

# ***JOURNAL OF* KANSAS HERPETOLOGY**

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<http://www.cnah.org/khs>

## KHS OFFICERS (2010)

*President* – KATHY ELLIS  
10025 SW Jordan Road  
Wakarusa, Kansas 66546  
785.383.2788  
kathyshidler@yahoo.com

*President-Elect* – DEREK A. SCHMIDT  
7741 SE 101st Street  
Overbrook, Kansas 66524  
785.224.7549  
dschmidt@ksbroadband.net

*Past-President* – DAN JOHNSON  
15506 Beverly Court  
Overland Park, Kansas 66223  
913.897.0235  
gdj102356@hotmail.com

*Treasurer* – ERIC KESSLER  
5624 Cherry Street  
Kansas City, Missouri 64111  
816.444.4794  
ekessler@bluevalleyk12.org

*Secretary* – MARY KATE BALDWIN  
5438 SW 12 Terrace Apt. 4  
Topeka, Kansas 66604  
785.215.7219  
mbaldwin26@cox.net

*Historian* – SUZANNE L. COLLINS  
The Center for North American Herpetology  
1502 Medinah Circle  
Lawrence, Kansas 66047  
785.393.2392  
scollins@ku.edu

*Editor* – CURTIS J. SCHMIDT  
Sternberg Museum of Natural History  
3000 Sternberg Drive  
Hays, Kansas 67601-2006  
785.650.2447  
cjschmidt@fhsu.edu

## STANDING COMMITTEE CHAIRPERSONS

*Field Trips* - DANIEL G. MURROW  
8129 Perry #37  
Overland Park, Kansas 66204  
913.652.6971  
dan@iturnrocks.com

*Nominating* – JOSEPH T. COLLINS  
Sternberg Museum of Natural History  
Hays, Kansas 67601-2006  
785.393.4757  
jcollins@ku.edu

*Media & Publicity* – ROBIN OLDHAM  
716 Michigan Street  
Oswego, Kansas  
316.795.2293  
familyoldham@embarqmail.com

*Awards* – DANIEL D. FOGELL  
Dan Fogell  
Southeast Community College  
8800 -O- Street  
Lincoln, Nebraska 68520  
402.437.2870  
dfogell@southeast.edu

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Pittsburg State University

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*Kansas Department of Wildlife and Parks*  
KEN BRUNSON  
620.672-5911

*Kansas Nongame Wildlife Advisory Council*  
JOSEPH T. COLLINS  
785.393.4757

*Kansas Chapter – Wildlife Society*  
CURTIS J. SCHMIDT  
785.650.2447

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*Front Cover: An adult Common Map Turtle (Graptemys geographica). Photograph by J. Daren Riedle, recipient of The Collins Award in 2007 for best image.*

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## KHS BUSINESS

KANSAS HERPETOLOGICAL SOCIETY  
37th Annual Meeting  
5–7 November 2010  
*Gary K. Clarke Education Center*  
Topeka Zoological Park  
Topeka, Kansas

*Dedicated to the Memory of James Edward Gubanyi*

Meeting Sponsors  
*The McPherson Family Trust*  
*JTC Enterprises*

Note to speakers: Please plan your talks for no more than 12 minutes with an additional 3 minutes for questions from the audience. The lecture room has a computer for powerpoint presentations only (if you plan to use 35 mm slides, please bring your own projector). Please bring your visuals on a CD. Speakers should load their talk onto the computer no later than the break session before their talk. Any questions about equipment or meeting facilities should be emailed to cwagner@topeka.org.

Venue and Lodging: All scientific paper sessions for the KHS 37th Annual Meeting will be held in the Gary K. Clarke Education Center on the grounds of the Topeka Zoological Park, Topeka, Kansas, on 6–7 November 2010. There are many motels in Topeka—access them on the internet. KHS members are encouraged to patronize the Topeka Holidome (605 SW Fairlawn Road; call 800-822-0216), which is in close proximity to the Topeka Zoological Park. We have arranged a room rate of only \$69.00 per night at the Hampton Inn, but you must make your reservations no later than 10 October 2010 to get that rate. Mention the KHS and Topeka Zoo when registering. Lodging arrangements cannot be made by the KHS.

Registration: Register in the Gary K. Clarke Education Center with the KHS Treasurer on Saturday and Sunday: Students (9th Grade through 12th Grade) \$5.00 per person; all others \$10.00 per person. K through 8th Grade are admitted free.

KHS AUCTION. The annual KHS auction, vigorously led by Walter Meshaka, Dan Fogell and Eric Thiss, will be held on Saturday night (6 November) in the Gary K. Clarke Education Center. All proceeds from the auction go to the KHS. BEER, SOFT DRINKS, and SNACKS WILL BE FREE.

ZOO BOOK SALES. The well-known and highly esteemed book seller, Eric Thiss, will display his tremendous diversity of herpetological titles in Gary K. Clarke Education Center. Buy your favorite books, new and old. Eric is a generous contributor to the KHS auction.

BOOK SIGNINGS. Prior to the auction on Saturday evening, authors Joseph T. Collins, Suzanne L. Collins, and Travis W. Taggart, and artist Errol D. Hooper, Jr., will autograph copies of their new book, *Amphibians, Reptiles, and Turtles in Kansas*, and Daniel D. Fogell will autograph copies of his new book, *A Field Guide to the Amphibians and Reptiles of Nebraska*; both books will be available for purchase from Zoo Book Sales at the meeting. Funny stories will be told.

### FRIDAY, 5 NOVEMBER 2010

7:00 pm to 10:00 pm: KHS SOCIAL at Barnett's Party Barn, 10631 SW Burlingame Road 66546, Wakarusa, Kansas. Come talk to other herpetologists and discuss the creatures with which we are so obsessed. Tell us about them. Drink beer. Eat. Sing. Kiss. Boogie. Humor is appreciated.

### SATURDAY, 6 NOVEMBER 2010

8:00 am to 4:00 pm Registration for both days: Mary Kate Baldwin (KHS Secretary) and Eric Kessler (KHS Treasurer) in the Gary K. Clarke Education Center at the Topeka Zoological Park. Free coffee, juice, and donuts.

9:00 am Opening remarks by Kathy Ellis, KHS President  
Welcome by Brendan M. Wiley, Director, Topeka Zoo

Scientific Paper Session 1 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: George R. Pisani, Kansas Biological Survey, Lawrence (KHS Distinguished Life Member)

9:15 am KEYNOTE SPEAKER: Daniel D. Fogell, Southeast Community College, Lincoln, Nebraska  
9:45 am to 10:15 am Presentations

Scientific Paper Session 2 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: Dwight R. Platt, Bethel College, North Newton, Kansas (KHS Distinguished Life Member)  
10:30 am to 11:30 am Presentations followed by Group Photograph (by KHS Distinguished Life Member Larry L. Miller)

LUNCH: 11:45 am to 1:15 pm (at the Topeka Zoo's Grazer's Cafe or the restaurant of your choice)

Scientific Paper Session 3 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: David Oldham, Pittsburg State University, Pittsburg, Kansas (KHS Past President)  
1:15 pm to 2:45 pm Presentations

Scientific Paper Session 4 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: Dan Carpenter, Derby, Kansas (KHS Past President)  
3:00 pm to 4:15 pm Presentations

4:15 pm KHS General Business Meeting with KHS President Kathy Ellis presiding in the Gary K. Clarke Education Center, Topeka Zoological Park

*Introduction of current KHS officers by KHS President*

KHS Treasurer's Report for 2009 by Eric Kessler

KHS Secretary's Report for 2009 by Mary Kate Baldwin

KHS Editor's Report for 2009 by Curtis J. Schmidt

KHS Historian's Report for 2009 by Suzanne L. Collins

KHS President-Elect Derek Schmidt: Report on the 38th Annual KHS Meeting in Topeka Zoo in 2011

*Election of KHS Officers for 2011*

The KHS Nominating Committee is composed of Joseph T. Collins (Kansas Biological Survey, Lawrence), David Oldham (Pittsburg State University), and Eva Horne (Kansas State University), and offers the following slate of candidates:

For President

Derek Schmidt, Overbrook, Kansas

Serving as president-elect during 2010, and automatically assumes the KHS presidency on 1 January 2011

For President-Elect (unopposed)

Travis W. Taggart, Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas

For Treasurer (unopposed)

David Oldham, Pittsburg State University, Pittsburg, Kansas

For Secretary (unopposed)

Eva A. Horne, Kansas State University, Manhattan

Announcement of the results of the KHS election.

