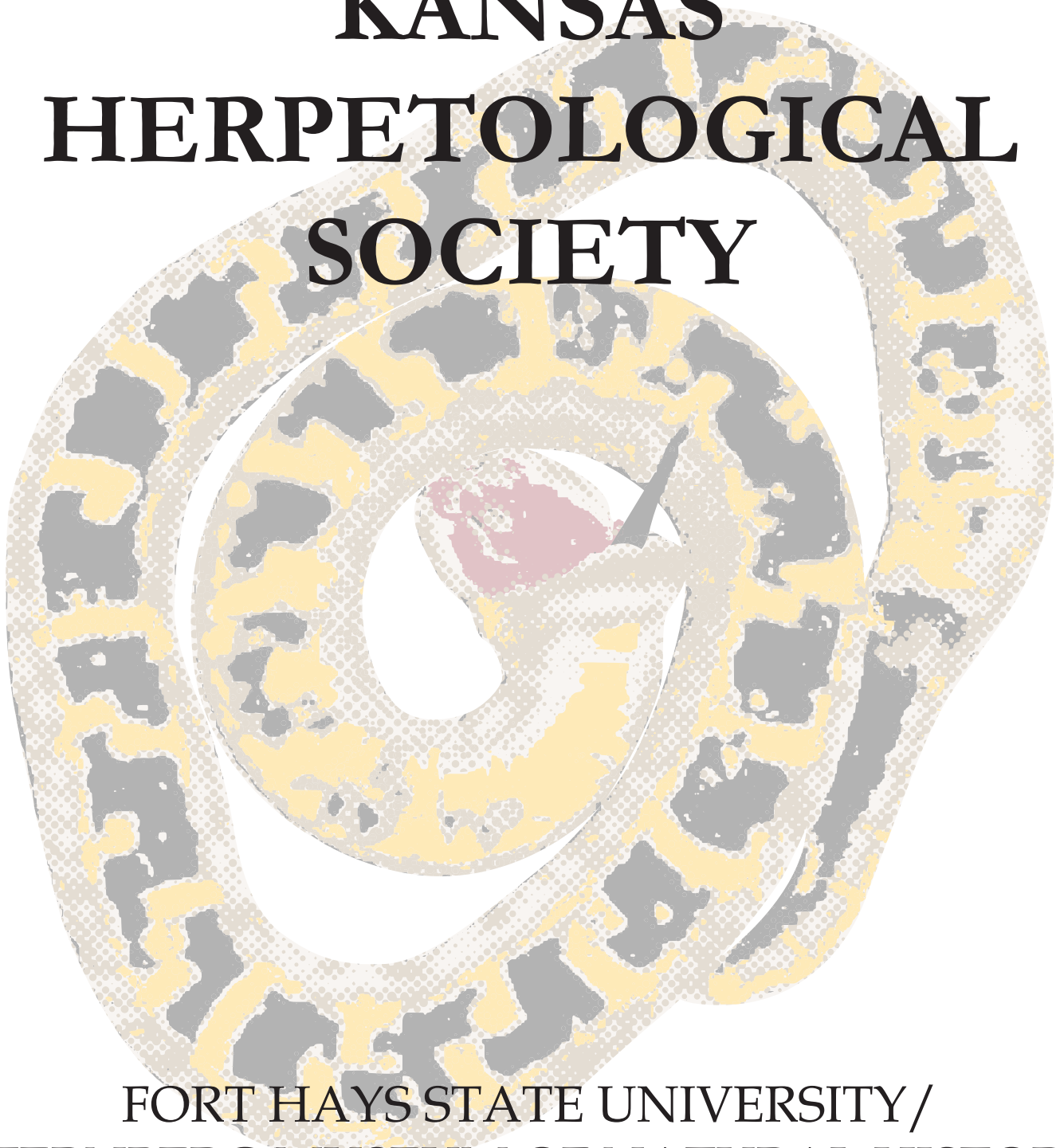


46th Annual Meeting  
*of the*  
**KANSAS  
HERPETOLOGICAL  
SOCIETY**



**FORT HAYS STATE UNIVERSITY/  
STERNBERG MUSEUM OF NATURAL HISTORY**  
Hays, Kansas

**1-3 November 2019**



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# KANSAS HERPETOLOGICAL SOCIETY



46th Annual Meeting • 1-3 November 2019

FORT HAYS STATE UNIVERSITY

Hays, Kansas

SATURDAY • 2 NOVEMBER 2019

- 8:00 am Registration for participants who did not pre-register: **Dexter R. Mardis** (KHS Secretary) and **Daren Riedle** (KHS Treasurer) inside the Albertson Atrium. Free coffee, soft drinks, and donuts.
- 9:00 am Welcome by **Curtis J. Schmidt**, President, Kansas Herpetological Society, Hays, KS and **Grady Dixon**, Interim Dean, Werth College of Science, Technology, and Mathematics, FHSU, Hays, KS.

