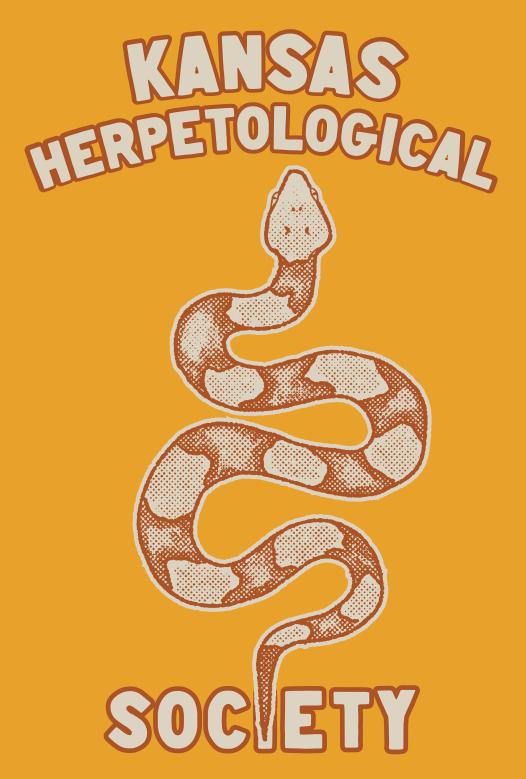
50TH ANNUAL MEETING



NOVEMBER 3-5, 2023 THE UNIVERSITY OF KANSAS

Laurence, Kansas

ACKNOWLEDGMENTS:

Local Committee: Rich Glor (Chairperson)

Rafe Brown Ana Motta

Sponsors: University of Kansas Biodiversity Institute, Lawrence, Kansas

The Center for North American Herpetology, Lawrence, Kansas

JTC Enterprises, LLC, Lawrence, Kansas Free State Beer, Lawrence, Kansas

Volunteers: Wendy Holman, Kansas Biological Survey

Rafe Brown, KU Biodiversity Institute
Ana Motta, KU Biodiversity Institute
Rich Glor, KU Biodiversity Institute
Errol Hooper, KU Biodiversity Institute
Javier Torres, KU Biodiversity Institute
Mark Herr, KU Biodiversity Institute
Christian Supsup, KU Biodiversity Institute
Hannah Som, KU Biodiversity Institute
Camila Meneses, KU Biodiversity Institute
Chan Kin Onn, KU Biodiversity Institute
Kier Pitogo, KU Biodiversity Institute

Saymé Pérez Martínez, KU Biodiversity Institute

Tom Luhring, Wichita State University Shania Burkhead, Wichita State University Sydney Falcon, Wichita State University

Grace Schafer

No-host Social

7:00 to 10:00 pm Johny's Tavern (Original) 401 N 2nd St, Lawrence, KS 66044

FRIDAY • 3 NOVEMBER 2023

Afternoon Tours: (by registration; see KHS website) Herpetology Division, KU Biodiversity Institute Fitch Reserve, KU Ecological Areas and Reserves

- Evening Social: -

6:30 to 9:00 pm

Dyche Hall Panorama

Herpetology Quiz: 7:15 to 8:15 pm

Beverages and snacks provided: 7:00 to 8:45 pm

SATURDAY • 4 NOVEMBER 2023

8:00 am Registration: **Keith Geluso** (KHS Secretary) and **Dexter R. Mardis** (KHS Treasurer) in the *Burge Union*.

Poster set-up. Drinks and snacks available.

PLEASE NOTE: Photographers competing for The Suzanne L. & Joseph T. Collins Award for Excellence in Kansas

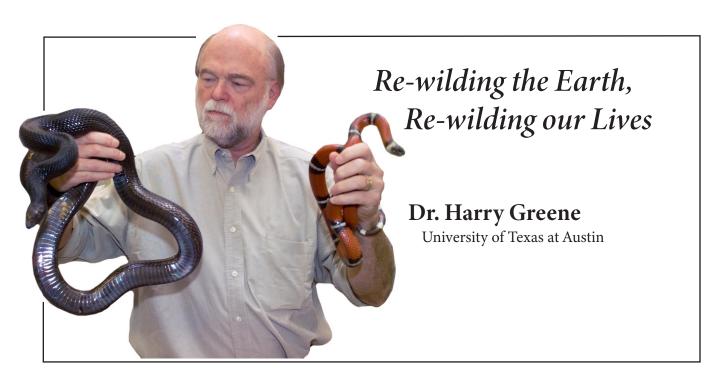
Herpetology must get their submissions set up and ready for viewing.

Posters are available all day. Presenters are asked to be at their poster between 10:00 and 11:00 AM Sunday.

All-day Identify that Kansas Herp Quiz (Burge Union)

9:00 am Welcome by **Rafe Brown** KHS President, The University of Kansas.

MORNING KEYNOTE



Scientific Paper Session 1 - Moderator: Bill Stark, Fort Hays State University, Hays, Kansas

10:15 am HOT TIMES AT WEST TEXAS MOUNTAIN HIGH: THE SPATIAL AND THERMAL RELATIONSHIP OF THREE SYMPATRIC RATTLESNAKES.

Joshua J. Mead (jjmead@miners.utep.edu) and Jerry D. Johnson. Department of Biological Sciences, University of Texas at El Paso, El Paso, Texas.

10:30 am USING GENETICS TO UNRAVEL THE ECOLOGY OF A TEGU INVASION.

