

# PANORAMA

KU Biodiversity Institute & Natural History Museum

SUMMER 2019



June

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**Community// Saturday, June 1 National Prairie Day + Prairie Block Party**  
9:00am - 1:00pm  
Burroughs Creek Park  
900 E 15th Street

Join us for a celebration of National Prairie Day and National Trails Day, as well as the official ribbon-cutting ceremony for the new Prairie Block Project at Burroughs Creek Park. Come try out our "bison goggles" and learn to do the dance of the Greater Prairie Chicken with museum staff! Organized by the Kansas Biological Survey, the Jayhawk Audubon Society, and the Friends of Lawrence Area Trails, this event will feature many great activities for all ages!

**Community// Saturday, June 15 Pop Up Science! Human Anatomy**  
10:00am - 12:00pm  
KU Natural History Museum

Join us for Pop Up Science, a monthly family-oriented program with a hands-on science learning activity in one of the museum galleries, led by our experienced museum volunteers. This month, learn how your lungs function and practice your surgical skills with our giant Anatomy Alex game!

**Community// Saturday, June 15 Our Fragile World: Family Activities on Nature + Climate Change**  
2:00pm - 4:00pm  
Watkins Museum of History  
1047 Massachusetts, Lawrence

Experience our changing natural world through hands-on activities at the Watkins Museum with staff from the KU Natural History Museum, Watkins, and the Spencer Museum of Art as we celebrate Watkins' upcoming exhibit, Flooding in Lawrence. Join us in exploring floods throughout Lawrence's history, and learn more about climate change and what we can do about it.

**Adults// Wednesday, June 19 Science on Tap: Birds, Bones, Beetles + Bunker**  
7:30pm - 9:00pm  
Free State Brewing Co.  
636 Massachusetts, Lawrence

Author Chuck Warner will talk about his new book, *Birds, Bones, and Beetles: The Improbable Career and Remarkable Legacy of University of Kansas Naturalist Charles D. Bunker*. In addition to discovering the famous *Tylosaurus* mosasaur specimen, Bunker is credited with creating the first complete catalog of the KU Natural History Museum's collections and with guiding the Ornithology division to national prominence in the 1930s. He'll share information on Bunker's lasting contributions to the natural sciences through museum collections, mentoring, and research. Copies of the book will be available for purchase.

July

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**Community// Thursday, July 11 Trees, Shrubs, + Woody Vines in Kansas: An evening with author Craig C. Freeman**  
7:00pm - 9:00pm  
KU Natural History Museum

You're invited to a celebratory book release of the revised and expanded *Trees, Shrubs, and Woody Vines in Kansas*, a guidebook by Michael John Haddock (Kansas State University) and Craig C. Freeman (University of Kansas). Dr. Freeman, curator-in-charge of the KU Biodiversity Institute's McGregor Herbarium, will talk about the updates made to expand H.A. Stephens' 1969 classic field guide. Enjoy light refreshments and explore the museum before the presentation. Copies of the book will be available for purchase.

**Adults// Wednesday, July 17 Science on Tap: Gomphotheres + Silkville: Little Known Stories about Woody Plants Around Us**  
7:30pm - 9:00 pm  
Free State Brewing Co.  
636 Massachusetts, Lawrence

Since the 1860s, nearly 2,200 species of flowering plants, cone-bearing plants, and ferns have been documented in the wild in Kansas. Woody plants—trees, shrubs, and lianas—are a relatively minor component of the state's flora but have enormous influence on the ecology, history, culture, and economy of Kansas. Craig Freeman, curator of botany at the KU Biodiversity Institute, will highlight the roles of some of these species in shaping our landscapes, lives, and legacy.

**Community// Saturday, July 20 Pop Up Science! Plant Science**  
10:00am - 12:00pm  
KU Natural History Museum

Join us for Pop Up Science, our monthly family-oriented program with a hands-on science learning activity in one of the museum galleries. This month, our museum volunteers will help you conduct plant experiments, including the dissection of a flower!

**Community// Saturday, July 20 Paleo Garden Plant Sale**  
10:00am - 3:00pm  
KU Natural History Museum

Take a piece of our living exhibit home with you! We're holding a paleo garden plant sale in the lobby, featuring potted cuttings from a variety of clubmoss species and flowering seed plants. Proceeds from this one-day-only sale will support the ongoing care of our paleo garden. Note: Limited quantities; only while supplies last.

**Community// Sunday, July 28 Discovery Day: Teeny Tiny Organisms**  
1:00pm - 3:00pm  
KU Natural History Museum

Explore the biodiversity of microscopic life, from tardigrades to microbes to fossilized organisms smaller than a grain of rice! Escape the summer heat and enjoy an educational afternoon at the museum. We'll have specimens on display, hands-on activities, and scavenger hunts for the entire family.

