CoA. "We create and we cultivate that experience through the saturation we attain through camping and the way we travel."

The Land Arts program started in 2000 at the University of New Mexico (UNM) and was brought to Texas Tech in 2008 when Taylor moved to Lubbock from the University of Texas at Austin (UT).

"Bill Gilbert, who was instrumental in starting the program at UNM, and I were friends," Taylor said. "In 2001, we began a collaboration between UNM and UT, and we ran a joint program until I came to Texas Tech. The version of the program at Texas Tech attracts architects, artists, and writers within the college and from far and wide."

Oh, the places you'll go

The journey taken while in the Land Arts program is profound. The program covers nearly 6,000 miles to experience major land art monuments such as Michael Heizer's Double Negative, Robert Smithson's Spiral Jetty, Nancy Holt's Sun Tunnels and Walter De Maria's "The Lightning Field."

"There are certain sites on our itinerary that we've always gone to and are pretty stable, either because of their historical significance in the history of land art as a genre or how they activate our ability to use land art as an index or lever to open up conversations," Taylor said. "Works like Smithson's Spiral Jetty at the top of the Great Salt Lake in Utah are really important to us – partly because of its place in land-art history and because that north arm of the Great Salt Lake is such a weird landscape. "The work was created in 1970 and, shortly thereafter, the lake level rose. So, the work was invisible and underwater for more than 30 years. Now, it's become a landmark of the state. It's a destination. It's celebrated. It stirs literature."

There are guests who meet with the group throughout the trip, offering a different view or context for certain sites and deepening the group's conversations. Sometimes, the field guests are the ones who influence where the trip goes.

"This past season, a well-known and important photographer named Zoe Leonard was a field guest," Taylor said. "She is working on a project dealing with the Rio Grande in Texas as a border and as a line. One aspect of her work is epic photographic narratives following a question or an idea where it takes her. "So, we spent four days with her south of Marfa, based out of Presidio, to work a stretch of the river and help her get to places that might be difficult for a lone woman cruising the border by herself."

Somewhat roughin' it

Students shouldn't sign up for the Land Arts program if they're expecting to go glamping and just admire the sites from a distance. The program is designed for them to interact with the art and the landscape in which it's placed.

"We're sleeping on the ground, in tents," Taylor said. "When we find a river or lake we can swim in, that's bathing. The frequency of those kinds of things we take for granted at home start to really become significant.

"We're up early with the sun and through into dark, with a frequency of evening seminars around a campfire, if there's wood to burn. We're a go, go, go operation that doesn't really take days of rest. Time is too precious to take the weekends off when we're in the field."

However, it's not a rough, strictly back-packing experience, either.

"We travel in two vans: one van for people and personal gear, another van for the kitchen and communal gear," Taylor said. "We put a roof rack on one of the vans for solar panels so we can make our own power from the sun to charge our computers and cameras, and to play the stereo and screen films in the evening, which are parts of the seminar schedule."

One main point Taylor stresses is the importance the program places on a "nice-for-camping" kitchen and eating together as a group.



"It's one thing to study ideas of the world and the history of the world; it's another thing to put yourself in contact with other cultures and other places and to have a first-person experience"





"I have an assistant who manages the logistics operation and the kitchen," he said. "The kitchen fits within a 10by-40 foot modular tent structure we designed and fabricated out of aluminum pipe and fittings. We use plastic tarps for the roof and can put up walls if need be. If the weather is bad, we can make it into a pseudo bunker, tie it down, and operate in there with the kitchen. We have folding tables to take our meals on that double as work surfaces.

"It's a fairly 'cush' and elaborate kitchen. Since we're technically car camping, we have the benefit of being able to haul a reasonable amount of support infrastructure. The psychology of people in the field is import-

ant to maintain. So, keeping people well-nourished and happy is a vital motivation for the communal aspect of taking meals together."

Rest and recharge

The camping portion of the program begins in August and ends in the first week of November. Though participants are on the go the entire time, there is a week-long reprieve in the middle so everyone can rest, recharge, and relax.

"We come back to campus after the first three-and-a-half weeks," Taylor said. "By then, there's a deep need for a few cycles of laundry, for checking in with the world, paying bills, and dealing with correspondence. But, it's also a moment to pull back from the group to reflect and to think about what just happened over the last three weeks. Students touch base with their families, sleep in, rest, re-tool supplies, whatever it takes. Then, we're back again for another field session." Once returning from the second half of the trip, the students spend the remainder of the semester working in the studio, finishing their work. The work then will be critiqued and placed on exhibition the following spring.

"At the end of every semester in architecture, there are final reviews," Taylor said. "It's part of our final exams where we present our projects and talk about them with a panel of critics. While we participate in that, it's not the end of the program.

"People aren't in class any longer in the spring when we do the exhibition.



That's really the finale, where we share the work with the larger public. Everybody's working toward that goal from day one. To be in an exhibition is a privilege and an opportunity, but it's also a responsibility, to make your work legible to other people. You can't just be over in a corner saying, 'This is what I like to do and I don't share it with anybody."

Benefiting from the land

The Land Arts program isn't just about seeing pretty sites and learning about the history of the art; it's a way for students to connect to their work and to better appreciate the diversity of the land. "The big frame of the program is to look at the way humans have shaped the land and are shaped by the land over time, from ancient periods, through the archeological record, into modern and contemporary eras," Taylor said. "We're learning from those histories, those examples of what people have done on and with the land and how they've been marked and shaped by the land. That's the big, conceptual frame.

"Yet, the two months of camping and being really exposed to, and embedded within, the weather, the travel, and the sites, adds other dimensions to the experience. Out of all of this, we gain a greater appreciation of the definition

> and formation of landscape, what it is and that it's not singular like, 'Oh, this is prairie; this is desert.' Landscapes are not generalizable. They're dynamic, diverse, and usually more complex and multi-lavered than for what we give them credit."

> Learning to appreciate the landscape on a deeper level is a wonderfu benefit, yet Taylor thinks the way

the students learn about themselves is equally important.

