

KANSAS HERPETOLOGICAL SOCIETY



NEWSLETTER No. 120



JUNE 2000

ANNOUNCEMENTS

KELLY IRWIN IS NEW ARKANSAS STATE HERPETOLOGIST

Kelly J. Irwin, a founding member of the KHS, has been appointed the *State Herpetologist of Arkansas*, a position with the Arkansas Game and Fish Commission. Kelly, a native of Topeka (where his parents still reside), will assume his duties in the Razorback State on 30 June of this year.

Kelly graduated with a degree from *Kansas State University* in 1992, and obtained his Master's Degree from *Texas A&M University* in 1997 under James R. Dixon, an internationally-known herpetologist. He has carried out extensive herpetological field research in American Samoa, Central America, and throughout the southern United States from New Mexico through Texas to Florida, working for a variety of agencies and organizations including the U. S. Fish & Wildlife Service, U. S. Forest Service, and The Nature Conservancy.

His major interests are nongame wildlife management with an emphasis on lower vertebrates, herpetofaunal community ecology, and the systematics and geographic distribution of North American amphibians, turtles, reptiles, and crocodylians. In Arkansas, his initial efforts will focus on the distribution, critical habitat, and status of Hellbenders, Alligator Snapping Turtles, and American Alligators.

Kelly previously served as KHS president in 1979, and was the 1998 recipient of *The Bronze Salamander Award*, the highest honor given by the KHS for distinguished service to the Society. In addition, he is a member of the Board of Directors of *The Center for North American Amphibians and Reptiles*, headquartered in Lawrence.

His field excursions and events are legendary amongst KHS members. Moving with his spouse and main field companion, Lisa, from sunny South Carolina west to nearby Arkansas gives hope that some of his future field exploits will once again take place in the Sunflower State and . . . become the stuff of more legends.

COLLINS APPOINTED CURATOR AT STERNBERG MUSEUM OF NATURAL HISTORY

Jerry Choate, Director of the Sternberg Museum of Natural History at Fort Hays State University announced the appointment of Joseph T. Collins, Lawrence, as *Adjunct Curator of Herpetology*. Collins recently retired from the University of Kansas, where he is *Herpetologist Emeritus* at the Natural History Museum and *Adjunct Herpetologist* for the Kansas Biological Survey. He has published more than 200 scholarly articles and 23 books, and in 1996 Governor Bill Graves proclaimed him *The Wildlife Author Laureate of Kansas*, a lifetime honor, and the first Laureate ever recognized by the state of Kansas.

Collins joins *Emeritus Curator of Herpetology* Eugene Fleharty and *Adjunct Curator of Herpetology* Travis W. Taggart at the museum in Hays, Kansas. As curator, he will present seminars, advise and assist with curation of the collection of amphibians, turtles, reptiles and crocodylians, make collections for the museum's research holdings, and assist with fund-raising for the museum and its programs. Currently, he continues to teach a courses on Kansas Herpetology and North American Herpetology at KU and Washburn University

KANSAS AMPHIBIAN, TURTLE & REPTILE COUNTS NEEDED NOW

Kansas herpetologists need to get their jubilee 2000 herp counts to Eric Rundquist as soon as possible. Please email them to him as attachments at trattler1@aol.com. You may also send them as regular email but he would prefer the attachment route. Word processor type makes no difference. Thanks for your assistance in this matter. The counts are scheduled to appear in the September 2000 issue of the KHS Newsletter.

For those without computers, mail your herp counts directly to: Eric Rundquist, Animal Care Unit, B054 Malott Hall, University of Kansas, Lawrence, Kansas 66045.

EMILY MORIARTY GETS MAJOR HERPETOLOGY AWARD

Emily C. Moriarty, a longtime member of the Kansas Herpetological Society, has just been awarded a prestigious three-year pre-doctoral research fellowship by the National Science Foundation, Washington D. C. The fellowship is for slightly more than \$80,000.00 over three years.

The pre-doctoral research fellowship is the largest such award ever given in herpetology by the National Science Foundation to a Kansan, and allows Ms. Moriarty to focus her studies on any scientific topic at the institution of her choice.

Moriarty graduated *summa cum laude* with a Bachelor of Science Degree in Biology in May 2000 from St. Mary's College, Notre Dame, Indiana, where her major advisor was professor David Sever. She will pursue her Doctoral Degree in Molecular Biology this coming August at the University of Texas in Austin, working under professors David Cannatella and David Hillis, both former KHS members who received their doctoral degrees from KU.

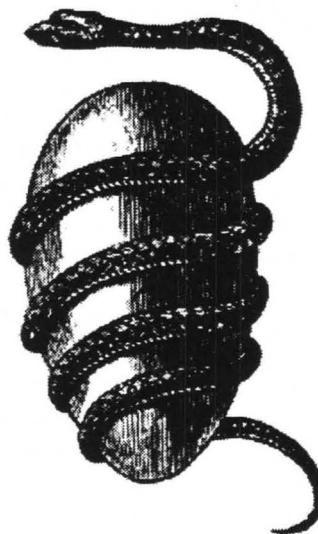
Moriarty studies amphibians, particularly frogs, and plans to concentrate on the evolutionary systematics of North American Chorus Frogs during her research career at Austin. In addition, she is interested in studying Sirens, large aquatic salamanders found in the southeastern United States, and in researching the worldwide declining amphibian phenomenon.

In 1996, Ms. Moriarty was the recipient of a presidential scholarship for \$20,000.00 from St. Mary's College. In 1997, she was awarded a prestigious Goldwater Scholarship for \$15,000.00 for support during her junior and senior undergraduate years. This spring, she received the year 2000 *Sigma Xi Award for Outstanding Research* from the St. Mary's Chapter of that biological honor society. In addition, she received from that same institution the *George & Juanda Bick Nature Award for Outstanding Achievement in Environmental Biology and Ecology*.

Emily became interested in amphibians at an early age, and was mentored in amphibian biology from her 7th grade-year in 1992 through high school by Joseph T. Collins, *Herpetologist Emeritus* at the KU Natural History Museum. Moriarty co-authored her first two scientific papers with Collins in 1995, both of which were published in the Kansas Herpetological Society Newsletter. During her summer vacations as an undergraduate at St. Mary's, she returned to Lawrence and received valuable training in molecular techniques from Walter Dimmick, Curator of Fishes at the University of Kansas Natural History Museum.

KHS FALL FIELD TRIP TO CHETOPA

Named for a native American chief of the Osage tribe, the village of Chetopa sits on the west bank of the Neosho River. Here, on 29–30 September and 1 October, the Kansas Herpetological Society will conduct its annual Fall field trip. Members and friends will begin to assemble at the little park on the east bank of the river on Friday evening. Contact Larry L. Miller (see inside front cover of this issue) for details.



FIELD ASSISTANT NEEDED IN VIRGINIA

A long term part time field assistant is needed for a population dynamics and habitat use study on the Wood Turtle (*Clemmys insculpta*) in northern Virginia. This is an ongoing study funded by the Virginia Department of Game and Inland Fisheries and the U. S. Fish and Wildlife Foundation.

Applicants would need to live in the northern Virginia area (Arlington, Fairfax, Loudoun, Clarke, Warren, Frederick counties are reasonable distances) and have reliable transportation. Wages would cover approximately 20hr a week through the summer and fall and possibly into 2001. Qualified applicants need only to be reliable, comfortable in all field conditions, and have a keen attention for detail. Herp enthusiasts or students of ecology/herpetology are a plus. If any of you are or know of such a person contact the following address.