¹Rachel N. Pikstein (rpbiologist@gmail.com), ²Walter E. Meshaka Jr., ¹Jeffrey S. Forrester, ¹Dean Williams, ¹Cydney M. Andrew, ¹Joseph B. Nies, ¹Brent Hilla, and ¹Matthew L. Arnold. ¹Pikstein Laboratory (NFP), Grand Canyon University, Phoenix, Arizona, ²Section of Zoology and Botany, State Museum of Pennsylvania, Harrisburg, Pennsylvania.

10:45 am CONSERVATION ANALYSIS OF CHIHUAHUAN GREEN TOADS, *ANAXYRUS DEBILIS*, IN WESTERN KANSAS. **Mackenzie Reh** (mgzielke@mail.fhsu.edu) and Dr. William Stark. Department of Biological Sciences Department, Fort Hays State University, Hays, Kansas.

11:00 am HISTORICAL CONTEXT AND PRELIMINARY HERPETOFAUNA SURVEYS ON FORT LEAVENWORTH MILITARY RESERVATION.

Nora K. Lazerus (nklazerus@fhsu.edu), William J. Stark, and Jacob N. Alexander. Department of Biological Sciences, Fort Hays State University, Hays, Kansas.

11:15 am POND(ERING) NORTHERN WATERSNAKE, *NERODIA SIPEDON*, LONG-TERM DEMOGRAPHY IN A NORTHERN ALLEGHENY WETLAND MATRIX.

¹Walter E. Meshaka, Jr. (wmeshaka@pa.gov), ²Daniel F. Hughes, and ³Stanley E. Trauth. ¹Section of Zoology and Botany, State Museum of Pennsylvania, Harrisburg, Pennsylvania, ²Department of Biology, Coe College, Cedar Rapids, Iowa, ³Trauth Histo-herpetology Lab, Arkansas State University, Morrilton, Arkansas.

KHS GROUP PHOTOGRAPH (Chan Kin Onn, The University of Kansas)

LUNCH: 11:45 am to 1:00 pm (Meeting participants are expected to forage independently, or in large groups if this provides leverage)

Scientific Paper Session II - Moderator: Walter E. Meshaka, Jr., State Museum of Pennsylvania, Harrisburg, Pennsylvania

1:00 pm ARE ALL ARTIFICIAL COVER OBJECTS EQUALLY EFFECTIVE IN REPTILE SURVEYS?

Greg Sievert (gsievert@g.emporia.edu). Department of Biological Sciences, Emporia State University, Emporia, Kansas.

1:15 pm REVISITING A LEGACY DATA SET: VARIATION IN THE REPRODUCTIVE VALUE OF WESTERN RAT SNAKES, PANTHEROPHIS OBSOLETUS.

¹**J. Daren Riedle** (daren.riedle@ks.gov) and ²George Pisani. ¹Kansas Department of Wildlife and Parks, Pratt, Kansas, ²Kansas Biological Survey, Lawrence, Kansas.

1:30 pm A FIELD-BASED COMPARISON OF PIT TAGS AND PHOTO RECOGNITION.

Jacob Kearns (jakearns@shockers.wichita.edu), Sydney Falcon, Megan Flanagan, and Thomas M. Luhring. Wichita State University, Wichita, Kansas.

1:45 pm USING FROG CALL SURVEYS TO ASSESS THE STATUS OF CRAWFISH FROGS (*LITHOBATES AREOLATUS*) IN OKLAHOMA.

Kaleb M. Banks (kaleb.banks@okstate.edu), Owen M. Edwards, Bo Zhang, and Michael S. Reichert. Oklahoma State University, Stillwater, Oklahoma.

2:15 pm (PRELIMINARY REPORT) SURVIVORSHIP AND SPATIAL USE OF HEADSTARTED TEXAS HORNED LIZARDS (PHRYNOSOMA CORNUTUM) SOFT-RELEASED AS ADULTS INTO AN URBAN POPULATION.

Forrest Nielsen (forrest.nielsen@ou.edu). University of Oklahoma, Norman, Oklahoma.

2:25 pm SURVEY OF AMPHIBIANS AND REPTILES AT A RESTORED PRAIRIE ON THE CAMPUS OF MISSOURI WEST-ERN STATE UNIVERSITY.

> Mark S. Mills (mmills3@missouriwestern.edu), Destiny Christopher, Yu Kai Ng, Monet Phipps, and Zachary Hendrickson. Missouri Western State University, St. Joseph, Missouri.

2:35 pm GEOGRAPHIC VARIATION COMPLICATES THE IDENTIFICATION OF CHORUS FROGS NEAR RANGE BOUNDARIES.

> ^{1,2}Taylor Michael (taylormichael@ku.edu), ²Christine Rega-Brodsky, and ²Andrew George. ¹University of Kansas, Lawrence, Kansas; ²Pittsburg State University, Pittsburg, Kansas.

2:45 pm TOASTY TESSELATA: THERMAL ECOLOGY OF THE CHECKERED WHIPTAIL IN THE CHIHUAHUAN DES-ERT.

> ¹Spencer J. Duffendack (sjd6884@truman.edu), ²Océane Da Cunha, ²Joshua J. Mead, ²Ximena Larrieu, ²Simon L. Terrazas, ¹Chad E. Montgomery, and ²Jerry D. Johnson. ¹Truman State University, Biology Department, Kirksville, Missouri; ²University of Texas at El Paso, El Paso, Texas.

HARD TOPICS: THE CHALLENGES OF STUDYING A NEAR-THREATENED (OR MAYBE UNDER-RE-2:55 pm SEARCHED?) TURTLE.