"You also learn a lot about yourself during this time," he said. "There's a huge lesson for individuals in terms of their own confidence, sense of identity, their relationship of themselves to their work and their relationship with others—both the community with which they're traveling, and then the larger community of people inhabiting the territories we travel within.

"We'll talk about this from time to time, yet it's not something we focus on directly, while being perhaps one of the most pervasive and serious takeaways of participation. The sites and the seminar conversations are super important, and there's definitely merit within them, yet what the program does to recalibrate our focus, or open up perspective for individuals in terms of their life trajectory, is pretty big."

Join the experience

Though the Land Arts program is run through the College of Architecture, any undergraduate or graduate student, no matter their major, can participate.

"When I arrived, I made a point of saying that the program is a university-wide offering, open to all disciplines, that happens to be housed within architecture," Taylor said. "We've been successful with students from the School of Art. We've had a poet from the Department of English, but we haven't had people from the Honors College, Spanish, or from any of the sciences yet. I would love to receive applications from students in those, and other, areas."

The program also accepts students from outside the university who enroll at Texas Tech to participate.

"Over the years, the Land Arts program has included architects, artists, art historians, and creative writers from

North America, Australia, Chile, and Spain," Taylor said. "They've come to Texas Tech from universities such as Yale University, University of California, Berkeley, and the University of Pennsylvania."

Visit the Land Arts website, or email Chris Taylor at chris.taylor@ ttu.edu. You also can watch the documentary, "Through the Repellent Fence: A Land Art Film," where Taylor is featured speaking about the Land Arts program, for further information on the Land Arts program.







PRE-MODERN BIBLES: FROM THE DEAD SEA SCROLLS TO THE COMPLUTENSIAN POLYGLOT BIBLE

By: Janis Elliott, Ph.D. Associate Professor Art and John Howe, Ph.D. Professor of History

The Bible is etymologically The Book, a stable center for Judaism and, once supplemented by an additional twenty -seven books, for Christianity. Yet, over millennia, biblical texts have changed in their format, in modes of interpretation, and in ways of presentation. Brilliant scholars and theologians have wrestled with these texts, studying them in multiple ways, some of which have become basic to contemporary forms of intellectual inquiry. Who we are and how we think have been profoundly influenced by biblical studies.

From Aug. 18, 2018 to March 3, 2019, the Museum of Texas Tech University will host an unprecedented exhibit on Pre-Modern Bibles: From the Dead Sea Scrolls to the Complutensian Polyglot Bible. Here will be found the largest collection of original and facsimile biblical manuscripts ever assembled in West Texas, displayed to illustrate the evolution of the physical Bible, the development of scholarly methods of biblical analysis, the refinement of multiple ways to convey biblical learning, often to people of limited literacy, and the creation, in Spain at the end of the Middle Ages, of the Complutensian Polyglot Bible, which summarized these scholarly traditions and also, with its elaborate multilingual printing press fonts. looked toward a new modern era of biblical scholarship.

Why is Texas Tech commemorating an ancient monument of biblical scholarship? The exhibit provides an occasion to take a historical look at the culturally seminal importance of biblical studies. It honors the quincentenary of an important biblical project that appeared from 1517 to 1520. It also helps us recall some of Texas Tech's historical and aspirational roots, inasmuch as the Spanish revival architecture of the Texas Tech campus and the Complutensian Polyglot Bible can both be traced back to the same source, a university in north-central

Spain, the Universidad Complutense at Alcalá de Henares. It relocated to Madrid during the 19th century. This renaissance university was the creation of Cardinal Francisco Ximénes (1436-1517), a former hermit who became the chaplain of Columbus's patroness Queen Isabella of Castille. Although today most Americans know Ximénes only as the lead character of a famous Monty Python comedy sketch about how Nobody Expects the Spanish Inquisition, he was in fact a pious statesmen and reformer who believed that a proper understanding of the Bible could lead to a reformed Christianity. To that end he diverted whatever funds he could gather into his new university whose major project

would be to create an edition of the Bible that, thanks to the new printing press technology, could make the word of God available in all the major biblical source languages. The result was not only a tour de force of printing technology and biblical scholarship, but also the creation of the academic setting that would inspire Texas Tech. In 1923, architect William Ward Watkin, seeking a suitable architectural style for a new university on the High Plains of Texas, looked to the High Plains of Spain, the region of the Extremadura, and modeled Texas Tech's first building, the Administration Building, on the university at Alcalá. Other Spanish echoes, including the team name Matadors, would soon follow. Celebrating this quincentenary allows Texas Tech,



now designated as a Hispanic Serving Institution, to recollect the Spanish revival traditions that have always been part of campus heritage.

In the interdisciplinary exhibit *Pre-Modern Bibles: From the Dead Sea Scrolls to the Complutensian Polyglot Bible* we are seeking to present our research to a broader community.

"University professors sometimes find ourselves talking only to each other, and not to the people of Texas who pay our salaries," said Howe. "It is challenging, as well as fun, to look beyond academic journals and to attempt to present what we know in a public exhibit."

Among the co-sponsors of the exhibition are Texas Tech University, the Museum of Texas Tech, and The Remnant Trust. The Remnant Trust is lending several major original manuscripts, such as a 16th century Greek and Latin New Testament, a 16th century Torah scroll, and a 13th century Paris Vulgate Bible. Other precious materials will be furnished by the Lanier Theological Library, the Harry Ransom Center of the University of Texas at Austin, and the Sarah Campbell Blaffer Foundation, Houston, the Library and Southwest Collection of Texas Tech, and the libraries of Abilene Christian, Baylor, and Western Michigan Universities all are providing loans of handsome facsimile manuscripts. Many of the manuscripts included in the exhibition are facsimiles because manuscripts, which are



hand-written and painted, are unique and too precious to travel from their home libraries.

"In order to illustrate our narrative about the development of biblical scholarship we needed to display manuscripts that demonstrate the importance of art in communicating the stories of the Bible," says Elliott. "Facsimile editions provide us with a glimpse of how text and image worked together in some of the most spectacularly decorated medieval manuscripts that we might never otherwise see." Financial support comes not only from the Museum of Texas Tech but also from the Helen Jones Foundation, a Humanities Texas Major Grant for a Community Project, and a Civic Lubbock Cultural Arts Grant.