**Walter Meshaka, Jr.**, State Museum of Pennsylvania, Harrisburg, PA

- 9:15 am • Venom Resistance in a Colorado Rodent Community to Two Grassland Rattlesnakes. **Neil R. Balchan** and Stephen P. Mackessy. University of Northern Colorado, Greeley, CO. † ‡
- 9:30 am • Pits in Pits: Further Insight into Viper Ecology Through Increased Resolution. **Joshua J. Mead**, Andressa L. Viol, Vicente Mata-Silva, and Jerry D. Johnson. Department of Biological Sciences, The University of Texas at El Paso, TX. †
- 9:45 am • Herpetofaunal Inventory and Monitoring Efforts in the Ferris Mountain Wilderness Study Area. **Keri Skelly**, Rebekah Bates, and Anthony Bridger. Bureau of Land Management, Rawlins, WY. †
- 10:00 am • Quantifying Color Pattern Mimicry and Background Color-Matching in Desert Squamates Utilizing Digital Photography and C.O.I. Technology. **Rachel Pikstein**. Grand Canyon University, Phoenix, AZ. †

Paper Session 1

BREAK 10:15 to 10:30 am

**Daniel D. Fogell**, Southeast Community College, Lincoln, NE

- 10:30 am: • Feeding Habits of the Mudpuppy (*Necturus maculosus*) in Kansas. **Jennifer L. Buchanan**, Alexis F. L. A. Powell, and Lynnette M. Sievert. Department of Biological Sciences, Emporia State University, Emporia, KS. †
- 10:45 am • Long-term Herpetofaunal Monitoring at Glacier Creek Preserve in Eastern Nebraska: The first two years and 101 cover boards. **Tracy J. Coleman**. University of Nebraska at Omaha, Glacier Creek Preserve, NE. ‡
- 11:00 am • Demographic Response to High Juvenile Mortality in the Northern Watersnake, *Nerodia sipedon sipedon*, in Powdermill Nature Reserve. **Walter Meshaka, Jr.**, Mark Swartz, and Stanley E. Trauth. State Museum of Pennsylvania, Harrisburg, PA.
- 11:15 am • Setting the Record Straight: Assessing the False Map Turtle Complex in Kansas. **Michael S. Mahr**, Justin Autz, Jennifer L. Buchanan, Alexis F. L. A. Powell, Lynnette M. Sievert, David R. Edds, and J. Daren Riedle. Department of Biological Sciences, Emporia State University, Emporia, KS. † ‡

Paper Session 2

- 11:30 am KHS Group Photograph (**Larry L. Miller**, Kansas Heritage Photography, Wakarusa, KS)

LUNCH: 11:30 to 1:00 pm

(Local restaurants are listed on the back of the program)

**Travis W. Taggart**, Sternberg Museum of Natural History, Hays, KS

- 1:00 pm • Assessing our Borders: Herpetology of Kansas' Borders. **Travis W. Taggart**. Sternberg Museum of Natural History, Hays, KS.
- 1:30 pm • Assessing our Borders: The Herpetofauna of the Kansas/Missouri Line. **Brian Edmond**, Missouri State University, Springfield, MO. ‡
- 2:00 pm • Assessing our Borders: The Herpetofauna of the Kansas/Oklahoma Line. **Greg Sievert**, Emporia, KS. ‡
- 2:30 pm • Assessing our Borders: The Herpetofauna of the Kansas/Colorado Line. **Lauren Livo**. Lakewood, CO. ‡
- 3:00pm • Assessing our Borders: The Herpetofauna of the Kansas/Nebraska Line. **Daniel D. Fogell**, Southeastern Community College, Lincoln, NE. ‡

Paper Session 3

BREAK 3:30 to 3:45 pm

- 3:45 pm • Patterns of Herpetofaunal Species Richness Along Environmental Gradients in Kansas. **Andrew D. George**, Amy M. Hammesfahr, Michael W. Barnes, Christine C. Rega-Brodsky Pittsburg State University, Pittsburg, KS. ‡
- 4:00pm • Using Citizen Science Data to Describe Diversity and Distribution of Amphibians and Reptiles in Kansas. **J. Daren Riedle**. Kansas Department of Wildlife, Parks, and Tourism, Pratt, KS. ‡

4:30pm Introduction of KHS Officers and dignitaries by **Curtis J. Schmidt**  
 KHS Treasurer's Report for 2019 by **Daren Riedle**  
 KHS Secretary's Report for 2019 by **Dexter R. Mardis**  
 KHS Editor's Report for 2019 by **Daren Riedle**  
 KHS Historian's Report for 2019 by **Suzanne L. Collins**

Report on Plans for the 47th Annual KHS Meeting in Manhattan, KS on 6-8 November 2020 by  
 KHS President-Elect **Christopher C. Visser**, Nebraska Nature Service, Lincoln, NE.