> ¹Thomas M. Zapletal (tz56s@missouristate.edu), ¹Larissa Saarel, ^{1,2}Donald T. McKnight, ¹Day B. Ligon. ¹Department of Biology, Missouri State University, Springfield, Missouri; ²Belize Turtle Ecology Lab, Savanna Field Station, La Democracia, Belize District, Belize.

A TURTLE IN HAND MEANS MORE IN THE BUSH: CONSERVATION EDUCATION STRATEGIES. 3:10 pm Monica Macoubrie (monica.macoubrie@nebraska.gov). Nebraska Game and Parks, Lincoln, Nebraska.

– KHS General Business Meeting -

KHS General Business Meeting, KHS President Rafe Brown presiding

Introduction of KHS Officers & Committee Chairpersons

KHS Treasurer's Report by Dexter R. Mardis

KHS Secretary's Report by Keith Geluso

KHS Editor's Report by J. Daren Riedle

KHS Historian's Report by Suzanne L. Collins

KHS Field Trip Report by Travis W. Taggart

Report on Plans for the 51st Annual KHS Meeting on the first weekend in November 2024 by KHS President-Elect Bill Stark, Fort Hays State University, Hays, Kansas

Election of KHS Officers for 2024

Lynnette Sievert (Emporia, Kansas), the KHS Nominating Committee, offers the following slate

For President-Elect • Kelly Kluthe, Kansas City, Missouri and Alexis Powell, Emporia, Kansas

For Treasurer • Dexter R. Mardis, Wichita, Kansas

For Secretary • Keith Geluso, Kearney, Nebraska

Announcement of the results of the KHS election by KHS President Rafe Brown

DINNER ca. 5:00 to 6:00 pm (Meeting participants are again expected to forage, this time with greater skill because of their lunch-time experience.)

3:25 pm

6:00 pm Oread Hotel

1200 Oread Avenue

6:30 pm EVENING KEYNOTE

Uncovering the Evolutionary Drivers of Speciation in Chorus Frogs

Emily Moriarty-Lemmon Florida State Univeristy



7:15 pm KHS AWARDS CEREMONY

Dan Fogell, Chairman, KHS Awards Committee

Bronze Salamander Award

Exemplary long-term service to the KHS

The Suzanne L. & Joseph T. Collins Award

Best paper/presentation (even years) or photograph (odd years)

The Suzanne L. & Larry L. Miller Grant for Kansas Public School Teachers

To support teachers in Kansas public schools in aquiring hands-on experiences in herpetology

The Curtis J. Schmidt Award

Commitment to, and excellence in, public education and engagement

Howard K. Gloyd-Edward H. Taylor Scholarship

Educational scholarship

Gann Scholarship for Women in Herpetology

Educational scholarship

Alan H. Kamb Grant for Research on Kansas Snakes

Best research proposal on Kansas snakes

Henry S. Fitch-Dwight R. Platt Award for Excellence in Field Herpetology

Exemplary herpetological fieldwork in Kansas

George Toland Award for Ecological Research on North American Herpetofauna

Best research proposal on Kansas herp ecology (presented Sunday, prior to adjournment)

Walter Meshaka Award for Excellence of North American Amphibian and Reptile Ecology

Best poster presented at the KHS Annual Meeting (presented Sunday, prior to adjournment)

7:30 pm KHS AUCTION

Auctioneers **Daniel D. Fogell, Walter E. Meshaka,** and **Rich Glor** will offer up many breathtaking items (of questionable value). The *KHS* takes cash, credit cards, and checks. Be sure and get a bidding number before the auction commences. Bid vigorously and support the *KHS*. The *KHS* will provide one beer ticket and light snacks.

Scientific Paper Session IV - Moderator: Andrew George, Pittsburg State University, Pittsburg, Kansas

9:00 am IMPACTS OF TEMPERATURE ON THE BITE FORCE OF PLESTIODON OBSOLETUS.

Andre Johnson (ajohns83@g.emporia.edu). Department of Biology, Emporia State University, Emporia, Kansas.

9:15 am UNITING INDIGENOUS WISDOM AND SCIENTIFIC INQUIRY IN THE MERATUS MOUNTAINS.

Thornton Larson (trl21jz@sulross.edu). Sul Ross State University, Alpine, Texas.

9:30 am COMPARATIVE POPULATION SIZE, STRUCTURE, AND SURVIVORSHIP OF TWO EASTERN MILKSNAKE,

LAMPROPELTIS TRIANGULUM, POPULATIONS IN SOUTH-CENTRAL PENNSYLVANIA.

¹Emeleigh Luckenbaugh (eluck0020@gmail.com), ¹Dr. Pablo R. Delis, and ²Dr. Walter E. Meshaka, Jr. ¹Department of Biology, Shippensburg University, Shippensburg, Pennsylvania; 2State Museum of Pennsylvania, Harrisburg, Pennsylvania.

9:45 am LATITUDINAL CLINES IN AN ECTOTHERMIC VERTEBRATE: COUNTERGRADIENT VARIATION IN BODY

SIZE, GROWTH RATE, AND REPRODUCTIVE EFFORT IN THE PRAIRIE LIZARD, SCELOPORUS CONSOBRI-

NUS.

Travis R. Robbins (trobbins2@unomaha.edu). University of Nebraska Omaha, Omaha, Nebraska.

10:00 am POPULATION SURVEYS OF ALLIGATOR SNAPPING TURTLES IN OKLAHOMA.