The first part of the exhibit will attempt to show how the material Bible came to exist as it does. The Lanier Theological Library is lending a facsimile of a Complutensian Polyglot Bible as well as two replicas of Dead Sea scrolls. From Jesse Scott of Lubbock Christian University comes a Dead Sea Scroll facsimile jar. The exhibition will explain the transitions from scroll to codex, the form of book we use today that triumphed in Late Antiquity, probably as a result of Christian use of scripture. Codex books are easier to consult for multiple liturgical readings and they are cheaper to produce in quantity because you can write on both sides of the page. The exhibition will include facsimiles of some of the early Christian codices, such as the fourth-century Codex Sinaiticus and the eighth century Codex Amiatinus. Also included will be a facsimile of the ninth century Utrecht Psalter and one of its famous English copies. The Utrecht Psalter is an example of the artistic display of religious exuberance typical of some Carolingian manuscripts, and it is one of the continental manuscripts that were sent to Canterbury to inspire copies after the Viking raids destroyed most of the British libraries in the 10th century.



Codex Amiatinus (Florence, Biblioteca Medici-Laurenziana. Cod. Amiatino 1), Frontispiece, 8th century



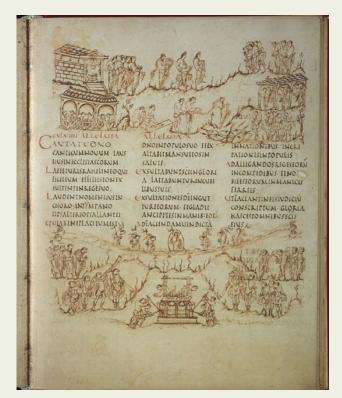
Complutensian polyglot Bible. (Rome, Library of the Society of Jesus), Frontispiece, 1517#20

Examples of scribal tools and materials will reveal the complex process involved in creating large books. Yet separate volumes for Pentateuchs, Psalters, Prophets, Gospels, Epistles, etc., were the norm, far from the single-volume complete bibles used today. The earliest surviving examples of complete one-volume bibles only appear in the seventh century. The order of all the books in these codex bibles was not definitively standardized until the 13th century. Even later, after Protestant reformers reverted to a Hebrew canon for the Old Testament, some books identified as apocrypha, which are biblical writings that are not the accepted canon of Scripture, were dropped or marginalized. The form of the Christian Bible has changed over the centuries.

The second part of the exhibit attempts to reveal not only the sophistication of pre-modern biblical scholarship but also how it relates to academic traditions today. This includes the belief in multiple senses of scriptural interpretation still basic to today's literary theories. The development of marginal glosses, which are comments or annotations in the margins of a book or commentary that is formatted around the text, will be presented as ancestral to modern-day scholarly apparatus, such as footnotes that still drive students crazy. Exhibition space will be devoted to the development of images of Biblical scholar, and to their metamorphoses into modern images of academics—this will include evangelist portraits and modern images of inspired

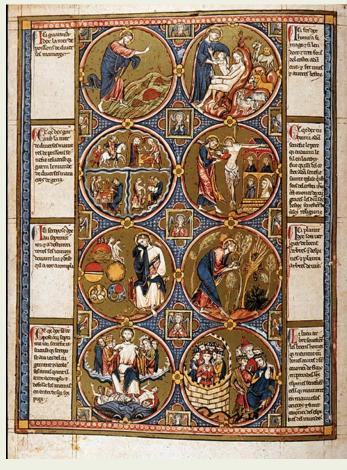
academics. A subgenre involves learned academics working in their studies, a portrait tradition extending from the sixth century through a variety of Renaissance examples, to the photographs taken today of modern authors at work. There will also be a section dedicated to the collaboration between Jewish and Christian biblical scholars from the High Middle Ages to the start of the early modern period.

Biblical texts could be found in the tiniest of books of hours and in giant lectern bibles that might weigh 70 or 80 pounds. Vernacular translations and paraphrases could present scripture, although church authorities were sometimes hostile to non-Latin scriptures that lacked orthodox glosses, interpretative apparatus, or approved theological vetting. Yet in a largely non-literate world, a universal church presented scripture in ways not limited strictly to reading the letters of texts. Pope Gregory the Great, whose large oil portrait also will be on display, argued that art was the bible of the illiterate, the means to instruct those who could not read. Biblical messages were presented in multiple media and genres. The exhibition includes a variety of illustrated bibles. Comic-book style illustrations and biblical paraphrases made bible texts more accessible. Some space will be devoted to moralized bibles that tell the biblical stories with an abbreviated text and use the power of images to communicate. Biblical content also was presented through personal books of hours and through sermons which were delivered in church or published in written collections. By the 15th century, the printing press could make biblical texts available in standardized, less expensive formats, and the new technology signaled the



Roman School. Pope Gregory the Great. Oil on canvas, c. 1620 BF.1984.21

end of the period of hand-made, manuscript bibles. The earliest printed bibles remained largely in Latin and were expensive to produce. The break between a high-quality manuscript Bible, such as the Mainz Bible, and the new printed bibles such as the Gutenberg Bible, was not initially too dramatic but, ultimately, mass-produced printed bibles would reshape Christian ecclesiastical structures.



Vienna Moralized Bible (Vienna, ÖNB. Cod. 2534), Genesis scenes, c. 1225

The final section of the exhibition will be devoted to the Complutensian Polyglot Bible, whose pages are laid out to include bible passages in four columns in different languages: Hebrew, Greek, Latin, and Aramaic. This bible will introduce the Spanish context that gave rise to this project, including King Ferdinand and Queen Isabella, and their efforts to create a new, more integrated Spanish kingdom and church. They were aided by Cardinal Francisco Ximénes de Cisneros, and by his attempt to revive old schools and universities, symptomatic of the creativity of the early Spanish Renaissance, which would ultimately harden in a more ideological response to Protestant challenges. The Spanish Renaissance would produce the Universidad Complutense at Alcalá de Henares, whose relationship with Texas Tech will be demonstrated in the exhibition, and the Complutensian Polyglot Bible that will be presented as the culmination of a long tradition of themes related to multilingual, cross cultural, biblical scholarship,

which will bring us to the point of seeing how the future was transformed by the technology of the printing press.