Vote on the Amendment to the By Laws

- Executive Council position - Media/Publicity
- Executive Council position - Field Trips

Election of KHS Officers for 2019.

The KHS Nominating Committee Chair, **Lynnette Sievert** (Emporia, KS), offers the following slate of candidates:

- For President-Elect • **Andrew George** (Pittsburg, KS)
- For Treasurer (unopposed) • **Dexter R. Mardis** (Wichita, KS)
- For Secretary • **Keith Geluso** (Kearney, NE) and **Todd Volkmann** (Wichita, KS)
- Announcement of the results of the KHS election by the KHS President

## KHS BANQUET, KEYNOTE, AWARDS CEREMONY, AND AUCTION

### Sternberg Museum of Natural History

Shuttles running from the conference hotels to the Sternberg at 5:00, 5:15, 5:30, 5:45,  
 and from the Sternberg back to the conference hotels 10:30, 10:45, 11:00, 11:15, 11:30

6:00 pm

#### KHS Poster Session

(will be on display through the evening)

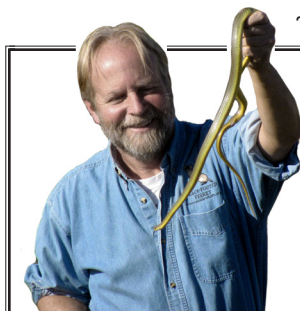
6:30 pm

#### KHS Banquet

7:00 pm

#### KHS Keynote

~ Sponsored by the FHSU Werth College of Science, Technology, and Mathematics ~



## Snake Venom Research at UNC: From Toxins to Therapeutics

**Dr. Stephen Mackessy,**

School of Biological Sciences

University of Northern Colorado, Greeley, CO

### KHS Awards Ceremony

**Daniel D. Fogell** (Southeast Community College, Lincoln, NE)

- *Walter E. Meshaka, Jr. Award for Excellence in Ecology* (best poster).
- *Henry S. Fitch-Dwight R. Platt Award for Field Herpetology.*
- *Howard Kay Gloyd-Edward Harrison Taylor Scholarship.*
- *Alan H. Kamb Grant for Research on Kansas Snakes.*
- *The Suzanne L. and Joseph T. Collins Award for Excellence in Kansas Herpetology.*

### KHS Auction

**Daniel D. Fogell** (Southeast Community College, Lincoln, NE) and **Walter Meshaka** (State Museum of Pennsylvania, Harrisburg, PA) - featuring many 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. Snacks and beverages are provided.

SUNDAY • 3 NOVEMBER 2019

8:00 am Registration for participants who did not pre-register: **Dexter R. Mardis** (KHS Secretary) and **Daren Riedle** (KHS Treasurer) inside the Albertson Atrium. Free coffee, soft drinks, and donuts.

**Eva Horne**, Department of Biological Sciences, Kansas State University, Manhattan, KS

- 9:00 am • A Return to the Birthplace of Humanity with Really Cool People. **Walter Meshaka, Jr.**, State Museum of Pennsylvania, Harrisburg, PA.
- 9:15 am • Differences in Medically Significant Venom Toxins Between Populations of the Prairie Rattlesnake, *Crotalus viridis*. **Cara Smith** and Stephen Mackessy. University of Northern Colorado, Greeley, CO. † ‡
- 9:30 am • The Eastern Mud Turtle, *Kinosternon subrubrum*, on Wallops Island, Virginia: A Population in Peril?. **Pablo R. Delis**, Safiya L. Abubakar, and Walter E. Meshaka Jr. Department of Biology, Shippensburg University, Shippensburg, PA.
- 9:45 am • Predation Alters Aquatic-terrestrial Exchange of Biomass and Nutrients. **Thomas M. Luhring**. Wichita State University, Wichita, KS. ‡
- 10:00 am • Effects of Seasonal Prescribed Fire on a Rolling Plains Herpetofaunal Community. **Joselyn M. Gutierrez**, Richard T. Kazmaier, Matthew W. Poole. West Texas A&M University, Canyon, TX. † ‡
- 10:15 am • A Comparison of Hematology and Plasma Biochemistry of Alligator Snapping Turtles in Wild, Reintroduced, and Captive Populations. **Samantha Hannabass**, Kameron Voves, Alesha Dodd, Sarah Freudenthal, Kay Backues, Day Ligon. Biology Department, Missouri State University, Springfield, MO. † ‡
- 10:30 am • An Incomplete Story of an Important Mechanism: Do We Really Understand How Constriction Works? **David Penning** and Christian Neff. Missouri Southern State University, Joplin, MO. ‡