Thomas Akre, MS3E1, Department of Biology, George Mason University, 4400 University Drive, Fairfax, Virginia 22030 USA. (703) 993-1044. email: takre@gmu.edu.

KHS BUSINESS

On 12 April 2000, the Executive Board of the KHS (officers and committee chairs) met in Lawrence to discuss a number of issues that affect the future of the Society. Following is a brief summary of decisions made at that meeting:

1. Beginning with this synopsis, summaries of decisions made at board meetings and at the annual business meeting will be published in the KHS Newsletter.
2. The Newsletter will not be placed on the KHS webpage, although a list of feature articles (author, title, pagination) will be included beginning with the June 2000 issue.
3. The KHS declined an invitation to participate in the Southwest Kansas Reptile Expo in Liberal this summer. The decision was based on a policy established at an Annual Business Meeting some time ago. That policy states that the KHS will not affiliate with any organization involved in the sale or trade of amphibians and reptiles. This decision, of course, does not preclude participation by individual KHS members in this or any similar event.
4. Beginning in 2001, the KHS Secretary will have available for distribution at the Annual Meeting a list of members and addresses (postal and email). Membership renewal forms shall include an option to indicate that the member does not wish to be listed.
5. Beginning in 2001, the KHS Secretary will maintain, in addition to the membership list, a "gratis list" for Newsletter distribution. This list will include 25 major departments of herpetology (at universities and museums) in addition to all other recipients of gratis copies. This list will not be distributed to the general membership.
6. The KHS will not at this time investigate the possibility of bonding the Society's funds or financial officers.
7. The KHS will establish an endowment for the Gloyd-Taylor Award by depositing \$100 into a new savings account. As soon as funds accumulate by means of designated donations or other sources, the principal will be converted into a certificate of deposit. The intent of establishing this endowment is so a portion of the accrued interest eventually will be used for the Award. Until then, the Award will be continue to be payable from the Society's non-designated funds.
8. The following proposed changes in the KHS By-laws will be presented to the membership at the 2000 Annual Business Meeting in Kansas City. If approved, the changes will go into effect in 2001.

PROPOSED KHS BYLAWS CHANGES

(existing text in regular type, proposed changes in bold type, rationale in italics)

Article II. Officers of the Society

Section 1. The officers of the Society shall be of two kinds, elective and appointive.

(b) The appointed officer shall be Editor of the Society.

(b) The appointed officers shall be the Editor of the Society and the Society Historian.

Rationale below in Section 5.

Section 4. The duties of the elective officers shall be as follows:

(c) The Secretary shall maintain the records of the Society and officers; notify the membership of pertinent business and be responsible for all general correspondence of the Society.

(c) The Secretary shall maintain the records of the Society and officers, including all moneys received, collect the annual dues and deposit fund into the Society's designated account(s), maintain the membership roster, provide mailing labels to the Editor of the Society, and notify the membership of pertinent business.

(d) The Treasurer shall keep records and accounts of the Society including all moneys received and disbursed; collect the annual dues and maintain the membership roster; and be responsible for all financial reports required by the business of the Society. The Treasurer shall make a financial report to the membership at the general meeting.

(d) The Treasurer shall keep financial records and accounts of the Society, be responsible for all moneys disbursed, and prepare and submit all financial reports required by the business of the Society. The Treasurer shall make a financial report to the membership at the general meeting; this report is to be published in the first issue of the Newsletter during the year following the general meeting.

Rationale: Separating receipts and disbursements protects both officers from charges of impropriety by providing an internal control of funds received and spent by the Society.

Section 5. The duties of the Editor of the Society shall be as follows: The Editor shall be responsible for all phases of Society publications. The Editor may appoint staff

members for assistance as needed. Inasmuch as the newsletter is the principal mechanism for written communication to the membership, the Editor is obligated to publish all communications of the Society and its officers on a first priority basis and to include, as space permits, other items consonant with the stated objectives of the Society. The Editor shall report annually to the officers of the Society.

Section 5. The duties of the appointed officers shall be as follows:

(a) The duties of the Editor of the Society shall be as follows: The Editor shall be responsible for all phases of Society publications. The Editor may appoint staff members for assistance as needed. Inasmuch as the Newsletter is the principal mechanism for written communication to the membership, the Editor is obligated to publish all communications of the Society and its officers on a first priority basis and to include, as space permits, other items consonant with the stated objectives of the Society. The Editor shall report annually to the officers of the Society.

(b) The Historian of the Society shall compile all Society publications and other pertinent records and make provisions for permanent archival storage of those records. The Historian shall report annually to the officers of the Society.

Rationale: No current mechanism exists for the archival preservation of Society records.

KHS SPRING FIELD TRIP SETS RECORD FOR ATTENDANCE

The annual 2000 Kansas Herpetological Society Spring Field Trip was held from 28 to 30 April at the Flint Hills Tallgrass Prairie Preserve (FHTPP) in Butler and Greenwood counties near the picturesque town of Cassoday, nestled in the namesake of the Preserve in the heart of Prairie Chicken country. On Friday afternoon (28 April), KHS members, friends, and colleagues began to assemble at the well-chosen Box Turtle Area in Eldorado Lake State Park. The site had previously been selected by KHS Field Trip Chairperson Larry L. Miller; he arrived earlier and planted the infamous KHS sign in the ground as a territorial marker for all non-herpetological campers that might happen by. Participants began setting up camp, cooking dinner, swapping stories about past surveys, and preparing for their first visit to the Preserve. KHS President-elect Mark Ellis was the only elected officer present; he and Larry Miller attempted (with some success) to organize the gathering into a cohesive camping unit. On Saturday

morning (29 April) at 9:00 am, with the temperature pleasant and a partly cloudy sky, over 65 participants assembled in Cassoday to begin the count. Led by Joe and Suzanne Collins, who were conducting an official amphibian, turtle, and reptile count of the FHTPP for the Kansas Chapter of The Nature Conservancy (owners of the Preserve), a 28-car caravan left Cassoday and proceeded to the first site in Butler County. Over 300 specimens of 26 species were found or at least observed (many Eastern Collared Lizards won the race), and additional vehicles began to arrive (it was easy to see us—28 cars parked atop a flat Flint Hills ridge are hard to miss). At about 1:30 pm, Joe and Suzanne led the crowd to a second site in Greenwood County where over 110 specimens of 18 species were recorded. The days activities concluded about 4:30 pm, and most members returned to camp for dinner and festivities. Joe and Suzanne returned to their motel in Eldorado, in an attempt to recover and gather strength for Sunday's marathon.

On Sunday (30 April), a smaller KHS group (about 45 participants) once again assembled at 9:00 am in Cassoday. The day was cool and cloudy with the threat of rain, but nothing would deter the participants. The 18-car caravan, again led by Joe and Suzanne Collins (who again were under incredible pressure to navigate precisely to the desired site), drove forth to the FHTPP, stopping first in Greenwood County at a new site, where 34 specimens of 8 species were observed. A second and final foray at a new site in Butler county yielded a count of 72 specimens of 8 species. From the standpoint of participation, this was the most successful field trip in the history of the Kansas Herpetological Society. Over 90 participants attended the field trip (a few did not register and are missing from the list below), and certainly the 28+ car caravan set a new record for dust raised on the back roads of the Sunflower State (our dust storm rivaled any prairie fire in the area).