August

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**Community// Saturday, August 17 Art Cart: Stacked Symbols**  
1:00pm - 3:30pm  
Spencer Museum of Art

We'll be at the Spencer Museum of Art for this special Art Cart: Stacked Symbols. Explore a totem pole created by artist Luke Watson and view specimens from the collections of the KU Natural History Museum of real animals often depicted on totem poles.

**KU Students// Friday, August 23 Hawk Week Welcome Walk-By**  
1:00pm - 4:00pm  
Outside of the KU Natural History Museum

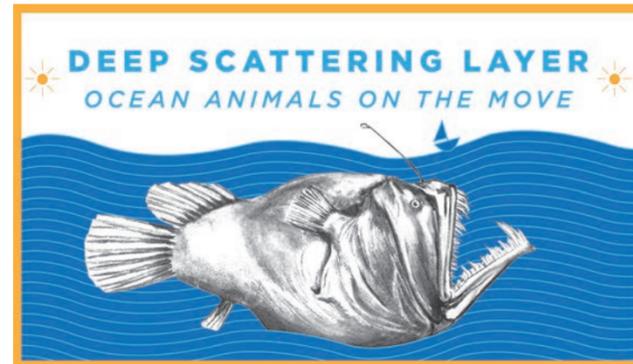
We're welcoming new Jayhawks to campus during Hawk Week! We'll be stationed outside of Dyche Hall, home of the KU Natural History Museum and Biodiversity Institute—stop by and say hello! We'll have free t-shirts (while they last), cold bottles of water, and a few surprises on hand for new students.

**KU Students// Friday, August 23 Union-Fest: Mobile Museum**  
7:00pm - 10:00pm  
Outside of the Kansas Memorial Union

We're excited to be a part of UnionFest this year, the official KU Student Union Activities (SUA) student welcome event. We'll have our pop-up mobile museum with more than 15 displays of specimens, plus fun activities such as "Can You Outrun a T.rex?" and more!

NEW EXHIBIT TO OPEN LATE SUMMER

As night approaches, ocean animals ascend from various depths to graze or hunt near the surface. Before daybreak, they descend back to their deeper, daytime residence. These vertical migrations make up the deep scattering layer. Visit the 6th floor of the museum to learn more about our new exhibit Deep Scattering Layer: Ocean animals on the move.



EXHIBITS



COOL OFF WITH THE NEWLY RESTORED POLAR BEAR

Get out your selfie sticks! Our beloved polar bear is back on display after receiving important repair work to its tail, face, and base. Thank you to our Party in the Panorama donors who made these repairs possible!

FROM OUR DIRECTOR



Leonard Krishtalka  
Museum Director

On Monday, April 1, we said, "stop the presses!" No fooling. This column had already been drafted. Then came the publication of the April 1 issue of Proceedings of the National Academy of Sciences (PNAS) in which our Museum scientists and their colleagues announced two spectacular research breakthroughs that captured international attention.

The first is by Museum vertebrate paleontology scientists: graduate student Robert DePalma, David Burnham, and their international colleagues. They unveiled a site in North Dakota that preserves the first chaotic minutes after a giant meteorite crashed into the Earth in the Gulf of Mexico 66 million years ago. The impact launched 28 trillion tons of molten, pulverized rock into the atmosphere, much of which rained back down onto the surface of the Earth and formed the signature geologic stratum worldwide that, like a stopwatch, marks the exact end of the Mesozoic Era—the era of dinosaurs—and the Cretaceous Period. The North Dakota site, a fossil lake, is that geological stopwatch. Among other features, it preserves a petrified, dead-zone of fish whose gills are choked with tektites, the glass spherules forged from the molten rock. The discovery was featured on March 29 in The New York Times, Washington Post and New Yorker Magazine, and on March 31 in National Geographic.

There is wonderful prescience here: KU, in February, honored Burnham's work on dinosaurs and fossil birds with its first Research Achievement Award. The honors for Museum scientists continued in March, when KU recognized Kirsten Jensen's research with the University Scholarly Achievement Award. An intrepid, sea-going explorer, Jensen deciphers the diversity and evolution of parasites that inhabit the guts of sharks, skates and rays. You can see the brilliant fusion of her science and art displayed on the 6th floor.

The second breakthrough in PNAS is by Museum ornithology scientists Rob Moyle, Town Peterson, and Mark Robbins, along with four former ornithology graduate students, and their colleagues. One of the former students, Carl Oliveros, led the study, which analyzed the DNA data from 137 families of perching birds—passerines, the most diverse of avian groups—and completely shook up the bird family tree into a new pattern of evolutionary relationships. The new tree, combined with the record of fossil birds, past climate change, continental drift, and glaciation events, shows that passerine birds originated some 47 million years ago on the Australian landmass, while it was drifting eastward with its passel of ancestral species.