*KHS Awards Ceremony*

Presentation of the *Henry S. Fitch-Dwight R. Platt Award for Excellence in Field Herpetology* for 2010 by Kathy Ellis (KHS President).

Presentation of the *Howard Kay Gloyd-Edward Harrison Taylor Scholarship* for 2010 by Kathy Ellis (KHS President).

Presentation of the *Alan H. Kamb Grant for Research on Kansas Snakes* for 2010 by Kathy Ellis (KHS President).

Presentation of *The Suzanne L. & Joseph T. Collins Award for Excellence in Kansas Herpetology* for 2009 by Kathy Ellis (KHS President) and Walter E. Meshaka, Jr. (KHS Awards Committee). The recipient of *The Collins Award* receives a commemorative certificate and a check for \$1000.00.

Presentation by KHS President Kathy Ellis of *The Bronze Salamander Award for Distinguished Service to the Kansas Herpetological Society*.

KHS Business Meeting adjourns by 5:00 pm. Take a dinner break at the restaurant of your choice. Then proceed to the Gary K. Clarke Education Center, Topeka Zoological Park (doors open at 6:30 pm) where the kegs of free beer will be tapped. Soft drinks and snacks are also free.

SATURDAY EVENING, 6 NOVEMBER 2010

6:30 pm Gary K. Clarke Education Center, Topeka Zoological Park

6:45 pm Autograph session for the new books, *Amphibians, Reptiles, and Turtles in Kansas*, and *A Field Guide to the Amphibians and Reptiles of Nebraska*

7:30 pm the KHS Auction will be conducted in the Gary K. Clarke Education Center, Topeka Zoological Park by Walter Meshaka, Dan Fogell, and Eric Thiss, ably assisted by KHS Secretary Mary Kate Baldwin and KHS Treasurer Eric Kessler, and featuring many breath-taking books and other goodies. The KHS takes cash, credit cards, and checks. Get a bidding number before the auction commences. Bid vigorously, and support the KHS.

SUNDAY, 7 NOVEMBER 2010

8:00 am Registration for participants that did not register on Saturday: Mary Kate Baldwin (KHS Secretary) and Eric Kessler (KHS Treasurer) in the Gary K. Clarke Education Center, Topeka Zoological Park. Free coffee, juice, and donuts will be available.

Scientific Paper Session 5 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: Curtis J. Schmidt, Sternberg Museum of Natural History (former KHS President)  
8:30 am to 10:15 am Presentations

Break 10:15 am

Scientific Paper Session 6 in the Gary K. Clarke Education Center, Topeka Zoological Park  
Moderator: Dan Johnson, Overland Park, Kansas (KHS Past President)  
10:30 am to 11:45 am Presentations

KHS Award Ceremony: Presentation of the third *George Toland Award* for 2010 by Dan Johnson (KHS Past President), S. Ross McNearney, representing one of our esteemed meeting sponsors, the McPherson Family Trust, and KHS President Kathy Ellis. This award will be given for the best paper presented at the meeting by a KHS student member on the ecology of North American amphibians, reptiles, turtles, and/or crocodylians. 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*.

ADJOURNMENT

Have a safe trip home. See you on 4-6 November 2011 at Washburn University, Topeka, Kansas, for the 38th Annual KHS Meeting.

37TH ANNUAL MEETING COMMITTEE

Kathy Ellis (Chairperson)

Mark Ellis, Dan Johnson, Derek Schmidt, Suzanne L. Collins & Joseph T. Collins

Note: *The Suzanne L. & Joseph T. Collins Award for Excellence in Kansas Herpetology* will be given at this KHS 37th Annual Meeting at the Topeka Zoological Park in Topeka, Kansas, to an individual judged to have published this best paper or presented the talk on a native species of Kansas herpetofauna. The KHS Awards Committee (Daniel D. Fogell, Travis W. Taggart & Walter E. Meshaka, Jr.) will select the recipient from presentations made and papers published during 2008 and 2009. During odd-numbered years (photography competition), only KHS members are eligible. During even-numbered years (scientific presentations or publications), candidates are strongly encouraged to join the KHS, because preference will be given to KHS members.



KHS FALL FIELD TRIP TO NORTON COUNTY  
IN OCTOBER

The 2010 Annual Fall KHS Field Trip will be held at Prairie Dog State Park at Keith Sebelius Reservoir in Norton County in north-central Kansas. KHS members and any other interested individuals can gather as early as Friday evening, 1 October 2010, at Prairie Dog State Park. Electric hookups (for a fee) and heated showers are available. Camping is available for a daily fee. There are restaurants and motels in Norton, Kansas. Participation in KHS field trips is free to anyone interested in amphibians, reptiles, and turtles, and the Society encourages you to attend.

When arriving, look for the large KHS sign at Prairie Dog State Park. Herpetofaunal counts begin at 9:00 am at the designated campsite on Saturday and Sunday, 2-3 October 2010. The field trip adjourns at noon on Sunday, 3 October 2010.

More information will be posted, as it becomes available, on the KHS web site at

<http://www.cnah.org/khs/FieldTripInfoFall.html>

For more details, contact:

Daniel G. Murrow, KHS Field Trip Chairperson  
(see inside front cover)

KHS ANNUAL MEETING CALL FOR AUCTION ITEMS

The 37th annual meeting of the Kansas Herpetological Society will be held 5-7 November 2010 in the Gary K. Clarke Education Center at the Topeka Zoological Park, Topeka, Kansas. KHS President Kathy Ellis will preside over the meeting and the fund-raising auction to be held Saturday night (6 November) to support the Society.

Please bring herpetological items to the meeting for the auction. Hold them and bring them to the auction on Saturday evening at the Gary K. Clarke Education Center. Give them to Kathy Ellis, Walter Meshaka, Daniel Fogell, or Eric Thiss at that time. We count on you to bring items about amphibians, turtles, or reptiles and other stuff oriented to herpetology. PLEASE DO NOT BRING NON-HERPETOLOGICAL ITEMS; these will simply be discarded. Experience has shown that herpetologists generally bid only on herpetological items.

For more information about the 2010 KHS annual meeting, visit the web site at

<http://www.cnah.org/khs/AnnualMeetingInfo.html>

KHS SCHOLARSHIP & GRANT DEADLINES

Members are reminded that the deadline is 25 September 2010 for submission of applications for the *Howard K. Gloyd-Edward H. Taylor Scholarship* and the *Alan H. Kamb Grant for Research on Kansas Snakes*. Self-nominations for the *Gloyd-Taylor Scholarship* are encouraged. Submissions for both the scholarship and grant should be sent to Daniel Fogell, Chairperson of the KHS Awards Committee (see inside front cover). Both the scholarship and grant amounts are \$300.00 each this year.

KHS ANNUAL MEETING CALL FOR PAPERS

The 37th annual meeting of the Kansas Herpetological Society will be held 5-7 November 2010 in the Gary K. Clarke Education Center at the Topeka Zoological Park in Topeka, Kansas. Effective immediately, the Society is accepting titles for talks to be presented at the meeting.

The KHS annual meeting provides a opportunity for herpetologists and other individuals who have an intellectual interest in amphibians, reptiles, and turtles to come together for scientific lectures and friendly intellectual discussion. There is ample opportunity for socializing in a collegial and supportive atmosphere. The keynote speaker for this year's meeting is Daniel D. Fogell (Southeast Community College, Lincoln, Nebraska). Registration is only \$10.00 and the beer and soft drinks are free.

Looking for an alternative to costly national herpetological meetings held in large cities with way too many non-herpetological registrants (and where you have only a cash bar)? Try the KHS. Regional meetings are the future and are great venues for graduate students.

Individuals wishing to present a paper at the KHS meeting should submit their title as an email no later than 1 October 2010 to Joe Collins ([jcollins@ku.edu](mailto:jcollins@ku.edu)) for posting on the KHS web site and inclusion in the program. Be sure to note whether your presentation is a candidate for *The Collins Award* (must be primarily about Kansas herpetofauna) and/or *The Toland Award* (must be a KHS student member). These will be flagged in the program and on the annual meeting web site.