> Tessa N. Irvine (tessairvine7@gmail.com), Kevin Babbitt, Derek Bateman, Alexander Edmond, and Day B. Ligon. Department of Biology, Missouri State University, Springfield, Missouri.

LONG-TERM STUDY OF A SHIFTING HERPETOLOGICAL COMMUNITY AT LETTERKENNY ARMY DEPOT, 10:30 am SOUTH-CENTRAL PENNSYLVANIA.

> ¹Pablo R. Delis (prdeli@ship.edu) and ²Walter E. Meshaka, Jr. ¹Department of Biology, Shippensburg University, Shippensburg, Pennsylvania; ²Section of Zoology and Botany, State Museum of Pennsylvania, Harrisburg, Pennsylvania.

> > POSTER SESSION - 10:45 to 11:30 am - Burge Union

Scientific Paper Session V - Moderator: David Penning, Missouri Southern State University, Joplin, Missouri

EARLY INSIGHTS ON GEOGRAPHIC VARIATION AND DISTRIBUTION IN THE MONOCLED COBRA (NAJA 11:30 am

KAOUTHIA).

noon

Neil R. Balchan (neil.balchan@okstate.edu) and Guinevere O. U. Wogan. Department of Integrative Biology, Oklahoma State University, Stillwater, Oklahoma.

11:45 am YOU CAN'T SEE ME: BACKGROUND MATCHING IN THE WESTERN DIAMOND-BACKED RATTLESNAKE (CROTALUS ATROX).

> Océane Da Cunha (odacunha@miners.utep.edu), Corentin Fournier, L. Miles Horne, and Jerry D. Johnson. Department of Biological Sciences, University of Texas at El Paso, El Paso, Texas.

EXPLORING PERSONALITY VARIATION IN TURTLES: AN OPPORTUNITY FOR MANAGEMENT?

¹Daniel F. Hughes (dhughes@coe.edu), ¹Kaylyn Hobelman, ¹Aubrey Gauntt, ¹Madison Schwenka, ¹Abigail Trautman, ¹Patience Wagner, ¹Samantha Kim, Chelsea Armstrong, ¹Sam Wagner, ¹Amelia Weller, ¹Katie Brighton, ¹Shelby Bloom, ¹Colin Nelson, ¹Farah Suboh, Cameron Kolthoff, ¹Sangai Dukuly, ¹Rodrigo Mercader, and ²Benjamin M. Reed. ¹Department of Biology, Coe College, Cedar Rapids, Iowa; ²Department of Biology, Washburn University, Topeka, Kansas.

12:15 pm PHYSIOLOGICAL AND MORPHOLOGICAL TRAITS AFFECT CONTEMPORARY RANGE EXPANSION AND IMPLICATIONS FOR SPECIES DISTRIBUTION MODELING IN AN AMPHIBIAN SPECIES.

Owen M. Edwards (owedwar@okstate.edu), Michael Reichert, Lu Zhai, and Bo Zhang. Department of Integrative Biolo-

gy, Oklahoma State University, Stillwater Oklahoma.

12:30 pm A MULTI-YEAR EXAMINATION OF THE REPRODUCTIVE ECOLOGY OF TERRAPENE ORNATA IN WESTERN NEBRASKA.

Keetan Munsell (keetan.munsell@washburn.edu), Katie Brighton, Erica Guldner, and Benjamin Reed. Washburn University, Topeka, Kansas.