The following URL links to an article from The Wichita Eagle's coverage of the field trip:

<http://www.wichitaeagle.com/sports/outdoors/hertrip0501.htm>

Participants on this historic weekend excursion of the new millennium were: Laura Acuff, Robert Acuff, Jr., Robert Acuff, Shawn Ames, Chelsea Armstrong, Mary Kate Baldwin, Aislynn Barnett, David Beaver, Tyler Beaver, Jesse E. Bell, Sarah Bellows-Blakely, Aaron Bennett, Mitch Bennett, Matt Bonebrake, Alex Bork, Dan Carpenter, Park W. Carter, Chris Cigich, Joseph T. Collins, Suzanne L. Collins, Cindy Cummings, Tom Cummings, G. R. Elder, Mark Ellis, Brandon Eugster, Robert Eugster, Adam Faircloth, Shirley Faircloth, Frank Finks, Georgia Finks,

Karen Graham, James Gubanyi, Henry Hall, Terry Hall, Trey Harrison, Jordan Haven, Kaity Heflin, Emily Heronemus, Betty Horn, John Horn, Amanda Hutton, Dan Johnson, Dustin Johnson, Grace Anne Johnson, Caleb Karch, Olin Karch, Eric Kessler, Maura Kessler, Julie Levings, Cami Liggett, John F. Lokke, Larry L. Miller, Suzanne L. Miller, David Oldham, Jackson Oldham, Robert Oldham, Tag Oldham, Stuart Perez, Jacob Porak, Ashley Rasmussen, Rachel Rasmussen, Stanley Rasmussen, Teresa Rasmussen, Evelyn Regier, Bernard Regier, Emily Reimer, James Reimer, Jill Reimer, Curtis Schmidt, Kathy Sheidler, Gregory Sievert, Melissa Skillman, Melissa Snickles, Jonathan Storm, Don Stout, Dan Thompson, Sheridan Thompson, T. J. Topf, Tony Topf, John Torline, Breana Tutuska, Jenny Upchurch, Jonathan Wasson, David Wickell, Tim Wray, Bob Zerwekh, and Mike Zerwekh.

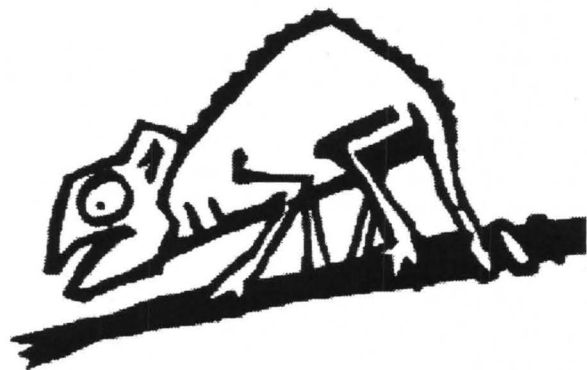
Final counts for the entire two-day trip are as follows:

<i>Species</i>	<i>Number Observed</i>
Woodhouse's Toad (tadpoles only)	±25
Northern Cricket Frog	69
Plains Leopard Frog	24
Bullfrog	10
Great Plains Narrowmouth Toad	5
Common Snapping Turtle	2
Painted Turtle	4
Ornate Box Turtle	46
Slider	1
Eastern Collared Lizard	19
Texas Horned Lizard	2
Great Plains Skink	174
Northern Prairie Skink	12
Ringneck Snake	14
Eastern Racer	5
Great Plains Rat Snake	1
Prairie Kingsnake	2
Common Kingsnake	18
Milk Snake	7
Gopher Snake	6
Plainbelly Water Snake	3
Northern Water Snake	3
Graham's Crayfish Snake	1
Western Ribbon Snake	2
Plains Garter Snake	2
Common Garter Snake	26
Lined Snake	30
Massasauga	9

Totals

28 species 531 specimens

Verifiers: Joseph T. Collins, Suzanne L. Collins and Larry L. Miller.



KHS BRINGS YOU NEWS OF THE WORLD

CORRESPONDENCE ABOUT RATTLESNAKE ROUNDUPS

Dear Editor:

Mr. Powell asked me to contact you and let you know what Coors is doing as to the Sweetwater Rattlesnake Roundup. Here is the short version. Back in Jan. of 1999 I sent Coors a letter, along with the KHS Position Paper on roundups, and a ton of other information related to roundups. Coors sent me a letter from Pat Dunn, who is a consumer information representative stating the issues needed attention and that they were giving serious consideration to the concerns I expressed. The letter I received is dated 1-25-1999.

In March of 1999 during the roundup, the big Coors Lite banner was not up in Nolan County Coliseum. However, other related advertisements were according to eye witnesses. I spent the next 9 months sending mail, making phone calls, and finally making some headway with the Bill Reed Distributor in Abilene. They sponsor the roundup and the spinoff events such as the dance and the chili cook off.

On 11-29-99 Charles Hughes, the General Manager for the Bill Reed Distr. told me in a letter that they will continue to sponsor Sweetwater's roundup. But will decline the added sponsor benefits of having banners, logos, or announcements of products Coors represents within the Nolan County Coliseum during the rattlesnake roundup. Let me tell you that a lot of blood sweat and tears went into this. You will enjoy this logic, as I've asked Coors to stop sponsoring the spinoff events. Up in Golden, Colorado, one of their representatives doesn't see any difference between rodeos and rattlesnake roundups. I have talked with them and they tell me that PETA is calling them about the cruel rodeos and how bad the horses and bulls are treated. I have explained to them that bulls and horses are not gassed out of their corrals, and on and on. You get my drift?

The KHS should send Coors a letter to explain the differences! That is where Coors position is as of now. It's a small victory for all of us, and the KHS Position Paper helped a great deal. Thank you for an excellent paper, A+!

The Arizona Game & Fish Department rattlesnake poster is brought to us by Randy Babb and Mike Demlong. Both are wildlife biologist for the state, and Mike is the state's reptile and amphibians program director. We both keep in touch on a regular basis. I hope this will be enough for your newsletter. Could I get a copy? Thanks for your time.

Dale Burton, Director
Rattlesnake Awareness Programs of Arizona

TOPEKA COLLEGIATE RECEIVES FIRST CNAAR AWARD

The *Topeka Collegiate School* Science Department was the first recipient of a new award, established in 2000 by *The Center for North American Amphibians and Reptiles* (CNAAR). The award is given to a school that promotes education about the amphibians, turtles, reptiles, and crocodilians native to the United States and Canada. Mary Kate Baldwin, Larry L. Miller, and Robert Rose, all science teachers at TCS, have diligently taught their students about these often overlooked creatures, whose lifestyles are often more secretive and sensitive than the general public may realize. Through the use of living animals in the classroom, numerous field trips to a variety of environments throughout the Great Plains, and an explanation of the diversity of life on earth by the use of evolutionary biology, the three teachers have instilled in their students a full and rich appreciation of the salamanders, frogs and toads, turtles, lizards, snakes, alligators and crocodilians that inhabit the North American continent.

A certificate was presented to all three teachers at the *Topeka Collegiate School* Graduation Ceremony on Friday, May 26th, by Suzanne L. Collins, Secretary-Treasurer of CNAAR, and Joseph T. Collins, Director of CNAAR.