To watch the 2010 KHS annual meeting program unfold before your very eyes (updated daily), visit the web site at

<http://www.cnah.org/khs/AnnualMeetingInfo.htm>

KHS WEB SITE

KHS members should avail themselves of the Society web site, the most up-to-date state herpetological web site on the internet, worldwide. Take advantage of these gratis services:

A complete modern checklist of the herpetofauna of Kansas (updated daily)

Gratis downloads of the first 30 issues of the *Journal of Kansas Herpetology*

Watch as the annual meeting program evolves before your very eyes

Field trip information (updated daily)

Complete current contact information on all KHS officers and committee chairpersons.

Go to

<http://www.cnah.org/khs/>

and keep up-to-date.

# KANSAS HERPETOFAUNAL COUNTS

## ANDERSON COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted on 6 April 2010 in Anderson County, Kansas. Participants were Keith Coleman and James E. Gubanyi. Weather was clear to overcast with temperatures from 50°F to 60°F. The following were observed:

Amphibians	
American Toad.....	8
Boreal Chorus Frog.....	12
Crawfish Frog.....	11
Plains Leopard Frog.....	17
Southern Leopard Frog.....	20
Reptiles	
Prairie Kingsnake.....	1
Common Garter Snake.....	1
Lined Snake.....	1
Turtles	
Common Snapping Turtle.....	2
Slider.....	2
Totals	
10 species .....	±75 specimens

Verified by Keith Coleman.

Submitted by **JAMES E. GUBANYI**, 2501 Burnett Road, Topeka, Kansas 66614.

## BARTON COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted from 3:45 pm to 5:15 pm at Cheyenne Bottoms Wildlife Area in Barton County, Kansas, on 13 April 2010. Participants were Suzanne L. Collins and Joseph T. Collins. We observed the following:

Reptiles	
Speckled Kingsnake.....	2
Gopher Snake (aka Bullsnake).....	3
Plains Garter Snake.....	1
Massasauga.....	1
Totals	
4 species .....	7 specimens

Verified by Joseph T. Collins.

Submitted by **SUZANNE L. COLLINS**, The Center for North American Herpetology, 1502 Medinah Circle, Lawrence, Kansas 66047.

## COWLEY COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted from 1:00 pm to 3:00 pm on the Southwestern College Floyd & Edna Moore Biological Field Station in Cowley County, Kansas, on 30 May 2010. Participants were: Samuel S. Abbott, Tara Abbott, David Dumler and Meredith Dumler. We observed the following:

Amphibians	
Great Plains Narrowmouth Toad.....	1
Reptiles	
Great Plains Skink.....	6
Turtles	
Ornate Box Turtle.....	2
Totals	
3 species .....	9 specimens

Verified by Samuel S. Abbott.

Submitted by **SAMUEL S. ABBOTT**, 9809 West Birch Street, Wichita, Kansas 67212.

## EAST-CENTRAL KANSAS HERPETOFAUNAL COUNT

An herpetofaunal count was conducted on 29 April 2010 in Franklin and Linn counties in east-central Kansas. Participants were Jill Luvadelle Collins, Suzanne L. Collins, Joseph T. Collins, Alan Lemmon, Emily Moriarty Lemmon, and Genevieve Lemmon. The following were observed:

Reptiles	
Eastern Racer.....	12
Milk Snake.....	1
Western Rat Snake.....	3
Western Worm Snake.....	1
Ringneck Snake.....	±36
Western Ribbon Snake.....	1
Turtles	
Ornate Box Turtle.....	1
Totals	
7 species .....	±55 specimens

Verified by Joseph T. Collins

Submitted by **SUZANNE L. COLLINS**, The Center for North American Herpetology, Lawrence, Kansas, & **JOSEPH T. COLLINS**, Kansas Biological Survey, University of Kansas, 2101 Constant Avenue, Lawrence, Kansas 66047.



FORT LEAVENWORTH HERPETOFAUNAL COUNT

On 17 April 2010, an herpetofaunal count was conducted on the Fort Leavenworth Military Reservation in Leavenworth County, Kansas. Participants were: Tom Becker, Kyle Becker, Ryan Becker, John Bollin, Gerard Brungardt, Luke Brungardt, Petra Brungardt, Tom Brungardt, Bill Busby, Ray Clifford, Steve Clifford, Joseph T. Collins, Suzanne L. Collins, Kelsi Detrick, Lexi Diedierich, Dustin Dougherty, Logan Fox, Shari Fox, Brandy Gibson, Brett Gibson, Carol Gibson, Marc Gibson, Tiffany Glazier, Dustin Hartman, Cheryl Hook, Tyler Hutchison, Dan Johnson, Grace Ann Johnson, Steven Justice, Dan Krull, Mike McRoberts, David C. McMartin, Darrell Meno, Jason Moore, Bev Morey, Corban Myers, John Parker, Ron Pine, George Pisani, Caitlyn Plant, Krystal Powell, Sandra Powell, and John Schukman. The following were observed:

Amphibians	
American Toad.....	3
Blanchard's Cricket Frog .....	8
Boreal Chorus Frog .....	±180
Bullfrog .....	1
Reptiles	
Five-lined Skink .....	15
Eastern Racer.....	4
Milk Snake.....	2
Western Rat Snake .....	1
Western Worm Snake .....	6
Ringneck Snake .....	18
Brown Snake .....	1
Western Ribbon Snake.....	1
Common Garter Snake.....	1
Copperhead.....	1
Totals	
14 species .....	±242 specimens

Submitted by **DAVID C. MCMARTIN**, 100 Stimson Avenue, Suite 3521U, Ft. Leavenworth, Kansas 66027.

FORT RILEY HERPETOFAUNAL COUNT

On 29 April 2010, the 9th annual herpetofaunal count was conducted on the Fort Riley Military Reservation in Riley County, Kansas. The survey spanned seven hours under mostly sunny skies; wind was ca 20 mph and the temperature was 83°F. Participants were: Steve Nagle, Eva Horne, Pat Silovsky, Kyle Ochs, Dan Krull, Dan Mulhern, Victor Wilkinson, Brecken Wilkinson, Janeen Walters, Maria Henderson, Jimmy Wu, Jessie Porter, Ashley Henderson, Lacey Henderson, Chris Mammoliti, Brock Emmert, John Dombrowski, Elby Adamson, Bryce Joonas, Blake Bradford, Lane Huff, Jared Porter, Cort Mohler, Matt Shandy, Paul Bushore, Joe Gritton, Bill Traxel, Chris McMartin, Mike Houck, Wade Keltner, Clint Helms, Tom Duckworth, Paula Urban, Steve Wahle, Brian Monser, Frank Rottinghaus, Jeff Keating, Brett Parsons, Megan Friedrichs, Josh Pease, Isaac Pease, and Mackenzie Pease. The following were observed:

Amphibians	
Woodhouse's Toad .....	3
Blanchard's Cricket Frog .....	106
Boreal Chorus Frog .....	8
Plains Leopard Frog .....	11
Bullfrog .....	7
Great Plains Narrowmouth Toad .....	39
Reptiles	
Eastern Collared Lizard .....	36
Great Plains Skink .....	42
Ground Skink.....	1
Six-lined Racerunner.....	5
Western Slender Glass Lizard.....	3
Eastern Racer.....	9
Speckled Kingsnake.....	1
Milk Snake .....	25
Great Plains Rat Snake .....	18
Gopher Snake (aka Bullsnake).....	5
Western Rat Snake .....	5
Western Worm Snake .....	1
Ringneck Snake .....	580
Northern Water Snake.....	2
Common Garter Snake.....	7
Lined Snake.....	3
Copperhead.....	5
Turtles	
Northern Painted Turtle .....	4
Ornate Box Turtle .....	1
Totals	
25 species .....	927 specimens

Submitted by **MIKE HOUCK**, Threatened & Endangered Species Biologist, U.S. Army CIV - DPW Environmental Division, Building 407, Pershing Court, Fort Riley, Kansas 66442.