Visitors to *Pre-Modern Bibles: From the Dead Sea Scrolls to the Complutensian Polyglot Bible*, will find delight in the variety of bibles and their colorful illuminations. The chronological extent is daunting, over 1,000 years, yet the narrative maintains focus on the trajectory of biblical scholarship and its relationship to the development of western civilization in the middle ages. The exhibition will succeed in its purpose if it is able to raise questions about traditional models of biblical studies that jump from the earliest surviving manuscripts to the printed bibles of the Protestant Reformation. Between those points lies a varied world of biblical study that was sometimes intellectually and visually brilliant and that ultimately helped shape our modern intellectual world.

Editor's Note: Sources used in this article can be found at : *http://biblemanuscriptsociety.com/Bible-resources/Early-Bibles/Complutensian-Polyglot.* The program is made possible in part by a grant from Humanities Texas, the state affiliate of the National Endowment for the Humanities, and the Helen Jones Foundation, Inc.

Janis Elliott, Ph.D., associate professor of art, and John Howe, Ph.D., professor of history, are co-curators of the exhibition. and

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Complutensian polyglot Bible (Rome, Library of the Society of Jesus). 1517-1520



Chile field near Dixon, New Mexico, July 1940, photographed by Russell Lee. Courtesy of Library of Congress Prints & Photographs Division, from the U.S. Farm Security Administration – Office of War Information Photograph Collection.

By: Cameron L. Saffell, Ph.D. / Curator of History

A PEPPER BY ANOTHER NAME-

New Mexicans are serious about their chile. Chile has been a fundamental part of New Mexico cuisine for many decades, but in the last fifty years it has evolved into an icon—a representation of New Mexico and what it means to be a New Mexican. Today it is an obsession. Chile literally is part of the self-identity of New Mexicans, with deep meaning to their lives.

For out-of-state visitors to New Mexico and recent transplants, chile is an enigma. Some who do not understand think the word is misspelled. Chili, says the true New Mexican, is that meat-and-beans dish that Texans make. Even longtime residents are less familiar with the origins of the chile or the differences between regional and varietal types of chile, other than the obvious question asked at the dinner table—red or green?

The heritage and historical evolution of how chile came to have a central place in New Mexico culture is the subject of a traveling exhibit open from May 13 to Sept. 23 in the Balcony Gallery of the Museum. Organized and curated by the New Mexico Farm & Ranch Heritage Museum, *Red or Green?: The Origins and Cultural Significance of the Chile Pepper in New Mexico* explains chile's origins and how today it is an integral part of the state's heritage, reflected in everything from green chile cheeseburgers to three state symbols. While most non-New Mexicans are only familiar with "New Mexico chile" or "Hatch chile," the exhibit also shows the differences between regional chile varieties within the state—and the reasons for the loyalties and rivalries between different communities who proclaim their chile to be the real New Mexico chile.

The first surprise for many folks—even the locals—is that chile is not native to New Mexico. Botanists agree that the chile originated in South America, most likely in some part of Bolivia or southern Brazil. Wild chiles produced small, fragrant, red fruits that were very attractive to birds, who ate the pods whole. Not affected by any capsaicin—the active ingredient

of a chile that makes it "hot"—the seeds passed through digestive tracts intact and were spread regionally with the birds' waste.

When humans reached South America over 10,000 years ago, there were about twenty-five species of chile (*genus Capsicum*). Over time, humans domesticated five of those and incorporated chile into their diet. Chile pods became larger, causing them to hang down among the plant leaves, thus making chile of less interest to birds. Thus, botanists say, people had to be the factor that spread chile into Central and North America.

Spanish explorers found native residents eating chile in their regular diets. Historian Garcilaso de la Vega wrote in 1609 that chile was the favorite fruit of the Inca Indians, who ate it with everything they cooked—"stewed, boiled, or roasted." Archaeological evidence suggests that Indians of the American Southwest and Northern Mexico were familiar with chile by the 1500s, but most historians believe that Spanish colonists settling in the region in the early 1600s marked the first time that chile was regularly cultivated, where it was a standard item in most Nuevo Mexico village gardens.

By the time New Mexico became an American territory in 1848, it was clear that a small, local chile industry existed in northern New Mexico. Josiah Gregg, the Santa Fe Trail trader and author of "The Commerce of the Prairies", wrote that "the extravagant use of red pepper among the [New] Mexicans has become truly proverbial. It enters into nearly every dish at every meal, and often so predominates as entirely to conceal the character of the [food]."

While chile was a common garden plant in the north, it was less common in southern New Mexico until the early 1900s. As in the north, chile was a popular part of the regional cuisine, but different varieties and types of chile were used. They had local terms such as Chile Colorado, a red chile; Chile Negro, a black



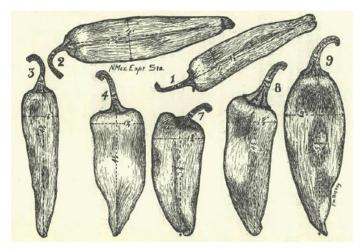
chile; and Chile Pasilla, a local variety from Chihuahua, Mexico, that were consumed both in the green and ripe red state.

In 1907, professor Fabian Garcia of the New Mexico College of Agriculture & Mechanical Arts began a formal study and improvement of this regional chile. He felt that chile could become a major commercial crop if adapted to American tastes: "The American people are beginning to cultivate a taste for [chile], and thus a greater demand is being created for this vegetable." His work over the next several years created a chile pepper that was more uniform in size and milder in taste than most native Mexican and New Mexican varieties. Chile soon became one of the local cash crops, and the southern New Mexico chile industry was born-focused on agricultural lands irrigated by the new Elephant Butte Dam around the village of Hatch. Today, Garcia is widely recognized as the "father of the New Mexico chile industry" for his pioneering research work, and the literal fruit of his research is broadly known as the New Mexico Chile.