KHS MEETING POSTER TITLES

- Effect of invasive plant species on the prevalence of Batrachochytrium dendrobatidis on salamanders in Ozark riparian areas. Keith Jones (keith.jones@mcdonaldr1.net), Roman Goswick, Jonny Pollard, Emily Mann, Jesse Kinney, Makayla Miller, Alexis Ives, Alia Ramirez, Kara Montgomery, Aislinn Wilson, and Charidy Mckinzie. McDonald County High School, Anderson, Missouri.
- Herpetological natural history notes from southern Kansas: Engaging undergraduate in research. ¹Joe W. Paysen, ¹Mackenzie J. Smith, ²Carter Kruse, and ¹Keith Geluso (gelusok1@unk.edu). ¹Department of Biology, University of Nebraska at Kearney, Kearney, Nebraska; ²Turner Institute of Ecoagriculture, Bozeman, Montana.
- It's turtles all the way down: Testing the effects of bait type, flotation color, and glowsticks on aquatic turtle capture rates. Gabriel McClain (gmcclaing001@mymail.mssu.edu), David Penning, Brenna Jones, Addison Wallace, and Jerod Thomas. Department of Biological Sciences, Missouri Southern State University, Joplin, Missouri.
- Marking efficacy and stress involved in image recognition vs. PIT tagging in a field setting. Sydney Falcon (safalcon@shockers.wichita.edu), Jacob Kearns, and Thomas Luhring. Department of Biological Sciences, Wichita State University, Wichita, Kansas.
- Cover-board sampling: The effect of cover object material and size on the number of individuals captured. Brenna Jones (jonesb019@mymail. mssu.edu), David Penning, Gabe McClain, Andrew Shipley, Jerod Thomas, Addison Wallace, Saige Haddock, and Johnathan Evenson. Missouri Southern State University, Joplin, Missouri.
- A digital photography identification system for Crawfish Frog individuals. **Kayleen Sugianto** (jksugian@okstate.edu), Kaleb Banks, Owen Edwards, and Michael Reichert. Oklahoma State University, Stillwater, Oklahoma.
- Assessing the impacts of wildlife crossings within median barriers of I-49 in McDonald County, Missouri. Johnathan Evenson, Gabe McClain, Brenna Jones, and David Penning (penning-d@mssu.edu). Missouri Southern State University, Joplin, Missouri.
- Endozoochoric dispersal in Ornate Box Turtles (Terrapene ornata) from Iowa. Sangai Dukuly (sndukuly21@coe.edu), Victoria Amandianeze, and Daniel Hughes. Department of Biology, Coe College, Cedar Rapids, Iowa.
- Count your blessings: A quantification of constriction mechanisms in snake diversity. Maya Greenquist (mayagreenquist12@gmail.com), David Penning, Jillian Hackney, and Gabe McClain. Department of Biology and Environmental Health, Missouri Southern State University, Joplin, Missouri.
- Factors affecting thermoregulation in Ornate Box Turtles from Iowa. ¹Megan L. Norris (mlnorris20@coe.edu), ²Benjamin M. Reed, and ¹Daniel F. Hughes. ¹Department of Biology, Coe College, Cedar Rapids, Iowa; ²Department of Biology, Washburn University, Topeka, Kansas.
- Take only vouchers, leave only footprints: "County Recording" clarifies distributions of Oklahoma herpetofauna. ¹Neil R. Balchan (neil.balchan@okstate.edu), ¹Owen M. Edwards, ¹Kaleb M. Banks, and ²Jesse J. Whitlock. ¹Department of Integrative Biology, Oklahoma State University, Stillwater, Oklahoma; ²Department of Biology, University of Central Oklahoma, Edmond, Oklahoma.
- Adaptive response or plasticity? Assessing temperature tolerance in a widespread introduced gecko, Hemidactylus turcicus. Desi M. Joseph (desi.wilson@okstate.edu), Samuel R. Wilson, and Guinevere O.U. Wogan. Integrative Biology Department, Oklahoma State University, Stillwater, Oklahoma.
- Want to eat a 50-pound cheeseburger? Using snakes in digestive physiology to understand diabetes. Isra Z Khan(khani001@mymail.mssu.edu) and David A. Penning. Missouri Southern State University, Joplin, Missouri.
- Real Life Frogger: Assessing the impacts of wildlife crossings within median barriers of I-49 in McDonald County, Missouri. Johnathan Evenson, Gabe McClain, Brenna Jones, and David Penning (davidapenning@gmail.com). Missouri Southern State University, Joplin, Missouri.
- Temporal integration of acoustic signals in male Cope's Gray Treefrogs. Kennedy Funa (kennedy.funa@okstate.edu), Jain Krishnan, and Michael Riechert. Oklahoma State University, Stillwater, Oklahoma.
- Field and lab behavioral consistencies and mirror responses of Ornate Box Turtles (Terrapene ornata) in Nebraska. Brianna Wilson (briannawilsonnn@gmail.com), Samantha Kim, Abigail Trautman, Katie Brighton, Erica Guldner, and Benjamin Reed. Washburn University, Topeka, Kansas.
- Responses of Prairie Turtle Assemblages to Droughts. Jacob Anderson (jacobbrettanderson220@gmail.com), Thomas Luhring, David Bohorquez, Jacob Kearns, Sydney Falcon, and Shania Burkhead-Harris. Wichita State University, Wichita, Kansas.
- Examining factors that may affect the nesting order of Ornate Box Turtles (Terrapene ornata) in western Nebraska. Erica Guldner (erica.guldner@washburn.edu), Katie Brighton, Keetan Munsell, Zoe Edlund, Samantha Kim, Timothy Speer, Abigail Trautman, Patience Wagner, Brianna Wilson, and Benjamin Reed. Washburn University, Topeka, Kansas.