MIDDLE SCHOOL STUDENT TO RECEIVE HERPETOLOGY AWARD

Sarah Bellows-Blakely, a seventh grade student at *Topeka Collegiate School*, was presented with a special award for her outstanding work in the field of herpetology during the school's annual middle school awards assembly the morning of Wednesday, 24 May 2000. Her teacher, Larry L. Miller, presented the award. Miller has been involved with herpetological issues for more than 25 years, and he teaches a herpetology elective class to interested middle school students at *Topeka Collegiate*.

Sarah has taken a variety of herpetological elective courses at *Topeka Collegiate* since entering the middle school two years ago. She has participated in several field trips to a variety of locations in Kansas and Oklahoma, and she has served as one of several student assistants during her herpetology classes by teaching new students about the subject of herpetology. Sarah is quite knowledgeable of Kansas' colorful herpetological history and of many of the fascinating amphibians, reptiles, and turtles found in our state. She has a good understanding of the evolutionary species concept and how it has played a part in the evolution of all life on Earth.

NEW ONLINE HERP

CONSERVATION JOURNAL

The Alliance for the Conservation of Reptiles and Amphibians will soon begin publishing a new online journal concerned with herpetological conservation

<http://www.herpconservation.org>

The journal, *Cylindraspis* (after an extinct genus of tortoises, formerly found on Mauritius and Reunion) will be published in PDF format, so that articles can be downloaded and printed but not copied to text. "Subscribers" will be alerted to the publication of each issue by email. The journal will be free of charge and open to all. *Cylindraspis* will contain peer reviewed articles, works in progress for authors seeking commentary, book reviews, legislative alerts, editorials and reptile and amphibian conservation-related news, particularly where it concerns on-the-ground conservation projects. Articles posted in *Cylindraspis* need not be original, assuming that the proper release from the former source of publication is obtained. English is the preferred language, but articles in other languages will be considered.

GEORGIA JOB ANNOUNCEMENT

Title of job: Faculty position in vertebrate ecology.

Location of job: University of Georgia, Athens, Georgia.

Closing date: August 15, 2000.

Job Description: Assistant Professor. Vertebrate Ecologist, tenure-track, 12-month, 50% teaching, 50% research in the Daniel B. Warnell School of Forest Resources, University of Georgia. We are especially interested in candidates in the areas of herpetology, population/conservation genetics, wetland ecology, and ecosystem or landscape ecology. Teaching responsibilities include a core, 5-credit undergraduate course in vertebrate natural history and one or more courses, possibly at the graduate level, in the successful applicant's area of expertise. Ph.D. in wildlife, ecology, conservation biology, or a related field is required. Applicants with a strong background in applied aspects of wildlife ecology and management are preferred. Postdoctoral experience is highly desirable. Application reviews begin August 15, 2000. Anticipated starting date: January 1, 2001.

Applicants should submit a curriculum vitae, statements of teaching and research interests, names and addresses of at least 3 professional references, transcripts, and copies of up to 5 major publications. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.

For more information contact: Dr. Robert J. Cooper, Vertebrate Ecologist Search Committee, Warnell School of Forest Resources, University of Georgia, Athens, Georgia 30602, USA. Fax: 706-542-8356; email: rcooper@smokey.forestry.uga.edu.

CONSERVATION AND REINVESTMENT ACT

CARA Moves Ahead

1) OVERSIGHT HEARING—On May 24th, the Senate Environment and Public Works (EPW) Committee held an oversight hearing on CARA. An oversight hearing is a way for a committee to hold a public forum on legislation or an issue but not necessarily act on the recommendations. In this case, the EPW committee is holding the hearing, but CARA is technically in the Energy and Natural Resources Committee (ENR).

2) COMMITTEE MARKUP—On Wednesday, June 14th, the ENR Committee marked up and voted on CARA. In general, the goals for states with ENR committee members were: 1—encourage the majority of the committee to reach an agreement on CARA promptly, 2—Work on gaining and solidifying support from committee members, and 3—have committee members who are already CARA cosponsors to support the strongest Title III possible. CARA must have at least 11 of the 20 committee members to pass.

3) SENATE FLOOR VOTE—Once CARA passes ENR, the goal is to get it to the Senate floor for a vote before the August Recess (recess is July 29 -September 4).

4) CONFERENCE COMMITTEE—After CARA passes the Senate, an ad hoc CARA conference committee will be formed with a handful of key House and Senate members including the House and Senate committee chairs and ranking members and others (e.g., Chairman Don Young, Ranking Democrat George Miller). These conferees will have to work out the differences between the House and Senate versions of CARA and release one final version back to House and Senate floors for a final vote. The sooner CARA gets through the Senate, the more time the conference committee will have to work out an agreement. It takes hard work and time to reach agreement in conference committee. Often bills die in conference committee because the conferees could not reach agreement or ran out of time.

5) FINAL HOUSE AND SENATE VOTE—Once a joint CARA bill is released from the conference committee, the full House and Senate each vote one last time on CARA (this time there are no floor amendments).

6) PRESIDENT WILLIAM JEFFERSON CLINTON SIGNS CARA INTO LAW.

More information can be found at:

www.teaming.com

FEATURE ARTICLES

A HERPETOLOGICAL SURVEY OF THE FORT LARNED NATIONAL HISTORIC SITE, PAWNEE COUNTY, KANSAS

MARK D. VAN DOREN AND CURTIS J. SCHMIDT
Fort Hays State University
Hays, Kansas 67601

Introduction

As a result of recent legislation, the U.S. government is now funding a survey of the natural resources contained in 256 national parks, known as the Servicewide Inventory and Monitoring Program. Accordingly, the National Park Service (NPS) is responsible for establishing an inventory of selected natural resources for each participating park. One of the objectives of the NPS is to conduct a biological survey of each park and establish a long-term monitoring program.

The biological inventory program, developed by the NPS, is designed to provide park managers with a thorough scientific survey of the distribution and status of flora and fauna in an effort to better manage and protect biological resources. This study is in direct response to the new program and focuses only on the reptiles and amphibians found on and around the Fort Larned National Historic Site. The objective of the study was to document as many species of reptiles and amphibians within the park and to learn as much about their abundance and distribution as possible within one summer season.

The Fort is located in Pawnee County, Kansas, approximately 6 miles west of Larned (NW 1/4 Sec 32, T 21S, R 17N). A variety of habitats are found on the site. The Pawnee River runs directly through the park and provides aquatic as well as riparian habitats. The remainder of the park is mixed grass prairie; tall grass in the flood plain surrounding the river and short grass in upland areas, most notably at the detached ruts site. Portions of the tall grass prairie are under restoration and the quality of prairie habitat varies widely. A small area that includes the park headquarters and officers quarters contains the only buildings and maintained roads in the park. The area is relatively flat, except for along the river, a dry oxbow lake, and a dike located behind the officer's quarters. Farms and cropland border the park on all sides, with very little uncultivated land remaining in the surrounding area.

Materials and Methods

A total of eight survey days were conducted between 2 May 1998 and 26 September 1998. There are several useful methods for collecting reptiles and amphibians. In this part of the country looking under rocks and logs, as well as cultural detritus, such as boards and tins, is the most common and productive method of collecting. Unfortunately, the ground cover in the study area was limited to a small outcropping of limestone along the bank of the Pawnee River and some concrete rubble on the northwest side of the oxbow lake. Pitfall traps and drift fences are commonly used for collecting, but were decided against due to the infrequency of survey days. As an alternative, over 40 pieces of plywood board and concrete sheeting of varying sizes (most 2–4 feet wide) were strategically placed as artificial habitat. The pieces were placed throughout the park, and in a variety of habitats: the majority in riparian habitats along the river, and in the tall grass prairie near the river. Two large boards (3 x 6 feet) were laid out in the prairie dog town at the detached ruts site. The artificial habitat was constructed on 5 April 1998, and was checked 4–7 times between 2 May and 26 September 1998. Several boards and pieces of sheet metal lying around the maintenance yard, west of the Fort, were also checked regularly (ca. 7 times) as well as the rock outcroppings mentioned previously.