OSAGE COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted on 6 June 2010 in Osage County, Kansas. Participants were Keith Coleman and James E. Gubanyi. Sky was clear with temperature ca. 70°F and a 5–10 mph wind. The following were observed:

Amphibians	
Blanchard's Cricket Frog .....	±140
Cope's Gray Treefrog .....	3
Plains Leopard Frog .....	1
Bullfrog .....	10
Totals	
4 species .....	±154 specimens

Verified by Keith Coleman.

Submitted by **JAMES E. GUBANYI**, 2501 Burnett Road, Topeka, Kansas 66614, and **KEITH COLEMAN**, 1916 SW Atwood Avenue, Topeka, Kansas 66604.

RED HILLS HERPETOFAUNAL COUNT

An herpetofaunal count was conducted from 21-23 May 2010 in the Red Hills of Kansas along the Oklahoma border from Sumner County in the east to Comanche County in the west. Much of the count was conducted by road-cruising. Participants were Travis W. Taggart, Suzanne L. Collins & Joseph T. Collins. The following were observed:

Amphibians

Plains Spadefoot .....	±50
Great Plains Toad .....	±20
Red-spotted Toad .....	±10
Woodhouse's Toad .....	±10
Blanchard's Cricket Frog .....	±50
Spotted Chorus Frog .....	±200
Boreal Chorus Frog .....	3
Plains Leopard Frog .....	±20
Bullfrog .....	2
Great Plains Narrowmouth Toad .....	±100

Reptiles

Eastern Collared Lizard .....	2
Texas Horned Lizard .....	8
Six-lined Racerunner .....	2
Western Slender Glass Lizard .....	14
Eastern Racer .....	10
Prairie Kingsnake .....	4
Speckled Kingsnake .....	2
Coachwhip .....	8
Great Plains Rat Snake .....	1
Bullsnake .....	14
Western Rat Snake .....	7
Ground Snake .....	5
Plains Blackhead Snake .....	1
Western Hognose Snake .....	1
Eastern Hognose Snake .....	1
Plainbelly Water Snake .....	2
Diamondback Water Snake .....	1
Brown Snake .....	3
Checkered Garter Snake .....	1
Western Ribbon Snake .....	11
Common Garter Snake .....	5
Prairie Rattlesnake .....	2
Massasauga .....	5

Turtles

Yellow Mud Turtle .....	6
Slider .....	±20
Spiny Softshell .....	2

Totals

36 species ..... ±603 specimens

Verified by Joseph T. Collins

Submitted by **SUZANNE L. COLLINS**, The Center for North American Herpetology, Lawrence, Kansas 66047, **TRAVIS W. TAGGART**, Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas 67601, & **JOSEPH T. COLLINS**, Kansas Biological Survey, University of Kansas, 2101 Constant Avenue, Lawrence, Kansas 66047.

RUSSELL COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted in eastern Russell County, Kansas, on 20–22 May 2010. It was meant to be a fishing trip with my grandson, Sean Michael Harper, but when the fish didn't bite, we changed strategies. We road-cruised south of Wilson Lake in the morning and late afternoon. Weather was sunny (upper 70's to low 80's) and very windy. We observed the following:

Reptiles

Western Slender Glass Lizard .....	±30
Speckled Kingsnake .....	1
Milk Snake .....	1
Coachwhip .....	2
Great Plains Rat Snake .....	2
Bullsnake .....	11
Common Garter Snake .....	6
Massasauga .....	2

Turtles

Common Snapping Turtle .....	1
Ornate Box Turtle .....	4
Slider .....	1

Totals

11 species ..... ±61 specimens

Verified by Joseph T. Collins.

Submitted by **RICK STRAWN**, Associate Vice President, HNTB Architecture, 715 Kirk Drive, Kansas City, Missouri 64105.

SHAWNEE COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted on the Kansas River floodplain after a heavy rain on 14 June 2010 in Shawnee County, Kansas, by myself. Sky was partly cloudy with temperature ca. 75°F and wind was calm. The following were observed:

Amphibians

Plains Spadefoot .....	±6
Great Plains Toad .....	±12
Woodhouse's Toad .....	±15
Blanchard's Cricket Frog .....	±10
Cope's Gray Treefrog .....	±20
Boreal Chorus Frog .....	±40
Plains Leopard Frog .....	±10
Bullfrog .....	8
Plains Narrowmouth Toad .....	±10

Totals

9 species ..... ±131 specimens

Verified by James E. Gubanyi.

Submitted by **JAMES E. GUBANYI**, 2501 Burnett Road, Topeka, Kansas 66614.

SUMNER COUNTY HERPETOFAUNAL COUNT

The 34th annual Sumner County herpetofaunal count was held from 28 April to 1 May 2010 and covered an area from a point south of Drury, Kansas, beginning on the west side of the Chikaskia River at the Oklahoma line and following the Oklahoma line west to the Harper County line, thence north along the county line for three miles, and thence east to the Chikaskia River. The Chikaskia River was the eastern border for the count. The count consisted of searching on foot, turning rocks and other cover items, driving public and private roads, and listening for the calling of frogs. Participants were Daniel Barnes, Lori Rader Barnes, Will Barnes, Cooper Bristor, Marcie York Bristor, Jennifer Hovorka Brown, Justin Brown, Holly DeLain, Gail Feely, Grant Feely, Isabella Julianna, Joe LaScala, Shae Lebeda, Quinci Leighton, Larry L. Miller, Joden Ohnemiller, Tessa Ohnemiller, Dave Rader, Larry Rader, Kate Ruoff, Hanna Stueve, Hunter Stueve, Carson Ward, Christian Ward, Colten Ward, Cory Ward, Darin Ward, Mariah Ward, Nina Ward, Quin Ward, Tilyn Ward, Vicki Croft Ward, Cheryl Warner, Michelle Warner, Jayden Wodke, and Kambree York. The following were observed:

Amphibians	
Barred Tiger Salamander .....	2
Plains Spadefoot .....	1
Great Plains Toad .....	7
Woodhouse's Toad .....	2
Blanchard's Cricket Frog .....	16
Spotted Chorus Frog .....	3
Cope's Gray Treefrog .....	3
Plains Leopard Frog .....	9
Bullfrog .....	3
Great Plains Narrowmouth Toad .....	6
Reptiles	
Eastern Collared Lizard .....	1
Lesser Earless Lizard .....	12
Prairie Lizard .....	9
Texas Horned Lizard.....	2
Great Plains Skink .....	1
Southern Prairie Skink.....	16
Six-lined Racerunner .....	32
Eastern Racer.....	6
Prairie Kingsnake .....	1
Speckled Kingsnake.....	7
Coachwhip.....	5
Bullsnake.....	3
Western Rat Snake .....	4
Ground Snake .....	61
Plains Blackhead Snake.....	6
Ringneck Snake .....	103
Western Hognose Snake.....	1
Plainbelly Water Snake .....	1
Diamondback Water Snake .....	2
Northern Water Snake.....	6
Brown Snake .....	2
Western Ribbon Snake.....	2
Common Garter Snake.....	4
Lined Snake.....	6

Turtles	
Common Snapping Turtle.....	1
Yellow Mud Turtle .....	2
Northern Painted Turtle .....	4
Ornate Box Turtle .....	6
Slider .....	3
Smooth Softshell .....	1

Totals

40 species ..... ±362 specimens

Verified by Larry L. Miller.

Submitted by **LARRY L. MILLER**, Kansas Heritage Photography, 840 SW 97th Street, Wakarusa, Kansas 66546.



Quinci Leighton (second from right) checks out an adult Speckled Kingsnake that has just been collected during the Sumner County count by Isabella Julianna, a foreign exchange student from Germany that spent the year in Caldwell as a guest of the Carson Ward family. She found the beautiful serpent under the first rock she turned. Carson Ward is on the far left and Quinn Ward is second from the left. Photograph by Larry L. Miller, Kansas Heritage Photography.

WOODSON COUNTY HERPETOFAUNAL COUNT

An herpetofaunal count was conducted from 1:15 pm to 4:45 pm in and around the Woodson County State Lake area in Woodson County, Kansas, on 23 April 2010. Participants were: Suzanne L. Collins and Joseph T. Collins. We observed the following:

Reptiles	
Eastern Racer.....	1
Rough Green Snake.....	1
Plainbelly Water Snake .....	2
Northern Water snake .....	1
Common Garter Snake.....	2
Turtles	
Northern Painted Turtle .....	2

Totals

6 species ..... 9 specimens

Verified by Joseph T. Collins.