- Behavior responses of Ornate Box Turtles (Terrapene ornata) to introduced goat grazing. Kaitlyn Scott (kaitlyn.scott@washburn.edu), Layne Hodge, Kaylyn Hobelman, and Benjamin Reed. Washburn University, Topeka, Kansas.
- Testing the effectiveness of glowsticks for increasing amphibian captures. Cameron Kolthoff (chkolthoff20@coe.edu), Aubree L. Cota, Kennedy Frias, Marcos Villanueva, and Daniel F. Hughes. Coe College, Cedar Rapids, Iowa.
- Comparative analyses of microhabitat associations across populations in Terrapene ornata. Mark Lewis (mark.lewis1@washburn.edu), Timothy Speer, Ruthline Pierre, Chris Schenk, Mogli Issa-Prout, TaRon Graham, Cheyenne Kearn, Katie Brighton, Zoe Edlund, Eric Guldner, Samantha Kim, Keetan Munsell, Abigail Trautman, Patience Wagner, and Brianna Wilson. Washburn University, Topeka, Kansas.
- Movement ecology of Ornate Box Turtles (Terrapene ornata) across different life stages in western Nebraska. Timothy Speer (timothy.speer@ washburn.edu), Katie Brighton, Zoe Edlund, Samantha Kim, Keetan Munsell, Abigail Trautman, Patience Wagner, Brianna Wilson, and Benjamin Reed. Washburn University, Topeka, Kansas. An agricultural pond turtle assemblage in south-central Pennsylvania: The last stand of the Chelonians? Grace Cocanower (gc4314@ship.edu) and Pablo R. Delis. Department of Biology, Shippensburg University, Shippensburg, Pennsylvania.
- A Comparison of corticosterone levels across sex and age groups in Ornate Box Turtles (Terrapene ornata). Samantha Kim (samantha.kim@ washburn.edu), Susan Bjerke, John Mullican, and Benjamin Reed. Washburn University, Topeka, Kansas.
- Examining juvenile Ornate Box Turtle (Terrapene ornata) behavior types across populations. Mary Grace Tyler (marygrace.tyler@washburn. edu), Samantha O-Hara-Arrington, Carolyn Wilson, Abigail Trautman, Katie Brighton, Samantha Kim, Erica Guldner, and Benjamin Reed. Washburn University, Topeka, Kansas.
- Relationship between resting metabolic rate (RMR) and calling behavior in Cope's Grey Treefrog (Hyla chrysoscelis). **Phoebe Will** (phwill@okstate.edu) and Michael Reichert. Oklahoma State University, Stillwater, Oklahoma.
- Fire-induced mortalities of herpetofauna and other vertebrates in a grassland of northern Oklahoma. ¹Mackenzie J. Smith (smithmackenziej@ gmail.com), ¹Joseph W. Paysen, ²Carter Kruse, and ¹Keith Geluso. ¹Department of Biology, University of Nebraska at Kearney, Kearney, Nebraska; ²Turner Institute of Ecoagriculture, Bozeman, Montana.
- Protractor muscle diversity in reptiles and its significance for cranial kinesis. ¹Christopher Zobek (czobek@gmail.com), ²Conner D. Verhulst, ³Anmol Sethi, ¹Alec Wilken, and ¹Casey M. Holliday. ¹Pathology and Anatomical Sciences, University of Missouri, Columbia, Missouri; ²Kansas City School of Medicine, University of Missouri, Kansas City, Missouri; ³Kansas City School of Dentistry, University of Missouri, Kansas City, Missouri; ⁴Department of Organismal Biology and Anatomy, The University of Chicago, Chicago, Illinois.
- Impact of population on shell patterns of Ornate Box Turtles (Terrapene ornata). Carolyn Wilson (carolyn.wilson@washburn.edu) and Benjamin Reed. Washburn University, Topeka, Kansas.
- Female responses to conspecific intra an inter-sexual playback signals in a Bornean frog. Johana Goyes Vallejos (goyes.johana@gmail.com). University of Missouri, Columbia, Missouri.
- Rates of heating and cooling across latitudinally distributed Sceloporus consobrinus populations. Brandon Wolfsohn (bwolfsohn@unomaha. edu), Tiffany R. Hegdahl, Benjamin D. Haussmann, and Travis R. Robbins. University of Nebraska at Omaha, Omaha, Nebraska.
- Life under the leaves: Activity patterns of Dwarf Geckos revealed by substrate-borne vibrations. Christian A. Perez-Martinez (perez.christian. alessandro@gmail.com), Jack Ogilvy, Marissa LaMartina, and Manuel Leal; University of Missouri, Columbia, Missouri.
- Countergradient variation in metabolic rates associated with digestion in a Sceloporus lizard. Benjamin D. Haussmann (bhaussmann@unomaha.edu), Brandon Wolfshon, Tiffany R. Hegdahl, and Travis R. Robbins. University of Nebraska at Omaha, Omaha, Nebraska.
- The Bunker Resurvey Project: A century of environmental change in Kansas. Ana Motta (apmotta@ku.edu) and Rafe Brown. Biodiversity Institute, The University of Kansas, Lawrence, Kansas.
- Looking under the hood: Using diceCT to characterize sensory structures in lizards. Marissa LaMartina (marissalamartina@gmail.com), Christian Perez-Martinez, and Manuel Leal. University of Missouri, Columbia, Missouri.
- Using metal and plywood cover objects to assess snake and lizard habitat use within a 525-acre nature preserve in eastern Nebraska. Tracy J Coleman (tracycoleman@unomaha.edu). Glacier Creek Preserve, University of Nebraska at Omaha, Omaha, Nebraska.
- Comparison of pull strength and latency to pull between two populations of Ornate Box Turtles. Bryce Liedtke, Abby Trautman, Zach Davidson, Jade Vopat, Benjamin Reed, Tracy Wagner, and Paul Wagner (paul.wagner@washburn.edu). Washburn University, Topeka, Kansas.
- Life Underground: Elucidating the Metabolic Rates of Amphisbaena schmidti. Jack Ogilvy (jaob86@mail.missouri.edu), Christian Perez, and Manuel Leal. University of Missouri, Columbia, Missouri.



Joe Collins arrived at KU in 1967 from Cincinnati, Ohio. Since Hobart M. Smith's second edition of his Handbook in 1956, no one in the state had focused on Kansas herpetology. Henry Fitch and a few of his students were doing ground-breaking research on individual species and whole local ecosystems in northeast Kansas, and a few state universities were contributing specimens to collections in conjunction with their herpetology courses. However, no one was putting this information together and directing future discovery.

In 1973, Joe was the impetus for forming the Kansas Herpetological Society, and in no small part why we're together this weekend. The organization of the KHS was concomitant with the release of Joe's 1974 Amphibians and Reptiles in Kansas. A pre-KHS planning committee was established, which in addition to Joe, included Stanley D. Roth, Al Kamb, Mary E. Dawson, Richard Plumlee, Phil Humphrey (then director of the KU Museum of Natural History), and Robert Sprackland. They brought their collective experience, vision, and direction, laying the foundation for the KHS as an academic and state-oriented society.