Garcia's successors developed more New Mexican chile types— New Mexico 6-4, NuMex Big Jim, Española Improved—which became the major varieties grown by New Mexico farmers. Today's heir to the heritage of New Mexico chile researchers is Paul Bosland, known as Mr. Chileman, who has served as New Mexico State University's chief chile breeder since 1986 and co-founder/director of the Chile Pepper Institute—an organization devoted to education, research, and archiving information about all Capsicums and "the wonders of chile peppers." In addition to supporting scientific research, the institute sponsors the International Pepper Conference and certifies the world's hottest chile pepper—currently the Trinidad Moruga Scorpion at 1.2 million Scoville Heat Units (SHU). For comparison, the generic jalapeño pepper comes in at 3,500 to 8,000 SHUs.

Most chile peppers have the same kind of internal structure regardless of whether it is hot or mild, long and skinny, or short and fat. New Mexico State University researchers developed a classification system that combines scientific nomenclature and general identification to sort out and distinguish all the varietal types: 1) the scientific name of the pepper; 2) the pod type (or shape); and 3) the specific variety of the plant. When identifying chiles, think about the various terms we use to describe dogs. There are many species of dogs such as wolves, foxes, and domesticated dogs, just as there are scientific names of peppers such as *Capsicum annuum, Capsicum frutescens*. You can also describe dogs by types, collies, poodles, just as you can chile pods, jalapeño, ancho, and within each type you could describe some specific animals, like a toy poodle or a Sandia pepper variety.

From the earliest chile in Spanish colonial gardens five centuries ago, residents utilized last year's local seeds to produce next year's plants. Over time, each community's variety developed into something distinct due to the climate of each area. These variations might be in the shape of the pod, the fruit's pungency, or when it matured during the year. Scientists call these "landrace" chiles, but the locals referred to them by the names of the villages where each was grown—Española,



Some of the illustrative figures in Improved Variety No. 9 of Native Chile (1921) from Garcia's development of chile from types he found growing in Southern New Mexico and Northern Mexico. Garcia's "Improved Variety"... and "Chile Culture" are considered two of the seminal works on chile in the Southwest. Courtesy of New Mexico State University Archives & Special Collections.

Velarde, San Felipe Pueblo, and a dozen others. While these original landrace chiles can still be found, the influence of newer scientifically developed varieties, and a lack of interest among young residents, is leading toward the loss of these original descendant chiles. Perhaps the best known of these landrace chiles-and one of the varieties that appears to be survivingis Chimayó chile, which has been trademarked and produced by the Chimayo Chile Farmers, Inc., around its small, northern New Mexico village.



Ofella Sandoval picking chile from her Taos garden, 1939, photographed by Russell Lee. Courtesy of Library of Congress Prints & Photographs Division, from the U.S. Farm Security Administration – Office of War Information Photograph Collection.

But by far the best known of the New Mexico chiles

is Hatch chile, due to its extensive marketing and the annual festival of the same name-but most people do not know what a Hatch chile is. In fact, it is nothing more than a descriptive term for the fresh, long, green chiles grown in the area around Hatch. about 40 miles northwest of Las Cruces. Chile growing did not begin there until the 1920s, but in the span of a couple of years, local production went from 300 pounds to a quarter-million pounds. Today, an average year yields more than 21,000 tons, or 42 million pounds, of Hatch chile. By 1970, Hatch was called the Chile Capital of the World. Most varieties have mild heat ranging from 100 to 2,500 SHU, although farmers always produce a few acres of the hotter stuff. It has become so common that some outsiders unscrupulously market any green chile as Hatch Chile, regardless of whether it was grown there or not-leading the New Mexico Legislature to pass a truth-in-marketing law in 2011.

In New Mexico, chile isn't just about putting something spicy on your meal—it is thoroughly ingrained in the culture. During the late 1800s and early 1900s, the center of New Mexico chile production was the small Spanish communities north of Santa Fe along the foothills of the Sangre de Cristo Mountains. The railroad serving this area was the narrow-gauge Denver & Rio Grande Western line from Antonito, Colorado, to Santa Fe, which became popularly known as the "Chili Line" [sic]. The name came either from the fact that large quantities of chile were shipped out of the region each fall on the rails, or that chiles drying on racks or home roofs and hanging on ristra strings were a frequent sight along the line.

In the 1960s, the State Legislature decided that chile was of such distinctive importance that it should be named the state vegetable. Technically, since chile comes from the flower of the plant, it is a fruit. Some legislators objected, citing that dinner was not a New Mexico meal if it did not include frijole (pinto) beans. In the end, common sense won out—chiles and frijoles are inseparable parts of the New Mexican diet, so both were recognized as the State Vegetables in 1965.

The central role of chile and its influence in restaurants came before the Legislature a second time, in the 1990s. A resolution was passed in 1996 to designate the State Question: "Red or Green?" This referred to the query from restaurant servers to their customers about whether they preferred red or green chile sauce with their meal. For a decade, the official State Question plagued New Mexicans. Each person had their own preference, and non-residents were confused until someone explained it to them. Either way, a question begs an answer, so in 2007 the Legislature said the State Answer was "Christmas," referring to saying you want a combination of both red and green chile sauces on your plate.

A more recent phenomenon is the debate about Green Chile Cheeseburgers. Though popular among locals since the hamburger craze of the mid-1900s with the twist of adding green chile, and cheese, in the toppings, features and profiles on TV, including Food Network's "Throwdown with Bobby Flay" in 2009, has launched this into the national spotlight. In 2009, the Tourism Bureau launched the Green Chile Cheeseburger Trail to highlight this local favorite, and the New Mexico State Fair's Green Chile Cheeseburger Challenge has quickly become one of the highly anticipated and coveted title food contests each year.



A classic New Mexico restaurant dish with "Christmas" sauce. This work is a derivative of "Breakfast Burrito OR Cheese Enchilada" by alasam, used under CC BY-NC-ND 2.0.