Submitted by **SUZANNE L. COLLINS**, The Center for North American Herpetology, 1502 Medinah Circle, Lawrence, Kansas 66047, & **JOSEPH T. COLLINS**, Kansas Biological Survey, University of Kansas, 2101 Constant Avenue, Lawrence, Kansas 66047.

## GEOGRAPHIC DISTRIBUTION

**PSEUDACRIS CRUCIFER** (Spring Peeper). Kansas: Johnson Co: 38°44.451'N, 094°37.517'W. 10 April 2010. Keith Coleman (MHP 14820). Verified by Joseph T. Collins. First record for this threatened species from the county, northernmost record for the taxon in Kansas, and gives credence to the publish type locality (Fort Leavenworth, Kansas) for this frog (Collins, Collins & Taggart. 2010. *Amphibians, Reptiles, and Turtles in Kansas*. Eagle Mountain Publishing, Utah. xvi + 312 pp; Taggart, Collins & Schmidt. 2010. *Kansas Herpetofaunal Atlas: An On-line Reference*. Electronic Database at [webcat.fhsu.edu/ksfauna/herps](http://webcat.fhsu.edu/ksfauna/herps) Sternberg Museum of Natural History, Fort Hays State University, Kansas. Accessed 8/18/2010).

Submitted by **KEITH COLEMAN**, 1916 SW Atwood Avenue, Topeka, Kansas 66604.

**PSEUDACRIS STRECKERI** (Strecker's Chorus Frog). Oklahoma: Woodward Co: Boiling Springs State Park, N36.453406, W99.306017. 7 March 2010. MHP 14745–14749. Collected by Brian C. Bartels, Johanna Bartels, and Curtis J. Schmidt under Oklahoma scientific collecting permit 4741. Verified by Joseph T. Collins. First records for the county and expands the known range of the species in northwest Oklahoma (Sievert and Sievert. 2006. *A Field Guide to Oklahoma's Amphibians and Reptiles*. Oklahoma Department of Wildlife Conservation. 205 pp.).

Submitted by **BRIAN C. BARTELS** and **JOHANNA BARTELS**, Sternberg Museum of Natural History, Fort Hays State University, 3000 Sternberg Drive, Hays, Kansas 67601

**DIADOPHIS PUNCTATUS** (Ringneck Snake). Nebraska: Harlan Co: 40.09364°N, 99.21332°W. 7 August 2010. Daniel D. Fogell and Travis W. Taggart (MHP 15136). Verified by Curtis J. Schmidt. First record from the county (Fogell, 2010. *A Field Guide to the Amphibians and Reptiles of Nebraska*. University of Nebraska, Lincoln. vi + 158 pp.)

Submitted by **DANIEL D. FOGELL**, Academic Education Division, Southeast Community College, Lincoln, Nebraska 68520 and **TRAVIS W. TAGGART**, Sternberg Museum of Natural History, 3000 Sternberg Drive, Fort Hays State University, Hays, Kansas 67601.

**HETERODON NASICUS** (Western Hognose Snake). Nebraska: Phelps Co: 40.408360°N, 99.60702°W. 7 August 2010. Daniel D. Fogell and Travis W. Taggart (MHP 15137). Verified by Joseph T. Collins. First record from the county (Fogell, 2010. *A Field Guide to the Amphibians and Reptiles of Nebraska*. University of Nebraska, Lincoln. vi + 158 pp.)

Submitted by **DANIEL D. FOGELL**, Academic Education Division, Southeast Community College, Lincoln, Nebraska 68520 and **TRAVIS W. TAGGART**, Sternberg Museum of Natural History, 3000 Sternberg Drive, Fort Hays State University, Hays, Kansas 67601.

**STORERIA DEKAYI** (Brown Snake). Kansas: Jewell Co: 39.871535°N, 98.16745°W. 6 August 2010. Daniel D. Fogell and Travis W. Taggart (MHP 15138). Verified by Curtis J. Schmidt. First record from the county (Collins, Collins & Taggart. 2010. *Amphibians, Reptiles, and Turtles in Kansas*. Eagle Mountain Publishing, Utah. xvi + 312 pp; Taggart, Collins & Schmidt. 2010. *Kansas Herpetofaunal Atlas: An On-line Reference*. Electronic Database accessible at [webcat.fhsu.edu/ksfauna/herps](http://webcat.fhsu.edu/ksfauna/herps) Sternberg Museum of Natural History, Fort Hays State University, Kansas. Accessed 8/18/2010).

Submitted by **DANIEL D. FOGELL**, Southeast Community College, Lincoln, Nebraska 68520 and **TRAVIS W. TAGGART**, Sternberg Museum of Natural History, 3000 Sternberg Drive, Fort Hays State University, Hays, Kansas 67601.

## ADDITIONAL RECORDS OF THE CHECKERED GARTER SNAKE IN KANSAS.

A large adult female Checkered Garter Snake (*Thamnophis marcianus*; MHP 15000; 37.00519°N, 099.00035°W) was discovered by Joseph T. Collins, Suzanne L. Collins, and myself in Comanche County, Kansas on 22 May 2010. This was the first specimen of this species taken in the county since 1983 (Miller, 1987; Taggart et al. 2010). The specimen had been just hit by an oncoming vehicle as it moved from a wheat field on the east into a grassy waterway bordered by two wheat fields to the west at ca. 10:20 am.

A second specimen was collected in Morton County. (MHP 15001; 37.03963°N, 101.58109°W) by Charlie Stieben and myself on 11 June 2010. This specimen represents the first example of this snake collected in Morton County since 1926 (Taggart et al. 2010; Taylor, 1929). The record is 20 miles ESE of previous known localities in the county (Middle Spring) and was 1.43 mi W of the Stevens County line. The habitat surrounding the collection site of this road-killed specimen was irrigated cropland. The specimen corroborates earlier observations of this species in Morton County by Ball (1992).

Ball, R. L. 1992. High Plains serpents: results of a long-term study in Texas County, Oklahoma, and Morton County, Kansas. *Kansas Herpetol Soc. Newsl.* 88: 16–17.

Miller, L. 1987. An investigation of four rare snakes in south-central Kansas. Final Report (24 pp.), Kansas Fish and Game Commission, Pratt.

Taggart, Travis W., Joseph T. Collins, and Curtis J. Schmidt. 2010. *Kansas Herpetofaunal Atlas: An On-line Reference*. Electronic Database accessible at [webcat.fhsu.edu/ksfauna/herps](http://webcat.fhsu.edu/ksfauna/herps). Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas.

Taylor, E.H. 1929. List of reptiles and batrachians of Morton County, Kansas, reporting species new to the state fauna. *University of Kansas Science Bulletin* 19: 63–65.

Submitted by **TRAVIS W. TAGGART**, Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas 67601.



OF INTEREST

New Book  
*AMPHIBIANS, REPTILES, AND TURTLES IN KANSAS*

by Joseph T. Collins, Suzanne L. Collins  
& Travis W. Taggart

with artwork by Errol D. Hooper, Jr.  
and photography by Suzanne L. Collins

Published by Eagle Mountain Publishing, LLC  
Designed by Megan Davies, TM Creative

Since the early 1990s, molecular research has more accurately defined the relationships of amphibians, reptiles, and turtles in Kansas (and throughout the world), and has changed many of the scientific names. However, the standardized common names used over the last half century continue to be used in this book opposite the most current scientific names. The continued use of standardized common names permits easy understanding of this new book when comparing it to information in earlier Kansas guides or the most comprehensive national herpetological reference, the *Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America, Third Edition Expanded*.

*Amphibians, Reptiles, and Turtles in Kansas* is a book about the salamanders, frogs and toads, lizards and snakes, and turtles of Kansas, displayed in vivid color through the lens craft of co-author Suzanne L. Collins (*Peterson Field Guides, Kansas Wildlife, Kansas Wetlands*, and many other books). Innovative features in the book include the recognition of turtles, Class Chelonia, as a distinct evolutionary lineage, the inclusion of a phylogeny for the Phylum Chordata and for each of the traditionally recognized herpetofaunal groups (salamanders, lizards, turtles, etc.), the elimination of subspecies (because they are evolutionarily uninformative), and dot maps showing precise localities for all species in the state.