Many reptiles and amphibians are nocturnal or become nocturnal during the hot summer months. Driving country roads at night can also be an effective way to collect specimens, during this time. The roads surrounding the Fort were driven for 1–2 hours after sunset on 24 May and again on 29 August.

The Pawnee River provides habitat for a variety of aquatic and semi-aquatic reptiles and amphibians as well as refuge for many terrestrial species. Fortunately, observing and collecting specimens in or near the river was much easier than in the surrounding area. The afternoons of 29–

30 August were spent floating the river in a canoe. This method proved very useful in observing turtles and snakes. In addition, two large turtle traps were used to capture aquatic turtle species. The cylindrical traps, measuring 2 1/2 feet in diameter and six feet long with one-inch mesh, were baited with perforated cans of oysters and cream corn suspended from the top of the traps. One trap was staked to the river bottom and 3/4 submerged near the bridge on the west side of the Fort. The other trap was suspended from a tree branch and 3/4 submerged near the bridge leading to the Fort headquarters. Both traps were set on 29 August, and were checked on 30 August, 8 September, and 26 September.

Additional specimens were documented by searching by foot in the appropriate habitats. In open areas, with little ground cover, this method was especially important.

This survey was intended primarily to ascertain what species of amphibians and reptiles occur at Fort Larned, and secondarily to estimate the possible relative abundance of each species. Because of the way many of the specimens were found (e.g., choruses of *Pseudacris triseriata*), it was not always possible to quantify a unit effort as a means of estimating relative abundance. However, survey results provide a good initial estimate of relative abundance for most species.

The total time spent surveying was broken down into five major survey techniques: hiking the area and lifting ground cover, observation from area bridges, utilization of turtle traps, floating the river, and road-cruising. Approximately 20 hours were spent hiking the area and lifting artificial habitat as well as miscellaneous ground cover including rocks, sheet metal, logs, and boards. Roughly eight hours were spent surveying the Pawnee River and tributaries from area bridges with and without binoculars. Six hours were spent checking turtle traps. Eight hours were spent floating the river in a canoe, and six hours were spent road cruising.

Results

This section identifies the documented species as well as those species that were likely to occur in the area based on knowledge of their habits, habitat, and distribution. For those species documented, the relative abundance and preferred habitats were assessed, where possible. All species names, as well as habitat and natural history, are taken from Collins (1993). A total of seventeen species of amphibians and reptiles were documented during the survey period, including three new Pawnee County records.

The Barred Tiger Salamander, *Ambystoma mavortium*, is the only salamander found at the Fort. These salamanders remain underground for much of the spring and summer, only emerging during or after rains (Collins

1993). During emergence, these creatures often fall into pitfalls such as window wells and water wells. The one specimen we collected was found in a well just east of the Fort and within 100 yards of the Pawnee River. Although *A. mavortium* is common throughout the area, it is rarely seen. It would most likely be found while crossing the roads during or after rain showers.

Two species of toads were encountered on the Fort. The Great Plains Toad, *Bufo cognatus*, and the Woodhouse's Toad, *Bufo woodhousii*, are extremely abundant throughout the area. The best chances of discovering either of these two species was at night, near bright lights, along the sides of buildings, or during or after evening rain showers.

The Great Plains Narrowmouth Toad, *Gastrophyrne olivacea*, was typically found beneath rocks on open grassy slopes, but can tolerate a wide range of habitats (Collins 1993). During a mid-spring thunderstorm, we encountered six individuals emerging from small holes under the concrete foundation of the public restrooms at the Fort entrance. *G. olivacea* may live in similar burrows throughout the Fort, and may actually be common despite the paucity of specimens encountered during this study. The specimens that were collected represent new county records for Pawnee County and have been deposited in Museum of the High Plains collection at The Sternberg Museum of Natural History, Fort Hays State University.

The Plains Spadefoot, *Spea bombifrons*, was considered a species of probable occurrence. Although no specimens were documented on the Fort, this secretive species probably occurs in the area and emerges from burrows during rainy periods.

The Western Chorus Frog, *Pseudacris triseriata*, is common near water throughout its range, especially in the spring. It emerged during or after rains, and was heard chorusing at the prairie dog town site in early spring. Both the Spotted Chorus Frog, *Pseudacris clarkii*, and the Northern Cricket Frog, *Acris crepitans*, were given the status of possibly occurring on the Fort. *P. clarkii* utilizes habitat similar to that of *P. triseriata* but was not discovered during the survey. *A. crepitans* frequents muddy banks of shallow water (Collins 1993), and may eventually be found in drainage ditches and tributaries of the Pawnee River.

Both the Bullfrog, *Rana catesbeiana*, and the Plains Leopard Frog, *Rana blairi*, were very abundant along Pawnee River proper, as well as the riparian habitat surrounding it. They also have a tendency to wander a considerable distance from water during and after rains, and several *R. blairi* were collected from the window wells of the officer's quarters on the Fort.

Toads and frogs can be discovered and distinguished by their vocalizations during the breeding season. They are most commonly heard during or after rain showers, as they

congregate in temporary and permanent bodies of water to chorus. Other species of anurans are more opportunistic breeders and can be heard any time that conditions are favorable. Identifying frog and toad calls is often the best way to determine the presence of many species, however, during the survey only *Pseudacris triseriata* and *Rana catesbeiana* were heard calling.

The Pawnee River was also an ideal habitat for several species of turtles. Three bridges cross the river, and provided excellent vantage points for observing and identifying the majority of these turtle species. The Painted Turtle, *Chrysemys picta* was the most observably abundant turtle on Fort Larned. Two other turtle species were documented for the first time in Pawnee County. The Slider, *Trachemys scripta*, was found to be rather common, as was the Ouachita Map Turtle, *Graptemys ouachitensis*. Observations on both these turtles was most easily accomplished using binoculars. Due to the secretive nature of these two species, keeping a considerable distance was often necessary.

Although encountered less frequently than the other aquatic turtles, Common Snapping Turtles, *Chelydra serpentina*, also frequented the area, and two were documented in the Pawnee River by using binoculars. One Spiny Softshell, *Apalone spinifera*, was also observed foraging near the bank of the river. This was unexpected, because *A. spinifera* is common throughout central Kansas in a wide variety of aquatic habitats, (Collins 1993). More diligent use of turtle traps in various habitats along the Pawnee River may have aided in the collection of this taxon.

The Ornate Box Turtle, *Terrapene ornata*, was expected to be abundant throughout Fort Larned. Although no specimens were encountered during our survey, *T. ornata* lives in a variety of habitats throughout Kansas at a population density of more than one turtle per acre (Collins 1993).

Another typically common inhabitant of central Kansas, the Yellow Mud Turtle (*Kinosternon flavescens*), was conspicuously absent from the survey; none were observed during the course of this study. *K. flavescens* is reported to be common in bodies of water with muddy or sandy bottoms and may commonly travel long distances between bodies of water (Collins 1993).