As chile has graduated from a culinary ingredient to a cultural icon, a number of annual festivals celebrating chile and its products emerged in New Mexico. The Chile Capital of the World has hosted the Hatch Chile Festival since 1971. Each March, Albuquerque plays host to the National Fiery Foods & Barbecue Show, the premier event for salsa- and chile-based



Enthusiasts and foodies attending the Hatch Chile Festival. "More Booths" by Christopher Holden is licensed under CC BY-SA 2.0.

food dealers nationwide. The Fiery Foods show features the annual Scovie Awards, honoring Wilbur Scoville and his test to measure the "heat" in chile, and recognizes the best fiery food products from around the world. An upscale celebration since 1991 is the Santa Fe Wine & Chile Fiesta, featuring gourmet chile dishes and wines that go well together. From 1980 to 2014, the Whole Enchilada Fiesta in Las Cruces celebrated chile and its prominence in regional culture, as well as the world's largest flat enchilada, at just over 10.5 feet in diameter, in its final year. After the retirement of the fiesta's enchilada master, Las Crucesans now celebrate chile with the annual New Year's Chile Drop—an homage to New York's Times Square dropping of the big ball, featuring a 19-foot long chile pepper with a twist when it reaches the bottom and the new year begins, the chile turns either solid red or solid green.

Today, the future of New Mexico-grown chile is somewhat in question. Over the last 20 years, chile production has declined from 34,500 acres at its peak in 1992 to only about 8,000 acres today. Foreign-grown chile, chile wilt disease, and the lack of laborers to hand-pick chile at harvest time all threaten the industry. New Mexico State University researchers have worked for several years to improve disease resistance and to develop and improve a mechanical chile harvester. Meanwhile the New Mexico Chile Association, through its Keep New Mexico Green awareness campaign, and the New Mexico Department of Agriculture's Get Your Fix marketing campaign in over 2,000 grocery stores nationwide, focus attention on authentic, New Mexico grown chile. The latter program features roaster machines that blister and toast chile peppers for peeling and culinary preparation-generating a familiar and distinct smell that native New Mexicans know each fall, when it's time to go buy their chile by the boxful. Together with cross-marketing of chile with other deli and store ingredients, Hatch Chile Fest, Hatch-A-Palooza, Hatch-a-licious events, and Hatchennings are becoming popular fall grocery events every year throughout the United States.

Come find out more about the cultural heritage behind New Mexico chile at the Museum of Texas Tech University. *Red or*



A plate of a newer variety chile released by the Chile Pepper Institute called NuMex Sandia Select continues one of today's popular chile lines. Courtesy of New Mexico State University Communications.

Green?: The Origins and Cultural Significance of the Chile Pepper in New Mexico will be on exhibit from May 13 to Sept. 23 in the Balcony Gallery.

Editor's Note: The author wishes to acknowledge and thank the New Mexico Farm & Ranch Heritage Museum for allowing him to utilize its research and educational materials in the development of this article. Dr. Saffell formerly served as Curator of History there and curated the original Red or Green exhibit in 2010. Although he is a proud native Texan, his employees think he is un poco loco for including green chile in his potluck dishes since returning to Lubbock in 2012.

Red or Green?: The Origins and Cultural Significance of the Chile Pepper in New Mexico, May 13 – Sept. 23

Museum of Texas Tech University Association

2018 Art on the Llano Estacado Legacy Award Winner Garland Weeks

The Museum of Texas Tech University Association honored Garland Weeks with the Legacy Award during its 2018 Art on the Llano Estacado. The Legacy Award acknowledges and honors an artist's lifetime achievement.

Weeks has done a little bit of everything during his lifetime: earned an agriculture economics degree from Texas Tech; served his country with the U.S. Army in Vietnam; worked for T. Boone Pickens and Mesa Petroleum; did a stint with the





Rimrock Cattle Company; and served with the Texas Cattle Feeders Association for a spell.

But what Garland Weeks of Lubbock really does best – and enjoys most – is sculpting. His diverse and impressive portfolio of works spanning a 45-year career in bronze can be found throughout Texas and the United States. His work is well recognized.

"I am the only graduate of Texas Tech University to be elected to the National Sculpture Society (1990) for full membership," Weeks said with pride. "I was then advanced to status of Fellow in 2004, and I was elected to its national board of directors in 2009."

There have been other honors as well, including his designation as the Official State Sculptor of Texas by the Texas Legislature in 1995, gaining full membership in the National Academy of Western Art in 1990, and serving as the Kenan Master Sculptor in Residence at Brookgreen Gardens, South Carolina, in 2002.

There is a little bit of just about everything in Weeks' bronzes. There are animals and cowboys and soldiers and generals and early settlers and baseball mitts and bats and American heroes. "I am motivated by curiosity of Mother Nature and mankind in general," he explains, who was born in Amarillo but raised and schooled in Wichita Falls. "Anthropology and archaeology fascinate me. The history of Texas and the Southwest. The flora and fauna of Texas and the Southwest. I love it."

Some of Weeks' better-known works include:

• A life-size monument of Old Yeller in Mason, Texas, memorializing the author Fred Gipson, who penned the memorable book that was subsequently made into the movie.

• A life-size monument at the Kansas Cosmosphere and Space Center in Hutchinson, Kansas, memorializing astronaut Gene Cernan, the last man to walk on the moon.

• A life-size Revolutionary War memorial honoring Gen. Francis Marion, the Swamp Fox of the Revolution, in Moncks Corner, South Carolina, as well as for the campus of Francis Marion University in Florence, South Carolina.

• In Lubbock, a larger-than-life portrait bust of former Texas Gov. Preston Smith; a life-size sculpture of a cowboy, Between Broncs, for the National Ranching Heritage Center; a three-figure life-size First Responders memorial; and numerous awards for the College Baseball Hall of Fame.

• Life-size portraits of Gen. Adna R. Chaffee at Fort Chaffee, Arkansas, and General Peter Horry in Horry County, South Carolina.