A bibliography of over 1,700 papers and books, the most complete ever assembled for any state field guide, is appended. All range maps are in color and color dots show specific localities in each county for each species, thanks to the expertise of co-author Travis W. Taggart, Sternberg Museum of Natural History, Fort Hays State University. The text includes the most current data for each kind of amphibian, reptile, and turtle found in Kansas. Endangered or threatened status is noted where relevant. Errol D. Hooper, Jr. of Greentop, Missouri, has illustrated a complete identification key for use in classroom labs at the high school and college level. Maximum size for each kind of amphibian, turtle, and reptile is included along with the name of the collector and date of collection; in addition, the maximum weight for some of the larger species is listed. Information about identification, size, and distribution in Kansas, natural history, and pertinent references are presented for each of the nearly 100 kinds of amphibians, reptiles, and turtles found in the state.

*Amphibians, Reptiles, and Turtles in Kansas* is sponsored by the Sternberg Museum of Natural History at Fort Hays State University and with substantial financial support from Westar Energy, Touchstone Energy, the Kansas Department of Wildlife and Parks, and the U.S. Environmental Protection Agency. Through the generosity of these sponsors, numerous color images and maps appear throughout the book and permit it to be offered less expensively in bookstores and online. This will make it available to more Kansans, as well as to more schools and libraries across the state and nation.

Book specifications:

- Date published: 19 July 2010
- Size: 6 x 9 inches
- Hardcover with dust jacket
- 497 color images
- 97 color maps
- 65 B&W Illustrations
- xvi + 312 pages
- ISBN: 978-0-9720154-5-5
- Cost: \$30.00

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New Book  
*A FIELD GUIDE TO THE AMPHIBIANS  
AND REPTILES OF NEBRASKA*

by Daniel D. Fogell

Edited by Patricia Freeman  
Photographs by Daniel D. Fogell  
Line Drawings by Errol D. Hooper, Jr.

A stunning new book entitled *A Field Guide to the Amphibians and Reptiles of Nebraska*, published by the Conservation & Survey Division of the Institute of Agriculture & Natural Resources at the University of Nebraska-Lincoln, and with substantial financial support from CNAH, the Nebraska Game and Parks Commission, the Nebraska Herpetological Society, and the Nebraska Reptile Breeder's Expo, has been released. Through the generosity of the above-mentioned sponsors, numerous color images and maps appear throughout the book and permit it to be offered less expensively in bookstores and online. This will make it available to more Cornhuskers, as well as to more schools and libraries across the state and nation.



This is a modern book about the salamanders, frogs and toads, lizards and snakes, and turtles of Nebraska, displayed in vivid color throughout the volume. Since the early 1990s, molecular research has more accurately defined the relationships of amphibians and reptiles in Nebraska (and throughout the world), and has changed many of the scientific names. However, the CNAH standardized common names used over the last half century continue to be used in this book opposite the most current scientific names. The continued use of standardized common names permits easy understanding of this new book when comparing it to information in earlier Nebraska works or the most comprehensive national herpetological reference, the *Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America, Third Edition Expanded*.

All range maps are in color and show those counties where each species has been found. The text includes the most current information for each kind of amphibian, reptile, and turtle found in Nebraska. Endangered, Threatened, or Species in Need of Conservation status is noted where relevant. Errol D. Hooper, Jr. of Greentop, Missouri, has exquisitely illustrated a complete identification key for use in classroom labs at the high school and college level. Information about identification, size, Nebraska distribution, habitat, and natural history, are presented for each of the 62 kinds of amphibians and reptiles found in the state.

Book specifications:

Published by the Conservation & Survey Division, Institute of Agriculture & Natural Resources, University of Nebraska-Lincoln.

Date published: June 2010

155 color images

62 color maps

22 line drawings

vi + 158 pages

ISBN: 978-1-56161-013-6

Cost: \$17.95

To order by phone, call 1-402-472-3471

To order by online, visit

<http://nebraskamaps.unl.edu/productcart/pc/home.asp>

#### POSTDOCTORATE PYRON PROMOTED

Starting 1 January 2011, Dr. R. Alexander Pyron will assume the position of Robert F. Griggs Assistant Professor of Biology in the Department of Biological Sciences at George Washington University in Washington, D.C. Research in his laboratory will focus on historical biogeography and systematics, primarily of herpetofauna. Alex was the KHS Annual Meeting Keynote Speaker in 2009, enlightening the assembled participants at that meeting on the systematics of the Common Kingsnake complex (*Lampropeltis getula*). In his early years, he was mentored in herpetology by Joseph T. Collins in the panhandle of Florida where each winter for many seasons they did island fieldwork together on St. Vincent National Wildlife Refuge in the Gulf of Mexico. Alex is currently a Postdoctoral Research Fellow at the Department of Ecology & Evolution, Stony Brook University, Stony Brook, New York.

#### RIEDLE RETURNS

KHS member J. Daren Riedle got his Bachelors Degree in Biology from Emporia State University in 1995, and his Masters Degree in Zoology on the ecology of the Alligator Snapping Turtle from Oklahoma State University in 2001. Between 2001 and 2005, Daren worked as the turtle project coordinator for the Arizona Game and Fish Department. There, he oversaw research and recovery actions for the Desert Tortoise and Sonoyta Mud Turtle. In 2006, Daren began work on his Doctorate in Wildlife and Fisheries Science at Texas A&M, working through a cooperative program between Texas A&M and West Texas A&M universities. Daren's research topic at Texas A&M focused on landscape level effects on turtle assemblages and the role that the physiochemical environment of stream systems plays in structuring turtle and fish communities. Daren has published nine peer-reviewed publications on turtle ecology and one book chapter on desert resource management. He is currently finishing his PhD program and will be starting as a Natural Resource/Wildlife Management faculty member at Lincoln University, Jefferson City, Missouri, in the fall of 2010. Daren was the KHS Secretary from 1997 to 2000 and was the 2007 recipient of *The Suzanne L. & Joseph T. Collins Award for Excellence in Kansas Herpetology* for his exquisite image of a Common Map Turtle (*Graptemys geographica*). He is currently Assistant Editor for *Herpetological Conservation and Biology*, and a member of the *IUCN Tortoise and Freshwater Turtle Specialist Group*.

#### WEATHERMAN WINS

Former KHS President and long-time KHS member Ginny Weatherman of Lawrence, Kansas, was part of a field team doing research in the Mexican state of Colima in 2008, exploration that resulted in the discovery of the first living examples of the world's rarest crotalid snake, *Crotalus lannomi*, the Autlan Longtail Rattlesnake. Ginny and the team turned up five specimens assignable to this species from two localities in the foothills of Colima, and published their amazing find in the March 2010 issue of *Herpetological Review*. In addition, her image of the first living specimen of the Autlan Longtail Rattlesnake appeared on the front cover of that issue of HR. Ginny was a student in Joe Collins' herpetology class at Washburn University in Topeka in 2003 and was president of the KHS during 2007. She now resides in California and Mexico.

#### MILLER MOVES ON MARCIANUS

KHS Distinguished Life Member Larry L. Miller of Kansas Heritage Photography in Wakarusa, Kansas, received a 2010 grant for \$4995.00 from the Kansas Department of Wildlife and Parks to assess the status of the Checkered Garter Snake (*Thamnophis marcianus*). This species is designated Threatened in Kansas by KDWP and occurs in the state only along the Oklahoma border, from Sumner County in the east to Morton County in the west. Larry will make field trips to the historic range of the Checkered Garter Snake in Kansas, with emphasis on Sumner, Harper, Barber, and Comanche and Clark counties. Some of the last specimens seen in Kansas were found in the 1980s.

KANSAS SNAKE OIL:  
COMMENTS ON A BOOK BY POPE BROCK ENTITLED *CHARLATAN: AMERICA'S  
MOST DANGEROUS HUCKSTER, THE MAN WHO PURSUED HIM, AND THE AGE OF FLIMFLAM*

DAVID CHISZAR  
*Department of Psychology, CB 345  
University of Colorado  
Boulder, Colorado 80309*

HOBART M. SMITH  
*Department of Ecology and Evolutionary Biology, CB 334  
University of Colorado  
Boulder, Colorado 80309*

*Charlatan* is in large part a Kansas story, hence a story likely to be of interest to readers of this journal. It is about John R. Brinkley (1885–1942), a physician of sorts, twice a candidate for governor of Kansas, an innovator in many respects, and at bottom a fraud as well as a skilled exploiter of human weakness. Although Brinkley is the main character, he is by no means the only one in the book. There is a review of other purveyors of "snake oils," and an interesting summary of their collective demise.