Only one species of lizard was documented on the Fort. The Six-Lined Racerunner, *Cnemidophorus sexlineatus*, was found in many sandy areas, as well as along dirt roads. It was also observed active on a warm, sunny day along the rocky banks of the Pawnee River, on the west edge of the Fort.

Many species of snakes are difficult to collect without the presence of ground cover such as rocks, logs, boards, and tins. It is even more difficult to predict relative abundance without these permanent shelters where snakes can

be found repeatedly. On the other hand, many snakes are not habitat specific and tend to wander from one shelter to the next. Fort Larned is limited in these types of shelters and most encounters happen by chance. The single Plains Garter Snake, *Thamnophis radix*, that was collected during this study was found under a rock in the same vicinity as Six-lined Racerunner, along the Pawnee River. The three other documented snakes, were found by searching by foot. One Bullsnake, *Pituophis catenifer*, was collected, and one Northern Water Snake, *Nerodia sipedon*, was observed. The Bullsnake was found in tall grass prairie near the Pawnee River and the Northern Water Snake was found swimming in the Pawnee River. On the Fort, *N. sipedon* is probably restricted to areas in or near the Pawnee River and its tributaries.

Several other snake species are probably found in the area and therefore, possibly occur on the Fort, including the Eastern Racer, *Coluber constrictor*; Western Hognose Snake, *Heterodon nasicus*, Eastern Hognose Snake, *Heterodon platirhinos*, Great Plains Rat Snake, *Elaphe emoryi*, Prairie Kingsnake, *Lampropeltis calligaster*, Common Kingsnake, *Lampropeltis getula*, Coachwhip, *Masticophis flagellum*, and Western Rattlesnake, *Crotalus viridis*. Each of these species has various optimal habitats, which include grasslands, and all have been previously documented either in Pawnee County, or the surrounding area (Collins 1993). Other species that may ultimately be found in or near the Pawnee River and its drainages include: the Common Garter Snake, *Thamnophis sirtalis*, Western Ribbon Snake, *Thamnophis proximus*, Plainbelly Water Snake, *Nerodia erythrogaster*, Diamondback Watersnake, *Nerodia rhombifer*, and Massasauga, *Sistrurus catenatus*. Some of these species may be common; however, we did not document their presence and therefore listed them as species of possible occurrence.

Discussion

We found that the best surveying technique for lizards and snakes was simply searching by foot. There were a few objects, such as logs and boards, on the Fort and nearby that may harbor some herps, but they were not productive in this survey. The use of artificial habitats in the form of boards and sheet metal, were not effective. The boards only revealed a few toads throughout the entire study. However, given more time, the boards may become more popular shelters for herps and we believe this is worthy of future study. The use of drift fences and pitfalls may also be an effective alternative.

As mentioned, several species of turtles are found in the Pawnee River and its tributaries. Capturing specimens for vouchers and positive identification is made simple for most species by using standard turtle traps. However, as we

discovered, setting and baiting the trap must be done correctly. If the corners of the trap are not somehow anchored, the trap will not stay open and stretched out properly. The bait should be suspended, allowing water to flow through it and helping to spread the 'odor' throughout the water. Placement of traps should be in an area where turtles are most commonly seen.

We ran into much confusion regarding the identification of turtles of the genus *Graptemys*. First of all, the taxonomy of two of these turtles had recently changed. The Ouachita Map Turtle, which was formerly considered a subspecies of the False Map Turtle, *Graptemys pseudogeographica*, is now considered a distinct species, *Graptemys ouachitensis*. The Mississippi Map Turtle, *Graptemys p. kohnii* which was formerly considered distinct species, is now considered a subspecies of the False Map Turtle, *Graptemys pseudogeographica*. The Ouachita Map Turtle, *G. ouachitensis*, was the only member of the genus to have been previously documented in Pawnee County. This was an isolated record, many miles to the west of its next closest record, which is mainly in eastern Kansas. We conclude that a large population of this species occurs on Fort Larned, and that the population may be isolated.

During the heat of mid summer, most snake species become nocturnal and can be found at night by cruising roads. We utilized this on two occasions and for only 1-2 hours at a time. More time spent road cruising should help increase the number of snake species documented in future surveys.

Future studies might be more successful by floating the river more frequently. Again, we only did this on two occasions, but found it to be very effective. It was especially helpful in identifying turtles, anurans, and semi-aquatic snakes.

Conclusion

The herpetofauna of Pawnee County remains largely unstudied. Very little has been done to determine species diversity, and to determine distributions and relative abundance. Studies such as this one provide a basis for monitoring reptile, turtle, and amphibian populations well into the future. Biological surveys will help answer similar questions about a variety of the aspects of the demography, distribution, and life history of the herpetofauna, and the knowledge gained by the Biological Inventory Program will undoubtedly help park officials and other scientists better understand and manage our biological resources.

Literature Cited

Collins, Joseph T. 1993. *Amphibians and Reptiles in Kansas. Third Edition.* University Press of Kansas, Lawrence. xx + 397 pp.

Appendix I. Number of documented species by habitat type.

Species	Restored Prairie/Riparian/Aquatic
Amphibians	
<i>Ambystoma mavortium</i>	1/0/0
<i>Bufo cognatus</i>	>20/0/0
<i>Bufo woodhousii</i>	>100/0/0
<i>Pseudacris triseriata</i>	>10/0/0
<i>Rana blairi</i>	0/>10/>20
<i>Rana catesbeiana</i>	0/>10/>20
<i>Gastrophryne olivacea</i>	6/0/0
Turtles	
<i>Chelydra serpentina</i>	0/0/2
<i>Chrysemys picta</i>	0/0/14
<i>Graptemys ouachitensis</i>	0/0/3
<i>Trachemys scripta</i>	0/0/4
<i>Apalone spinifera</i>	0/0/1
Reptiles	
<i>Cnemidophorus sexlineatus</i>	1/0/0
<i>Pituophis catenifer</i>	1/0/0
<i>Nerodia sipedon</i>	0/0/1
<i>Thamnophis radix</i>	1/0/0



NORTHERN LOUISIANA REPTILES AND AMPHIBIANS: A JUBILEE FIELD TRIP

TRAVIS W. TAGGART
Department of Herpetology
Sternberg Museum of Natural History
Hays, Kansas 67601
ttaggart@fhsu.edu

SUZANNE L. COLLINS & JOSEPH T. COLLINS
The Center for North American
Amphibians and Reptiles
1502 Medinah Circle
Lawrence, Kansas 66047
scollins@ukans.edu
jcollins@ukans.edu

Managed by the U. S. Forest Service, the Kisatchie National Forest consists of almost 600,000 acres in six separate units in central and northern Louisiana and features some of the steepest and most rugged terrain in Louisiana. The Kisatchie is one of the few places in Louisiana where rocks are relatively common. The area consists of pine covered hillsides, white sandy rivers and streams, and moss-covered cypress bayous. The six units of Kisatchie lie between the Ouachita and Sabine Rivers and contain a wide variety of endemic animals and plants. The Kisatchie Slimy Salamander (*Plethodon kisatchie*) is one of these endemics, and despite repeated trips to the area by one of us (TWT) previously, it has avoided capture. Compared to other members of the Slimy Salamander complex, this form is quite distinct; however the difficulty of its habitat and short activity periods have generally precluded it from being captured or photographed often.