Paper Session 4

BREAK 10:45 am to 11:00 am

**Jeff Seim**, Kansas Department of Wildlife, Parks, and Tourism, Pratt, KS

- 11:00 am • Temperature Impacts on Striking and Venom Delivery in Cottonmouths (*Agkistrodon piscivorus*). **Veronica Nguyen**, Nathan Piccoli, Brian Greene, and David Penning. Missouri Southern State University, Joplin, MO. † ‡
- 11:15 am • Baby got bite? Venom Injection and Strike Performance Across Ontogeny in Cottonmouths (*Agkistrodon piscivorus*). **Nathan Piccoli**, Veronica Nguyen, Brian Greene, and David Penning. Missouri Southern State University, Joplin, MO. † ‡
- 11:30 am • How the Use of One Body Impacts Biomechanical Performance in Borneo Pythons (*Python breitensteini*). **Jillian Hackney**, Nathan Piccoli, and David Penning. Missouri Southern State University, Joplin, MO.
- 11:45 am • Demographics of a Painted Turtle (*Chrysemys picta*) Population Responding to Drought in the Nebraska Sandhills. **Allyson N. Beard** and Larkin A. Powell. University of Nebraska-Lincoln, Lincoln, NE. † ‡
- 12:00 pm • Aquatic Turtle Communities in the Mined Lands Wildlife Area of Southeastern Kansas. **Ethan C. Hollender** and Day B. Ligon. Missouri State University, Springfield, MO. † ‡
- 12:15 pm • Hybridization in *Sceloporus* lizards: Extreme Aggression and Confusion. **Travis R. Robbins**. University of Nebraska, Omaha, NE † ‡
- 12:30 pm • Grip it and Flip it 3.0: Season Three of Herpetofaunal Composition and Monitoring at the Sternberg Natural Area. **Jacob N. Alexander**, Curtis J. Schmidt, Morgan A. Noland, Mitchell J. Greer. Department of Biological Sciences, Fort Hays State University, Hays, KS. † ‡

Paper Session 5

12:45 pm Presentation of the 11th annual **George Toland Award** by KHS Awards Committee Chair **Daniel D. Fogell**. The award is given for the best paper presented at this meeting by a KHS student member on the ecology of North American amphibians and reptiles.

ADJOURNMENT

Have a safe trip home. See you in Manhattan on the first weekend in November 2020 for the 47th Annual KHS Meeting.

**46th Annual Meeting Local Committee**

Curtis J. Schmidt (Chairperson)  
Jacob Alexander, Reese Barrick,  
Elmer Finck, Lavonne Finck,  
Melissa Skelton, Bill Stark, and Travis Taggart