Some of his other works, located in Texas, include a World War II infantry soldier in Tyler; the Ram's Head Fountain at Angelo State University in San Angelo; an over-life-size monument of early 20th century settlers of Wichita Falls; and one for the Texas Medical Association in Austin.

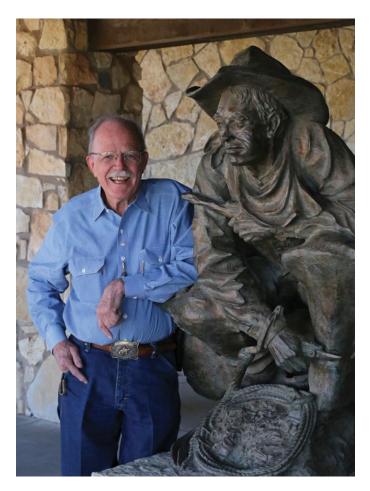
In spring 2018, Weeks celebrated the unveiling of a war memorial for Gold Star Families of Parker County, Texas, as well as an over-life-size Vietnam War Memorial For Those We Shall Never Forget for the Daughters of the American Revolution in Wichita Falls.

As one might expect, Weeks enjoys the simple things in life and relishes his heritage. The only son of Glynn and Madeline Weeks, he and sister Glynda Marie are sixth-generation Texans going back to 1835. His parents were married in the same living room in Southland in which his mother was born 21 years earlier.

"I like Bob Wills' music and Western Swing, representational art, doing business with a handshake, kind people, my life and my family and my friends, my job and being from Texas – especially from West Texas," he said in all earnestness. "What I don't like is bickering and petty politics, complainers and halfempty-glass people. Oh, and bitterly cold weather. "I value trustworthiness and loyalty, friendships – old and new – and family history."

Weeks has been a part of Art on the Llano since its inauguration in 2012. He has contributed to the success of the show by serving on the committee and by helping set up the exhibition.

Editor's Note: Interview of Garland Weeks provided by City Bank, a sponsor of Art on the Llano.





In Memoriam: **Robert Baker**



Dr. Robert J. Baker, retired Horn Professor and a founder of the Natural Science Research Laboratory (NSRL) at the Museum of Texas Tech University, passed away March 30.

Dr. Baker joined the Texas Tech faculty in 1967, where he spent 48 years in the Department of Biological Sciences. He was named as the first director of the NSRL in 1976 and held that position until he retired in 2015. He was recognized as a distinguished teacher and research scientist by Texas Tech and several professional scientific organizations. In 1979, he was named a Paul Whitfield Horn Professor, the university's highest honor for a faculty member.

His primary research interests focused on determining the biological effects of living in the highly polluted environment generated by the meltdown of the Chornobyl Nuclear Plant and the study of the American Leaf-Nosed bats, family Phyllostomidae.

Dr. Baker was active in many scientific societies, including serving as president of the American Society of Mammalogists, Southwestern Association of Naturalists, and Texas Society of Mammalogists. He was known nationally and internationally for his scholarship, research productivity, and education of graduate and undergraduate students.

The family suggests donations to the Natural Science Research Laboratory Fund for Excellence or the Bobby Baker Memorial Scholarship Fund. For more information, contact Emily Phillips, Museum development director, at 806-834-5111





Calendar

American Quran for land Arts

For the past 20 years, Southern California painter Sandow Birk has focused on applying the vision and scope of history painting to examining issues of contemporary relevance. Taking over a decade to complete, American Qur'an is Birk's most ambitious project to date. Birk hand-transcribed and illustrated every verse of the holy book of Islam using the calligraphy of the individual verses to frame scenes of contemporary American life. Inspired by travel in the Islamic regions of the world and informed by extensive research in collections of Islamic art and manuscripts, Birk's undertaking emerges from a conviction that despite the U.S. having recently engaged in wars with Muslim nations as well as stateless organizations, the text of the Qur'an offers universal principles intended for all nations. American Qur'an explores how this religious text might have meaning for Americans in the second decade of the 21st century.

August 2018 - January 2019

Grasslands of North America and Africa

This exhibit features the underutilized and little-known taxidermy mount collection of the Natural Science Research Laboratory of the Museum. This collection contains rare and charismatic species, including many herbivores and carnivores of the African Savannah and the North American prairies. In addition, the exhibit highlights the ecological parameters of these grasslands, as well as explores the natural history attributes of the animals that live in these regions.

Through Jan. 2019

Wildlife Photographer of the Year

The world-renowned exhibition, on loan from the Natural History Museum in London, is made up of 100 extraordinary images celebrating the diversity of the natural world, from intimate animal portraits to astonishing wild landscapes. *Wildlife Photographer of the Year* is the most prestigious photography event of its kind, providing a global platform that showcases the natural world's most astonishing and challenging sights for over 50 years. Winning images are selected for their creativity, originality, and technical excellence. Launching in 1965 and attracting 361 entries that year, today the competition receives almost 50,000 entries from 92 countries, highlighting its enduring appeal.



March 2 - July 1, 2018



A Most Misunderstood Landscape

The exhibit *A Most Misunderstood Landscape*, on display at the Lubbock Lake Landmark, explores the history and importance of grasslands and the Landmark's ongoing efforts to restore the prairie of Yellowhouse Draw. The grasslands of the Great Plains in their native state were a mix of short, tall, and mixed grass prairies that supported abundant plant and animal communities. They covered approximately 40 percent of the United States. Grasslands were the nation's largest ecosystem and now are the one most in danger of disappearing.

March 10 - late April 2018

When Harry Met Meghan

Prince Harry, or more formally, Henry of Wales, married American Meghan Markle at Windsor Castle in England on May 19, 2018. Theirs is a relationship that once would have created all sorts of controversy in royal circles, because Meghan is Catholic, divorced, and has an African-American mother. Today however, they are seen as perfect young royals in the modern world – socially conscientious, chatty and charming, and – most importantly – highly photogenic. The exhibit introduces features some of the monarchs of England and the United Kingdom. You will learn about their place in history and a little about some of their stories of love. From the legendary Arthur and Guinevere to modern day Queen Elizabeth I, we meet such famous characters as Henry VIII and his six wives, Elizabeth I, the 'virgin queen,' and Queen Victoria whose love for Albert was almost obsessive, but did not stop her from ruling an empire that stretched around the world.