This was the impetus for the expedition described below. We spent nine spring days in the sunny south photographing as many herps as possible, with the ultimate goal of securing some photographs of the enigmatic Kisatchie Slimy Salamander.

An annotated itinerary of our trip through Oklahoma, Arkansas, and Louisiana is given below. AOR = alive on road; DOR = dead on road.

15 April 2000

We departed Lawrence at 6:00 am and drove to McCurtain County, Oklahoma, arriving about 5:00 pm. Observed the following:

Oklahoma: McCurtain Co: Beaver Bend State Park

(Beaver Bend State Park is the only known locality of *Plethodon sequoyah*, another large member of the Slimy Salamander complex.)

Desmognathus brimleyorum—1 large adult under rock in wooded ditch

Eurycea multiplicata—3 adults under rocks along woodland stream

Plethodon serratus—7 under rocks and logs along woodland stream

Plethodon sequoyah—6 under rocks and logs along ravine near woodland stream

Stayed overnight at motel in Broken Bow, Oklahoma (a primitive camp site).

16 April 2000

Left Broken Bow, Oklahoma at 8:00 am heading east. Arrived in Arkansas at 9:00 am. Observed the following:

Arkansas: Ouachita Co: White Oak State Park

Desmognathus brimleyorum—2 under rocks in small stream

Terrapene carolina—1 AOR male

Eumeces fasciatus—1 under log in forest

Scincella lateralis—1 adult under log in forest

Arkansas: Ouachita Co: Poison Springs State Park

Desmognathus brimleyorum—1 under rock in small stream

Arkansas: Union Co: Calion City Lake area

(Calion City Lake is a historic collection locality for the only known Arkansas population of the Kisatchie Slimy Salamander.)

Acris crepitans—±100 adults active along small roadside stream

Hyla chrysoscelis/versicolor—2 heard calling in roadside forest

Bufo fowleri—2 adults under asphalt shingles near oil tanks

Rana clamitans—2 adults active along small roadside stream

Terrapene carolina—1 AOR male

Eumeces anthracinus—1 young adult under log in forest

Eumeces fasciatus—1 young adult under log in forest

Scincella lateralis—1 adult under log in forest

Sceloporus undulatus—3 adults (1 basking; 2 under asphalt shingles near oil tanks)

Elaphe obsoleta—1 DOR
Agkistrodon piscivorus—1 adult DOR

Drove into Louisiana at 2:00 pm.

Louisiana: Lincoln Parish: S of Ruston on US Rt. 167, 0.7 mi N Jackson Parish border

Coluber constrictor—1 adult DOR
(The Racers here, and to the south to Lake Charles, are of the 'buttermilk' variety and are quite attractive. Their ground colors vary from light blue to black with differential amount of large white or yellow speckles on their dorsum.)

Louisiana: Lincoln Parish: Cypress Bayou at Lincoln-Jackson Parish border, 32.4516177N, -92.6592600W

Trachemys scripta—1 adult DOR

Louisiana: Jackson Parish: within Hilltop city limits (S of Quitman) 32.3365402N, -92.7013708W

Lampropeltis calligaster—1 adult DOR
(In comparison to typical Kansas specimens, the Prairie Kingsnakes from the Kisatchie are much darker, and possibly more robust.)

Louisiana: Winn Parish: 6.9 mi N jct US Rt. 167 & La. Rt. 126 (= Dodson), 32.1695030N, -92.7048201W

Chelydra serpentina—1 subadult DOR

Arrived in Natchitoches (NAK-a-tish) at 7:00 pm and secured lodging at for the week.

17 April 2000

Spoke to Jeff Boundy of the Department of Wildlife and Fisheries at Baton Rouge, and obtained locality information for selected species. Left lodging at 9:00 am. Observed the following:

Louisiana: Natchitoches Parish: just N Bellwood at Bayou Santaburb on La. Rt. 117, 31.5395218N, -93.2070745W

Trachemys scripta—1 adult DOR

Louisiana: Natchitoches Parish: just S Bellwood on La. Rt. 117 at Mile Marker 27, 31.5159237N, -93.2026918

Agkistrodon contortrix—1 adult DOR

Louisiana: Natchitoches Parish: at bridge on La. Rt. 118, 31.3954014N, -93.0628843W

Acris crepitans—1 active by day along stream
Eumeces anthracinus—2 under sheet metal
Eumeces fasciatus—1 under sheet metal
Scincella lateralis—2 under sheet metal
Cnemidophorus sexlineatus—4 active by day along sandy streambank
Elaphe obsoleta—under sheet metal

Louisiana: Natchitoches Parish: on La. Rt. 118, 31.3870543N, -93.0521340W

Eumeces laticeps—1 male under sheet metal
Coluber constrictor—1 male under sheet metal

Louisiana: Natchitoches Parish: on La. Rt. 118, 31.3741475N, -92.9994554W

Anolis carolinensis—1 adult AOR (brown)
Storeria occipitomaculata—1 adult DOR (venter yellow)

Louisiana: Natchitoches Parish: just W Mora on La. Rt. 118, 31.3741207N, -92.9504300W

Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: at Mora on La. Rt. 118, 31.3645399N, -92.9356564W

Opheodrys aestivus—1 adult DOR

Louisiana: Rapides Parish: SE of Mora on La. Rt. 118, 31.3481516N, -92.9175837W

Chelydra serpentina—AOR

Louisiana: Rapides Parish: at Sharp
Terrapene carolina—1 adult AOR

Louisiana: Grant Parish: on La. Rt. 8 at Mile Marker 86, 31.5259123N, -92.5596321W

Terrapene carolina—1 adult AOR

Louisiana: Grant Parish: on La. Rt. 8, 31.5776575N, -92.3326743W

Coluber constrictor—1 adult DOR

Louisiana: Catahoula Parish: Sicily Island Hills WMA, 31.8255258N, -91.7548622W

(Sicily Island Hills is one of the best known localities for the Kisatchie Slimy Salamander; however, despite hours of intense searching, none were discovered.)

Desmognathus conanti—3 under logs in ravine along stream

Pseudacris crucifer—1 under log in ravine along stream

Rana catesbeiana—1 heard calling

Eumeces fasciatus—1 adult male under rock in ravine along stream

Scincella lateralis—±20 adults observed in leaf litter and under logs in ravine

Louisiana: Catahoula Parish: Sicily Island Hills WMA, 31.7963755N, -91.7533494W

Coluber constrictor—1 adult under sheet metal

Louisiana: Catahoula Parish: WSW Harrisonburg on La. Rt. 8, 31.7297709N, -91.8818540W

Coluber constrictor—1 adult under sheet metal

Louisiana: Winn Parish: at Packton on La. Rt. 500.
31.7970192N, -92.5739659W

Nerodia erythrogaster—1 adult DOR

Louisiana: Winn Parish: at jct. Rt. 167 & PR 617.
31.7972714N, -92.5801886W

Scincella lateralis—1 adult AOR

Louisiana: Winn Parish: W of Wheeling on Rt. 74.
31.7527574N, -92.8613753W

Nerodia fasciata—1 subadult AOR

Louisiana: Natchitoches Parish: on U. S. Rt. 71.
31.7708892N, -92.9810769W

Hyla cinerea—heard calling in roadside swamp

Nerodia rhombifer—1 adult AOR

Stopped collecting at 9:00 pm.