Brinkley, one of the bunkum artists who inspired the term "snake oil," sold patent medicines and posed as a physician during the early 1920s; he earlier attended (1908–1911) a medical school in Chicago, Bennett Eclectic Medical College, without earning a degree. He continued his posing, now with real medical jargon, gestures, and trappings, all serving to enhance his credibility. In short, he was learning the arts of self-presentation, persuasion, and messianic projection. Apparently he excelled in these areas, even before he hit upon his *raison d'être*: goats. Caprid fantasies began to occur to him in 1916 when he served as a physician at a meatpacking plant in Kansas City, watching billy goats copulate on their way to slaughter. Two points caught Brinkley's attention: (1) their "considerable lubricity" and (2) their apparent freedom from diseases that were more-or-less common in other hoofed stock.

A year later the town of Milford, Kansas (95 miles north of Wichita), advertised for a doctor, and Brinkley took the job (October 7, 1917). In November, a local farmer arrived at the clinic with the complaint of impotence; "too bad I don't have billy goat nuts," he mused after Brinkley told him there was no known cure for his ailment. Events led to a surgical experiment in which goat testicles were placed into that farmer's body, either into his scrotum or into his abdominal cavity, as Brinkley used both placements in subsequent patients. Call it the placebo effect or the power of suggestion, but that Kansas farmer recovered his "pep" and the word spread quickly. Soon Brinkley was transplanting goats' testicles routinely into those who craved a new lease on life. Of course, various oils and tinctures needed to be purchased from Brinkley's clinic to complete the treatment. Rejuvenation was the term most often applied to Brinkley's services. Furthermore, goat glands were soon discovered to be useful not only for sexual performance issues, but also for curing various diseases, including insanity, and for curing female infertility. Goats were transformed into miracles, Brinkley became the Milford messiah, and through his popularity he came to politics, running twice for governor (1930, 1932). Mercifully, there was not a sufficient surge of electoral lunacy for Brinkley to win.

This was a time when reputable science had shown "gonadal principles" to be involved in an important variety of developmental processes, but it was well before the actual

hormones were isolated and characterized. Research was marching that way, and testosterone would be discovered in 1935. Brinkley and numerous others were an "applied vanguard" of this basic science, operating and making fortunes under the veneer of science, abetted by the relative absence of the American Medical Association or governmental regulation as well as a profound demand created by thousands who were willing to suspend reason in order to recover the hedonic treasures of youth. This psychological aspect may be the most interesting component of the story.

Brinkley was eventually run out of Kansas, but he landed on his feet in Del Rio, Texas, where he got back to his goat glands and snake oils, and to the exploitation of the suggestible, of which there continued to be many. Mr. Brock estimated that Brinkley amassed over twelve million dollars during the depression years. Brinkley lived well and was warmly appreciated not only in Del Rio but also in many other places reached by his messianic projections.

Eventually, however, the bodies could not be kept secret. Of course, plenty of patients sickened or died from Brinkley's ministrations. The AMA got after him mainly in the person of Morris Fishbein, but many other wonderful American personalities were involved. In 1939, Brinkley's house of cards collapsed when he lost a libel suit against Fishbein, opening the way for prosecution by former patients who had suffered adverse reactions. Bankruptcy came in early 1942, death on May 26, 1942. But the story has plenty of other interesting components that deserve to be savored. Mr. Brock presents a fast-moving, well written account that will be enjoyed by all readers. To tempt you further, we will mention that Brinkley might be called the Father of Bluegrass and Country Music, and Brock explains why this is so. Also, there are 25 pages of notes and references for any reader who would like to pursue matters back to original sources, including a Kansas State University master's thesis from 1952.

We suspect that the real significance of Dr. J. R. Brinkley is that he was a mirror in which people could see their most profound vulnerabilities. Although he is long gone, the dream lives on that relatively easy fixes might someday be found for gerontological inevitabilities as well as for all other human dysphorias. Are there latter-day flimflammers and snake oil salesmen who offer expensive hope to twenty-first century folk willing to suspend rationality? Seems like our AARP Newsletters warn of such scam artists every month. *Charlatan* contains historical material that will enliven many biology lectures and a few in psychology and political science as well.

*Charlatan*  
Date Published: 2008  
Publisher: Crown Publishers, New York  
324 pp. ISBN 978-0-307-33988-1 Cost: \$24.95

## NOTES

### OBSERVATIONS OF LIMB ABNORMALITIES IN AMPHIBIANS FROM ERIE COUNTY, PENNSYLVANIA

Brian S. Gray  
P. O. Box 3515  
Erie, Pennsylvania 16508-0515  
brachystoma@hotmail.com

and

Mark Lethaby  
*Natural History Museum at the Tom Ridge Environmental Center*  
301 Peninsula Drive, Suite 3  
Erie, Pennsylvania 16505  
mlethaby@verizon.net

A recent paper by Ballengée and Sessions (2009) identifies selective predation as a possible explanation for the cause of missing and partial limbs in amphibians. They define selective predation as occurring when predators such as dragonfly nymphs are too small, or have mouth parts that are too small, to consume whole tadpoles and instead selectively snip or chew off small pieces of their prey. Sessions and Ruth (1990) demonstrated that trematode (*Ribeiroia* sp. [Sessions et al. 1999]) infections could cause supernumerary limbs in amphibians. Herein, we describe anomalies in wild *Lithobates sylvaticus*, *Ambystoma jeffersonianum*, and *A. maculatum* that may have been caused by selective predation. We also describe observed selective predation by larval *A. jeffersonianum* on a sibling that resulted in a supernumerary limb.

On 19 September 1998, a recently metamorphosed *Ambystoma maculatum* (32 mm SVL; 21.8 mm tail) was found under a log in the basin of a vernal pool at the Asbury Woods Nature Center, Erie, Pennsylvania. The specimen displayed bilateral hind limb abnormalities. Both limbs were truncated at the femur, and appeared to be healed. This single individual was the only abnormal *A. maculatum* of forty-three observed at the Asbury Woods site between 1998 and 2005 (Gray 2006), a frequency of 2.3%. Bilateral truncated hind limbs have not been reported for Pennsylvania *A. maculatum* (The National Biological Information Infrastructure website (<http://www.nbi.gov>)).

On 26 July 1999, a recently metamorphosed *Lithobates sylvaticus* was found under a log in the same vernal pool basin as the aforementioned *A. maculatum*. The specimen was missing the distal portion of the right hind limb, the tibiale and fibulare being truncated (Figure 1). This individual was the only *L. sylvaticus* out of twenty-five (4% frequency) observed at the Asbury Woods site between 1998 and 2005 (Gray 2006). This is within the suggested baseline of less than 5% for natural populations (Lannoo 2008), and is similar to Hoppe's frequency of 4.2% for *L. sylvaticus* in Minnesota.

In the laboratory, ultraviolet radiation (UV-B) has been demonstrated to cause abnormalities in anurans; however,



Figure 1. Image of a recently metamorphosed *Lithobates sylvaticus* with truncated hind limb from Erie County, Pennsylvania.

the abnormalities described are usually bilateral truncations (Blaustein et al 1997; Cohen 2001). Moreover, the vernal pool where the *L. sylvaticus* were found is well shaded, even in spring, and thus UV-B would be an unlikely factor at this site (Blaustein and Belden 2005). Exposure to low concentrations of pesticides (e.g. Carbaryl) may increase the rate of non-lethal deformities including missing or supernumerary limbs (Bridges and Semlitsch 2005). However, there is no evidence of environmental contamination at the Asbury Woods site, and no other instances of abnormal amphibians have been reported there. Dragonfly nymphs (*Aeshna* and *Sympetrum*) are common in the vernal pool from which the amphibian larvae were found. *Lithobates sylvaticus* larvae are capable of macrophagous predation (Petranka and Kennedy 1999), and there is anecdotal evidence that they can attack conspecifics (Gray 2002). It is possible that *L. sylvaticus* larvae on occasion attack and injure amphibian larvae, including conspecifics. Kiesecker (2002) observed truncated limbs (foot missing) in *L. sylvaticus* from Centre County, Pennsylvania.