April 7 – July 8





Red or Green: The Origins and Cultural Significance of the Chile

Chile is the subject of a fun and educational traveling exhibit from the New Mexico Farm & Ranch Museum in Las Cruces. The exhibit focuses on New Mexico chile varieties, their history and evolution, and how they came to have such a central place in the state's culture. A major theme of the exhibit is how chile became such an integral part of New Mexico without being native. The exhibit traces the origins of the chile and how the Spanish brought the plant to the American Southwest in the early 1600s. It features the emergence of regional production centers such as Hatch and Chimayo, and the development of specific varieties by researchers such as Fabian Garcia at New Mexico A&MA College in the early 1900s.

May 13 - September 23



The Red That Colored the World

The exhibition combines new research and original scholarship to explore the history and widespread use in art of cochineal, an insect-based dye source for the color red whose origins and use date to the pre-Columbian Americas. Highlighting more than 60 objects including textiles, sculpture, paintings, arts, and clothing from the Museum of International Folk Art in Santa Fe, private lenders, and museums around the country, the exhibition explores the history of cochineal and the seductive visual nature of red. The objects reflect the unique international uses of color, revealing its role in the creative process, and the motivations of artists in their choice of materials.

Sept. 17, 2018 – Jan. 17, 2019

Hold Your Event at the Museum

The Museum of Texas Tech University is available to host events ranging from small meetings to banquets to stage performances!

The facilities include the Helen DeVitt Jones Sculpture Court, a 12,500 square-foot area which soars two full stories in height and features twelve large skylights. Two independently controlled lighting systems provide several options for illuminating evening events. The Sculpture Court can accommodate up to 450 standing guests, or tabled seating for up to 300.



Adjoining the Sculpture Court is the Helen

DeVitt Jones Auditorium. Featuring a recently updated sound and video system, the auditorium has seating for 287. A rear-projection video system provides flexibility for presentations. The auditorium has a small performance stage, dressing and green rooms.

Our three meeting rooms span styles from straightforward to executive and can hold groups up to 88. Meeting rooms with full audio/visual capability are available in multiple sizes. Each space can be customized with projectors and microphones to meet any audio/visual need, including a slide projector. Room packages are available for small receptions or birthday parties, too.

In opening our meeting and venue spaces to the general public, the Museum becomes more than a place to visit every few months, more than a place where dinosaurs roam and art hangs on the wall. We are a resource that can be utilized on a daily basis; a vibrant, thriving, useful contributor to both the general public and the business community. We want to be the exceptional setting for your next event.

For more information find Rent the Museum on our website at www.museum.ttu.edu/about/facilities or email museum. texastech@ttu.edu or call (806) 742-2490.





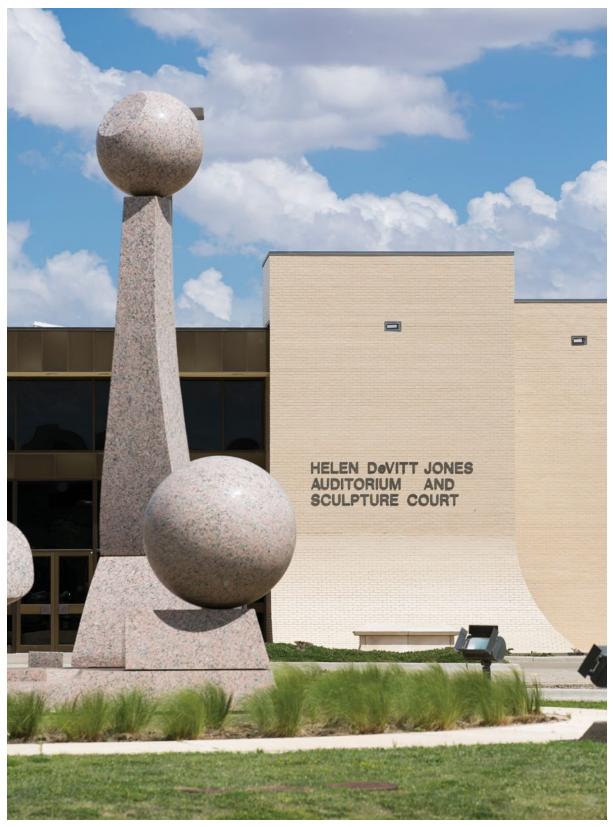


Photo: Ashley Rodgers

You can support the Museum

The Museum of Texas Tech University runs a wonderfully diverse program. We cover an extraordinary range of disciplines and collection areas, from the fine arts to the sciences. We carry out research on the collections and in the field, we develop exhibitions about all of the areas of our collections, and we present a wide range of events and educational activities for audiences spanning the entire community.

You can help us to do these things in two ways.

You can become a member of the Museum of Texas Tech University Association. This membership group has been a partner of the Museum since the Museum's beginning almost 90 years ago. You and your family can enjoy events and activities and know that your membership fees help the Museum in many different ways. For more information about the Association go to www.mottua.org.

The other way to support the Museum is through cash donations, bequests, and endowments. We accept donations of any amount as every bit helps. Donations or questions can be addressed to:

Emily Phillips Development Officer Museum of Texas Tech University Box 43191 Lubbock Texas 79409-3191.

Or email e.phillips@ttu.edu or call (806) 834 2833.

If you would like to discuss larger gifts and endowments, please contact either Emily Phillips Development Officer or the Museum's Executive Director, Dr. Gary Morgan on (806) 834-2792 or gary.morgan@ttu.edu.

If you have works of art or artifacts that you would like to see held safely in a publicly accessible collection, then we also welcome your contacting us. One of our curators will assess whether or not the objects align with the collection development priorities of the Museum. Collection donations can attract tax benefits.

Yes! I want to become a member in the Museum Association at the following level:

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Ladies in Red Opening September II through January 17

Red Hot and Quilted Opening September 25 through January 17