Writing in the Journal of the Geological Society, Museum invertebrate paleontologists Julian Kimmig, Sara Kimmig, Bruce Lieberman, former Postdoctoral Fellow Luke Strotz, and a colleague highlighted more than 50 species of fossil arthropods, worms, mollusks, and other animals that lived 505 million years ago in Utah. Remarkably, the animals are preserved as soft bodies, exposing previously unknown anatomy.

Every day, we reveal more of the life of the planet. Join us.

*L. Krishtalka*

PROGRAMS + PROJECT NEWS



SCOUT PROGRAMS

We're now offering outreach programs for scouts! Girl Scouts, Cub Scouts, and Boy Scouts can earn science- and nature-themed badges via fun and educational workshops at the museum.

Learn more at [biodiversity.ku.edu/scouts](http://biodiversity.ku.edu/scouts).

REGISTER BY AUGUST 1 FOR SCHOOL PROGRAMS

We have a variety of school programs for K-12 classes including a new Kindergarten program: Explore Animals. In this program, groups of 30 students will investigate museum specimens for patterns and listen to story time to discover the things that make animals the same and different.

Call Public Education at 785.864.4173 for more information.



MOBILE MUSEUM ON TOUR

Our pop-up Mobile Museum will travel to Salina, Great Bend, and Garden City in July 2019! Youth and families in these Kansas communities will have the opportunity to explore natural history collections up close and learn about fossils through a donor-funded outreach project. These outreach events will feature displays of more than 90 species plus hands-on paleontology activities. Each community will also receive a *Mosasaurus* skull cast and a story book about mosasaurs and other prehistoric creatures.

Details will be announced on our website at [biodiversity.ku.edu](http://biodiversity.ku.edu).



CONSTRUCTION ON JAYHAWK BOULEVARD  
Impacts Museum Entrance: May 20 - August 9

Construction on Jayhawk Blvd. will cause road and walkway closures surrounding the museum. Visitors will need to pass through the Kansas Memorial Union on their way to and from the Mississippi St. Parking Garage to access the museum. When the Union is closed, an alternate route east of Jayhawk Blvd. and behind Smith Hall to and from the parking garage is available.

Please see our website, [biodiversity.ku.edu](http://biodiversity.ku.edu), for more information.

MEMBERSHIP + VOLUNTEER

As a Friend of the KU Natural History Museum, you can open doors to museums worldwide while supporting our public science events, exhibits, education + research.

KU student membership	\$15
Household membership	\$60+
KU staff, faculty or student plus family	\$55+
Explorer's Club*	\$500+
Director's Society*	\$1,000+
Lifetime Family*	\$1,500+

Membership includes:

- Free admission to the KU Natural History Museum
- Reciprocal free admission to 300+ natural history museums and science centers
- Discount on museum summer camp programs
- 10% discount at the museum gift shop
- Subscription to bimonthly e-newsletter

Contact:  
Phone: 785.864.4450  
Email: [biodiversity@ku.edu](mailto:biodiversity@ku.edu)  
Web: [biodiversity.ku.edu](http://biodiversity.ku.edu)

Museum Hours:  
Tues-Sat: 9:00am-5:00pm  
Sun: Noon-4:00pm  
Closed Mondays

Museum Visitor Information:  
785.864.4450

Social:  
Facebook: [kunaturalhistory](https://www.facebook.com/kunaturalhistory)  
Twitter: @kunhm  
Instagram: @kunaturalhistory  
#KUnhm  
KU Natural History Museum  
1345 Jayhawk Blvd.  
Lawrence, KS 66045

PANORAMA is published three times per year by the KU Biodiversity Institute and features research news + KU Natural History Museum events and activities. The newsletter is free to museum members + friends. To receive by mail, email: [biodiversity@ku.edu](mailto:biodiversity@ku.edu)

Premium Memberships\*

If you join at the Explorer's Club level or above, you will enjoy these benefits plus receive invitations to special events. You'll also have the opportunity to go behind the scenes to learn about our collections!

100% of membership gifts support the Friends of the Museum fund. All memberships are good for one year from the date of purchase.

VOLUNTEER WITH US

Museum volunteers are an integral part of the museum and assist visitors in a variety of ways.

Available Positions:

- *Museum Greeter*  
Welcome museum visitors and process contributions
- *Museum Tidiness Assistant*  
Help keep our museum clean and tidy for our guests
- *Science Corps Volunteer*  
Assist with museum outreach events for children and families

TO VOLUNTEER WITH US, PLEASE VISIT: [biodiversity.ku.edu/volunteer](http://biodiversity.ku.edu/volunteer)  
Questions? Contact: Erin Huneke, Visitor Services Manager, at [erinhuneke@ku.edu](mailto:erinhuneke@ku.edu) or 785.864.4450.