The first organizational meeting was at the KU Museum of Natural History on 18 May 1974. More than thirty persons attended, including Ray E. Ashton, Walter E. Boles, Cornell Chivila, Bob Clark, Robert F. Clarke, Joseph T. Collins, Mary E. Dawson, William E. Duellman, Theodore H. Eaton, Henry S. Fitch, Virginia R. Fitch, Tim Hicke, Dave Huyser, James W. Irwin, Kelly Irwin, Al Kamb, Richard Lattis, Julian C. Lee, David Lucas, Elizabeth O'Hara, Chris Parsons, Jan Perry, Dick Plumlee, Gareth Rowell, Eric Rundquist, Alan H. Savitzky, Barbara Savitzky, Kris Sperry, Christopher Starr, Edward H. Taylor, Mark Thiry, Richard Wassersug, and Bernard Willard.

Officers elected that meeting were: President Eric M. Rundquist Treasurer Mary E. Dawson
President-elect George Pisani Secretary Richard Lattis

*Joe was selected as the first *Editor* of the KHS publications the following week. At the time, the Editor was not a position on the Executive Council.

The KHS published its membership list on 15 October 1974 in the *Kansas Herpetological Society Newsletter* (3):6-7. The following are the inagurual members of the Kansas Herpetological Society:

Ray E. Ashton	Victor B. Eichler
Ron Beuchot	Henry S. Fitch
Walter E. Boles	Virginia R. Fitch
David Bryant	Mike Gooch
Jan Caldwell	David Grow
Cornell Chirila	Chris Hedquist
Terry Callender	Tim Hickok
Bob Clark	Stephen Hoffman
Gary K. Clarke	David Huyser
Robert F. Clarke	James Irwin
Mike Coker	Kelly Irwin
Joseph T. Collins	Randall N. Johnson
Bruce Dawson	Al Kamb
Mary E. Dawson	Richard Lattis
Joseph R. Dinardo	Eugene Leon
Fred Dulin	Charlotte Leviton
Theodore H. Eaton	David Lucas
	Johnny Martinez

James M. Shields Shelley Skie Frank L. Slavens Don Soderburg Robert Sprackland Kris Sperry Christopher Starr Eddie Stegall Edward H. Taylor Marc Thiry George F. Toland Pennie von Achen Marc Voiles Bernard Willard Paul M. Willis Dennis W. Wilson John Wortman

KHS 2023 Venues and Parking

Saturday & Sunday Daytime Meeting Venue



Burge Union (B) & associated parking (BP) in surface lots 54, 72, 110 (free after 5pm and on weekends)

Friday Afternoon Museum Tours & Opening Social



Dyche Hall (D) & associated parking (DP) in lots 10, 12, 13, 14, 15, 16 (free after 5pm and on weekends)

Saturday Evening Keynote and Auction



Oread Hotel (O) & associated parking (OP) in surface lots 10, and in the Mississippi St. Parking Garage (pay by hour) 12, 13, 14, 15, 16 (free after 5pm and on weekends) Mississippi St. Parking Garage (pay by hour 24/7) or

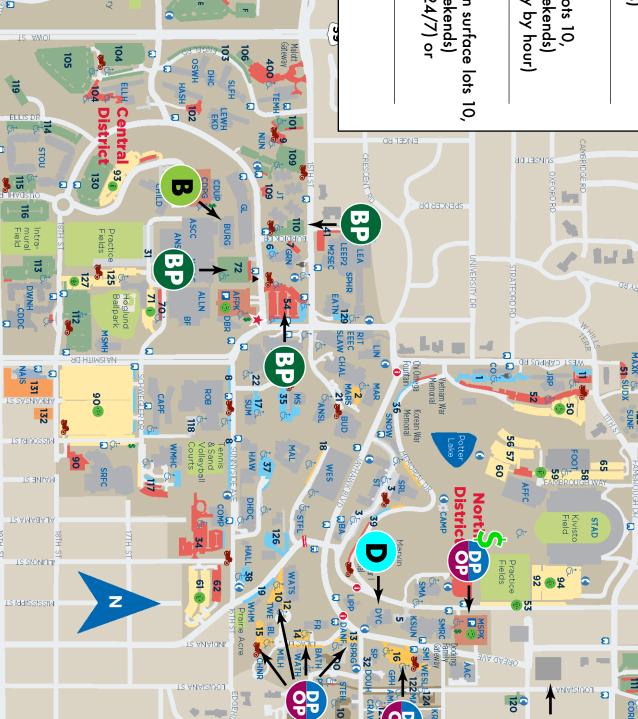


8

200

Pay lots that charge by the hour or day 24/7

Oread garage (\$15/day)



59 [o∰Sc (£2)

Shenk Recreationa Sports Complex

CONSTRUCTION ZONE

503

West District

LEGEND

Emergency phone

Prepay Kiosk

xyz Building Traffic info booth abbreviation

100 Parking lot number

P Public parking

👭 EV charging station 5. Accessible parking

Mississippi Street Parking Garage MSPK K3
Murphy Hall Crafton-Preyer Theatre MUR H5

Miller Scholar ship Hall MILH K5

Military Science Building MS 15

Measurement, Materials & Sustainable McCarthy Hall Apartments MSMH H7 Marvin Studios MARS 14 Max Kade Center MAXK 11 Marvin Hall MAR 14