Robert Wellington (2005) reported on a Northern Leopard Frog (*Lithobates pipiens*) captured at the Howard Eaton Reservoir in eastern Erie County, Pennsylvania that lacked most of its left hind limb. No speculation was made regarding the etiology of the truncated limb. The specimen survived for ca. 7.2 yrs in captivity, establishing a longevity record for the species (Wellington op cit.).

One of us (ML) observed and photographed an adult *A. jeffersonianum* with a supernumerary forelimb on the right side at a site in Erie County during the spring of 1994 (photo voucher TREC A- 00058). The supernumerary forelimb protrudes from between the 2nd and 3rd costal grooves (Figure 2). Supernumerary limbs in Pennsylvania *A. jeffersonianum* have not been reported on the NBII website.



Figure 2. Adult *Ambystoma jeffersonianum* from Erie County, Pennsylvania with extra limb (TREC A- 00058). White arrow indicates insertion of supernumerary limb between 2nd and 3rd costal grooves.

While rearing *Ambystoma jeffersonianum* larvae from the Asbury site during 1999, one of us (BG) observed selective predation in the form of individuals nipping their siblings' tail tips. However, in one instance, one of the *A. jeffersonianum* larvae partially severed the left forelimb of a sibling. As the injury healed, a second limb developed at the site of the injury, resulting in an extra limb (Figures 3 and 4). The female specimen was deposited in the American Museum of Natural History, New York (AMNH – A 163453). This observation suggests that selective predation by salamanders may also cause missing and partial limbs in anurans, as well as some instances of supernumerary limbs in salamanders. Giazzon (2001) reported an adult *A. texanum* from Illinois that had



Figure 3. Captive reared larval *Ambystoma jeffersonianum* with supernumerary limb. Note also nipped tail fin.



Figure 4. Recently metamorphosed *Ambystoma jeffersonianum* with supernumerary limb. The specimen is the same individual as in Figure 3.

an extra hind limb on the left side. The cause of this abnormality was undetermined. Similarly, the aforementioned observations described in free-ranging *A. jeffersonianum*, *A. maculatum*, *L. pipiens*, and *L. sylvaticus* are of undetermined cause.

Our observations, along with those documented in Ballengée and Sessions (2009) suggest that selective predation is a likely cause of truncated limbs (at least in anurans) and can also cause supernumerary limbs in salamanders. Further study is needed to better understand the effects and significance of selective predation on survivorship of larvae and recent metamorphs in populations of free-living amphibians.

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#### Literature Cited

- Ballengée, B., and S. K. Sessions. 2009. Explanation for missing limbs in deformed amphibians. *J. Exp. Zool. (Mol. Dev. Evol.)* 312B.
- Blaustein, A. R. and L. K. Belden. 2005. Ultraviolet Radiation. Pp. 87–88 *In* Lannoo, M. (ed.). *Amphibian Declines: The Conservation Status of United States Species*. University of California Press, Berkeley and Los Angeles, California and London, England.
- Blaustein, A. R., J. M. Kiesecker, D. P. Chivers, and R. G. Anthony. 1997. Ambient UV-B radiation causes deformities in amphibian embryos. *Proc. Nat. Acad. Sci.* 94: 13735–13737.
- Bridges, C. M. and R. D. Semlitsch. 2005. Xenobiotics. Pp. 89-92 *In* Lannoo, M. (ed.). *Amphibian Declines: The Conservation Status of United States Species*. Univer-

- sity of California Press, Berkeley and Los Angeles, California and London, England.
- Cohen, M. M., Jr. 2001. Frog decline, frog malformations, and a comparison of frog and human health. *Amer. J. Med. Genetics* 104: 101–109.
- Giazzon, M. D. 2001. Extra hind-limb in a Smallmouth Salamander (*Ambystoma texanum*) from Central Illinois. *Bull. Maryland Herp. Soc.* 37(4): 143–150.
- Gray, B. S. 2002. Observations on the herpetofauna of the Asbury Woods Greenway in Pennsylvania. *Bull. Chicago Herp. Soc.* 37(2): 21–24.
- Gray, B. S. 2006. The reptiles and amphibians of the Asbury Woods Greenway, Erie County, Pennsylvania. *Bull. Maryland Herp. Soc.* 42(2): 115–126.
- Hoppe, D. M. 2005. Malformed frogs in Minnesota: History and interspecific differences. Pp. 103-108 *In* Lannoo, M. (ed.). *Amphibian Declines: The Conservation Status of United States Species*. University of California Press, Berkeley and Los Angeles, California and London, England.
- Kiesecker, J. M. 2002. Synergism between trematode infection and pesticide exposure: A link to amphibian limb deformities in nature? *Proc. Nat. Acad. Sci.* 99(15): 9900–9904.
- Lannoo, M. J. 2008. *Malformed Frogs: The Collapse of Aquatic Ecosystems*. University of California Press, Berkeley and Los Angeles, California and London, England. National Biological Information Infrastructure website (<http://www.nbio.gov>). Accessed 22 August 2009.
- Petranka, J. W., and C. A. Kennedy. 1999. Pond tadpoles with general morphology: Is it time to reconsider their functional roles in aquatic communities? *Oecologia* (120): 621–631.
- Sessions, S. K., and S. B. Ruth. 1990. Explanation for naturally occurring supernumerary limbs in amphibians. *J. Exp. Zool.* 254: 38–47.
- Sessions, S.K., R.A. Franssen, and V.L. Horner (1999). Morphological clues from multilegged frogs: are retinoids to blame? *Science* 284: 800–802.
- Wellington, R. J. 2005. Longevity of a captive deformed Northern Leopard Frog, *Rana pipiens*, in Erie County, Pennsylvania. *Bull. Chicago Herp. Soc.* 40(6): 110–111.





## About the Kansas Herpetological Society

The KHS is a non-profit organization established in 1974 and designed to encourage education and dissemination of scientific information through the facilities of the Society; to encourage conservation of wildlife in general and of the herpetofauna of Kansas in particular; and to achieve closer cooperation and understanding between herpetologists, so that they may work together in common cause. All interested persons are invited to become members in the Society. Membership dues per calendar year are \$15.00 (U.S., Regular), \$20.00 (outside North America, Regular), and \$20.00 (Contributing) payable to the KHS. Send all dues to: KHS Secretary, 5438 SW 12th Terrace Apt. 4, Topeka, Kansas 66604.

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The KHS holds an annual meeting in the fall of each year. The meeting is, minimally, a two day event with lectures and presentations by herpetologists. All interested individuals are invited to make presentations. The annual meeting is also the time of the Saturday night social and fund-raising auction.

### *Field Trips*

The KHS hosts two or more field trips each year, one in the spring and one in the fall. Field trips are an enjoyable educational experience for everyone, and also serve to broaden our collective understanding of the distribution and abundance the amphibians, reptiles, and turtles in Kansas. All interested persons are invited to attend.

## Editorial Policy

The Journal of Kansas Herpetology, currently issued quarterly (March, June, September, and December), publishes all society business.

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As space allows, *JKH* publishes all manner of news, notes, and articles. Priority of publishing is given to submissions of Kansas herpetological subjects and by KHS members; however all submissions are welcome. The ultimate decision concerning the publication of a manuscript is at the discretion of the Editor. Manuscripts should be submitted to the Editor in an electronic format whenever possible. Those manuscripts submitted in hard copy may be delayed in date of publication. Manuscripts should be submitted to the Editor no later than the 1st of the month prior to the month of issuance. All manuscripts become the sole possession of the Society, and will not be returned unless arrangements are made with the Editor. In the interest of consistency and comprehension, the KHS Executive Council voted that the common names used in *JKH* will follow the latest edition of standardized common names as organized by CNAH ([www.cnah.org](http://www.cnah.org); Collins and Taggart, 2009), which are also used in the first edition of *Amphibians, Reptiles, and Turtles in Kansas* (Collins, Collins, and Taggart, 2010) and the *Peterson Field Guide* (Conant and Collins, 1991, 1998).

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KANSAS HERPETOLOGICAL SOCIETY  
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TOPEKA, KANSAS 66604

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