## POSTERS

1. Rattlers and Ranges: On the Impact of Size and Spatial Usage in Three Sympatric Species. **Andressa L. Viol**, Joshua J. Mead, and Jerry D. Johnson. Department of BioSciences, Rice University, Houston, TX.
2. Effects of Cover-Object Size and Material in Detecting Herpetofauna in South-Central Nebraska. **Mikalah Brown** and Keith Geluso. Department of Biology at University of Nebraska at Kearney.
3. Assessing Habitat Suitability for Alligator Snapping Turtles in Southeastern Kansas. **Kameron C. Voves**, Samantha L. Han-nabass, Denise M. Thompson, and Day B. Ligon. Department of Biology, Missouri State University, Springfield, MO.
4. Variation in the Diet of the Mudpuppy (*Necturus maculosus*). **Jennifer L. Buchanan**, Alexis F. L. A. Powell, and Lynnette M. Sievert. Department of Biological Sciences, Emporia State University, Emporia, KS.
5. Monitoring Herpetofauna on Reclaimed Mined Lands in Southeast Kansas. **Kyle A. Findley**, Jake T. Wright, Christine C. Rega-Brodsky, Andrew D. George. Pittsburg State University, Pittsburg, KS
6. Characterization of Mite Parasitism on Eastern Collared Lizards in the Kansas Flint Hills. **Daniel Peacock** and Eva Horne. Kansas State University, Manhattan, KS.
7. Sensitive Herptiles of Wyoming. J. W. Martin. Bureau of Land Management, WY.
8. The Effect of Different Temperatures on the Endurance of Hopping Activity in *Anaxyrus woodhousii*. **Donglin Han** and Lynette Sievert. Emporia State University, Emporia KS.
9. Movement, Space-use and Thermal Macrohabitat Selection by Ornate Box Turtles (*Terrapene ornata ornata*) and Three-toed Box Turtles (*Terrapene carolina triunguis*) in Northeastern Kansas. **Samuel Wagner**, Jia Feng, and Benjamin M Reed. Washburn University, Topeka, KS.
10. You're as cold as ice: Will strike performance pay the price in *Pantherophis obsoletus*? **Jainee Cowen**, CJ Hillard, Brad Moon, and David Penning. Missouri Southern State University, Joplin, MO.
11. Sexual dimorphism of the skull in the fanged-frog genus *Limnonectes* (Anura: Dicroglossidae) **Thornton Larson**, Justin L. Jacobs, and Eric N. Smith. University of Texas at Arlington, TX.

## AWARDS CRITERIA

**The Suzanne L. and Joseph T. Collins Award for Excellence in Kansas Herpetology** is awarded to the member of the KHS who, in the preceding two calendar years, accomplished the following: Had published a paper of academic excellence on the systematics, ecology, or conservation of a native species of Kansas amphibian, turtle, and/or reptile in the Journal of Kansas Herpetology, Transactions of the Kansas Academy of Science, Herpetological Review, or the Journal of Herpetology, and/or presented a lecture of excellence on the systematics, ecology, or conservation of a native species of Kansas amphibian(s) and/or reptile(s). To qualify for The Collins Award, a portion of the field work or observations must have occurred in Kansas, or the systematic data must have been based in part on Kansas specimens.

**George Toland Award for Ecological Research on North American Herpetofauna** will be given to the best judged student oral presentation on ecology of the North American herpetofauna. The KHS Awards Committee will select the winner. The recipient must be present to receive the commemorative certificate and a check for \$200.00, co-sponsored by the KHS and The Center for North American Herpetology.

† Signifies eligibility for the George Toland Award for Ecological Research on North American Herpetofauna.

‡ Denotes eligibility for the Suzanne L. and Joseph T. Collins Award for Excellence in Kansas Herpetology in 2020.

## VENDORS:

~ SMOKY HILL ECO SERVICES ~  
Custom field related items including herp bags  
Beverly Stark, Liebenthal, Kansas

~ ZOO BOOK SALES ~  
Herpetology books and periodicals  
Eric Thiss, Lanesboro, Minnesota



# LOCAL RESTAURANTS

1. Albertson Hall, FHSU (you are here)
2. Memorial Union (Starbucks, Grab-n-Go, Mondo's Subs)
3. On the Rocks  
507 W 7th St, Hays, KS  
(785) 301-2711
4. Cancun Mexican Grill  
1011 Elm St, Hays, KS  
(785) 621-4550
5. Taco Shop  
333 W 8th St, Hays, KS  
(785) 625-7114
6. Golden Q  
809 Ash St, Hays, KS  
(785) 625-6913
7. Golden Griddle  
230 W. Ninth, Hays, KS  
(785) 301-2483
8. Gutch's Bar & Grill  
111 W 7th St, Hays, KS  
(785) 623-4088
9. Sip N Spin Bar & Grill  
209 W 10th St, Hays, KS  
(785) 625-9292
10. Lomatos Pizza  
130 W 9th St, Hays, KS  
(785) 623-2888
11. Tiger Burger  
700 Main St, Hays, KS  
(785) 301-2999
12. TK's Smokehouse  
110 W 11th St, Hays, KS  
(785) 259-2828
13. Augustine's Bakery  
1305 Main St, Hays, KS  
(785) 621-2253
14. Soda Shoppe Cafe  
800 Main St, Hays, KS  
(785) 625-7323
15. Daylight Donuts  
113 E 8th St, Hays, KS  
(785) 625-7016
16. Chinese Food Express  
1312 Main St, Hays, KS  
(785) 628-9999
17. The Paisley Pear Cafe  
1100 Main Street, Hays, KS  
(785) 621-4660
18. Gella's Diner & Lb Brewing Co.  
117 E 11th St, Hays, KS  
(785) 621-2739