Environment Center M2SEC H4

Murphy Hall Crafton-

Oswald Residence Hall **OSWH E5** Nunemaker Center NUN F5 moped parking Motorcycle or Metered parking

available

Lippincott Hall LIPP K4
Malott Hall MAL I5

indley Hall LIN 14 ewis Residence Hall LEWH F5

Transportation Services K-10 Connector bus stop

Pearson Scholarship Hall **PEAH L4**Price Computing Center **COMP J5**Gertrude Sellards Pearson Residence Hall **GSPH K1**

Wakarusa Research Facility WRF A10

West District Greenhouse GHS D7

Warehouse WARE A7

Grace Pearson Scholarship Hall **GPH K4**Joseph R. Pearson Hall **JRP 12**

Dennis E. Rieger Scholarship Hall RIEH L4

No public access

ritten ons. is the

NORTH & CENTRAL DISTRICTS

Allen Fieldhouse Parking Garage

Sellards Scholarship Hall SELH L5 Slawson Hall Earth, Energy & Environ

& Environment Center SLAW H4

Self Residence Hall SLFH E5

Allen Fieldhouse ALLN H6

Adams Alumni Center Welcome Center AAC K3

Ritchie Hall Earth, Energy & Environment Center RIT H
Robinson Health & Physical Education Center ROB I6
Sabatini Multicultural Resource Center SMRC K3

ESSEE SI

e iservid sl

TERSEY ST

TS BAAW

CAP: Amini Scholarship Hall AMIH L4

Staret Amini Scholarship Hall MARH L4

Staret Amini Scholarship Hall MARH L4

Staret Amini Scholarship Hall MARH L4 David A. Ambler Student Baehr Audio-Reader Center BAHR II Booth Family Hall of Athletics **BF H6** Broadcasting Hall KPR BCST II Slake Hall BL K5 3attenfeld Scholarship Hall **BATH K4** Anschutz Sports Pavilion ANSP G6 Conditioning Center ASCC G6 rson Family Strength & rson Family Football Complex AFFC J2 ces AFPK H5

> Sprague Apartments SPRG K4 Spooner Hall SP K4

David Booth Kansas Memorial STAD J2

Spencer Research Library SRL J4 Spencer Museum of Art SMA K3

Spahr Engineering Library SPHR H4 Snow Hall **SNOW 14**South Dining Commons **DINE H7**

Stouffer Place Apartments STOU F7 Stauffer-Flint Hall STFL J5
Stephenson Scholarship Hall STEH L4

Strong Hall ST J4

Watson Library WATS K5 Wesley Building WESL K3 Watkins Scholarship Hall WATH K5 Watkins Memorial Health Center Watkins Home WHM K5

Wagnon-Parrott Athletic Center WPAC H6

wente Hall TWE K5

Sunflower Apartments **SUNF 11** Templin Residence Hall **TEMH F5**

Summerfield Hall SUM 15

Chancellor's Residence The Outlook CHNR K5 E. Laurence Chalmers Hall CHAL H4

Central District Utility Plant CDUP F5 Central District Parking Garage CDP1 F5 Carruth-O'Leary Hall co 13 Capitol Federal Hall CAPF 16

Crawford Community Center CRAW L4 Corbin Residence Hall CORH L1 Burge Student Union BURG G5
Campanile, Memorial CAMP J3

WEST DISTRICT

Eaton Hall EATN H4

Ellsworth Residence Hall ELLH F6 Ekdahl Dining Commons Mrs. E's EKD F5

-ootball Indoor Practice Facility FOOT 12

Douthart Scholarship Hall DOUH K4 Dole Human Development Center DHDC J5

ory Museum DYC K4

DeBruce Center DBR H5 Daisy Hill Commons **DHC E5**Danforth Chapel **DANF K4**

Center for Design Research CDR B5 Bridwell Botany Research Lab I Bioscience & Technology Research Center at Engineering Structural Testing & Construction & Landscape COLA A5
Robert J. Dole Institute of Politics DOLEI D5 Chamney House CHAM B5 Bales Organ Recital Hall BALE D6 Higuchi Hall HIGU E9 Innovation Park BTBC, BTBC3 B9 Hall HAMB E8 um BRID D9

Haworth Hall Stewart Children's Center HAW I Hilltop Child Development Center CHILD G6

nter HAW 15

Hashinger Residence Hall **HASH F6** Hall Center for the Humanities HALL J5 Green Hall GRN H5 Gray-Little Hall GL G5 Fraser Hall FR K4

Horejsi Family Volleyball Arena **HFAM H6**

layhawker Towers Apartments JT G5

Kansas Union KSUN K4

Scholarship Hall KREH L3

Learned Engineering Building LEEP2 H4

Learned Hall LEA H4

Smissman Research Laboratories SMSS D9
St. Andrews Office Facility SAO A9
St. Andrews Research Facility SAR A9
University Press of Kansas UPKS B5
University Press Warehouse UPW C5
Vehicle Maintenance Shop VEHI A5 Delbert M. Shankel Structural Biology Center SBIO D9 Shop Facility SHOP A7 Hill Research Facility HILL B9
KU Endowment Association Building KUEA D7 Multidisciplinary Research Building MRB D9 Maintenance & Surplus Property MNT D5
McCollum Laboratories MCL E9 Lied Center LIED D6 Life Sciences Research Labs LSRA &LSRBC Simons Biosciences Research Laboratories SIM E9 Public Safety Building PSB C5 Pharmacy Building PHAR D8 Parker Hall Kans: Nichols Hall NIC D7 Moore Hall MOOR E8 Library Annex LIBX B8 Kurata Building KB D8 Student Project Facility STSP B9 ological Survey PAR E8