18 April 2000

Left lodging at 9:15 am. Observed the following:

Louisiana: Natchitoches Parish: near Provencal at trash
pickup site. 31.6424113N, -93.1708432W

Scincella lateralis—1 adult under log

Anolis carolinensis—1 adult

(Spread much sheet metal around for return trips.)

Louisiana: Natchitoches Parish: near Flora. 31.6020119N,
-93.1031282W

Trachemys scripta—1 adult basking on log

Nerodia rhombifer—1 adult basking on log

Louisiana: Natchitoches Parish: 1.1 mi on Long Leaf Vista
Road. 31.4860386N, -93.1770820W

Thamnophis proximus—1 adult DOR

Louisiana: Natchitoches Parish: on Long Leaf Vista Trail.
31.4740008N, -92.9993267W

Scolopendra sp. (centipede)—2 adults active by day

Sceloporus undulatus—5 adults active on low rock wall

Cnemidophorus sexlineatus—2 adults active by day

Louisiana: Natchitoches Parish: trash site on Rt. 118.
31.4305329N, -93.1722487W

Sceloporus undulatus—1 adult

(Much cover was available at this site, and may yield many more specimens in the future.)

Louisiana: Natchitoches Parish: 4.5 mi E Kisatchie.
31.3973916N, -93.1155039W

Acris sp.—2 adults observed around logs in dry upland
pasture

Agkistrodon piscivorus—1 adult found dead under sheet
metal

Louisiana: Natchitoches Parish: at bridge on La. Rt. 118.
31.3954014N, -93.0628843W

Rana clamitans—adults heard calling by day

Nerodia fasciata—1 adult swimming in stream

Louisiana: Natchitoches Parish: SW of Cypress on Good
Hope Road (FR 342). 31.5873510N, -93.0442268W

Lampropeltis getula—1 adult DOR

Ate dinner at 5:00 pm. Went road-cruising at 6:30 pm.

Louisiana: Natchitoches Parish: 2 mi from jct. La. Rts. 117
& 120 on 120. 31.6431409N, -93.1718249W

Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: 5.3 mi from jct. La. Rts.
117 & 120 on 120. 31.6274554N, -93.1214691W

Agkistrodon contortrix—adult DOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 31.5066057N, -93.0348981W

Micrurus tener—1 adult AOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 31.4748484N, -93.0100394W

Agkistrodon piscivorus—1 adult AOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 0.4 mi W La. Rt. 119. 31.4586103N, -92.9682721W

Tarantula—1 adult AOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 4.4 mi W La. Rt. 119. 31.4819455N, -93.0225117W

Bufo cf. *woodhousii*—1 adult AOR (reddish color)

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 6.3 mi W La. Rt. 119. 31.5026146N, -93.0336536W

Bufo cf. *woodhousii*—1 adult AOR (brown color)

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 8.5 mi W La. Rt. 119. 31.5076250N, -93.0577237W

Elaphe emoryi—1 adult DOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 9.3 mi W La. Rt. 119. 31.5013647N, -93.0678786W

Agkistrodon contortrix—1 subadult AOR

Louisiana: Natchitoches Parish: Long Leaf Trail Vista
Road. 14 mi W La. Rt. 119. 31.4847726N, -93.1390000W

Hyla cinerea—1 adult AOR

Louisiana: Natchitoches Parish: 2 mi W jct. La. Rt. 117 &
478 on 478. 31.5639353N, -93.2380969W

Farancia abacura—1 juvenile AOR

Louisiana: Natchitoches Parish: 0.5 mi E jct. La. Rt. 117 & 478 on 478, 31.5638119N, -93.1996019W
Storeria occipitomaculata—1 adult DOR

Louisiana: Natchitoches Parish: 2.5 mi E jct. La. Rt. 117 & 478 on 478, 31.5697074N, -93.1673241W
Bufo cf. *woodhousii*—chorusing in roadside marsh
Acris sp.—chorusing in roadside marsh
Hyla chrysoscelis/versicolor—chorusing in roadside marsh
Rana clamitans—chorusing in roadside marsh
Rana catesbeiana—chorusing in roadside marsh

Louisiana: Natchitoches Parish: 5.4 mi E jct. La. Rt. 117 & 478 on 478, 31.5864712N, -93.1240708W
Lampropeltis getula—1 juvenile DOR

Louisiana: Natchitoches Parish: 5.7 mi E jct. La. Rt. 117 & 478 on 478, 31.5883380N, -93.1209166W
Agkistrodon contortrix—1 adult DOR

Louisiana: Natchitoches Parish: on Collins Road near Natchitoches, 31.6923541N, -93.1833262W
Ophisaurus attenuatus—1 adult DOR

Stopped collecting at 11:00 pm and returned to lodging.

19 April 2000

Left lodging at 9:30 am. Observed the following:

Louisiana: Natchitoches Parish: 1.7 mi from La. Rt. 6 on Collins Road, 31.6962272N, -93.1811000W
Pseudemys concinna—1 adult AOR

Louisiana: Natchitoches Parish: 3.3 mi from La. Rt. 6 on Collins Road, 31.6746354N, -93.1858958W
Terrapene carolina—1 adult AOR

Louisiana: Natchitoches Parish: within Provencal city limits, 31.6469335N, -93.2017154W
Lampropeltis getula—1 adult DOR

Louisiana: Natchitoches Parish: 6.8 mi W Provencal on South Boulevard, 31.6690457N, -93.3002866W
Coluber constrictor—1 adult DOR
Crotalus horridus—1 adult DOR

Louisiana: Sabine Parish: Cedar Grove Road, 4.6 mi W US Rt. 6, 31.6658109N, -93.3843953W
Opheodrys aestivus—1 adult DOR

Louisiana: Sabine Parish: Cedar Grove Road, 8.4 mi W US Rt. 6, 31.6502327N, -93.442787W
Coluber constrictor—1 young adult AOR

Louisiana: Sabine Parish: 0.7 mi W jct. Patton Road & Marthaville Road, 31.6462094N, -93.4724362W
Terrapene carolina—1 adult DOR

Louisiana: Sabine Parish: 5.4 mi E jct. La. Rt. 171 & La. Rt. 1216, 31.6462737N, -93.4723503W
Lampropeltis calligaster—1 adult DOR

Louisiana: Sabine Parish: Shuteye Road on E edge Sabine WMA, W of Many, 31.5640104N, -93.5107113W
Lampropeltis getula—1 adult AOR
Opheodrys aestivus—1 adult DOR

Louisiana: Sabine Parish: Shuteye Road on E edge Sabine WMA, W of Many at San Jose Cr, 31.5643376N, -93.5055239W
Trachemys scripta—1 adult AOR

Louisiana: Sabine Parish: Sabine WMA, 31.5578789N, -93.5499198W
Thamnophis proximus—1 young adult AOR

Louisiana: Sabine Parish: Sabine WMA, 31.5465921N, -93.582632W
Crotalus horridus—1 subadult DOR

Louisiana: Sabine Parish: 4.4 mi E jct. La. Rt. 191 & La. Rt. 471 on La. Rt. 471, 31.4445502N, -93.5056151W
Elaphe obsoleta—1 adult DOR

Louisiana: Sabine Parish: 5 mi E jct. La. Rt. 171 & La. Rt. 118 on La. Rt. 118, 31.4674294N, -93.4097100W
Coluber constrictor—1 adult DOR
Opheodrys aestivus—1 adult DOR

Louisiana: Sabine Parish: 5.6 mi E jct. La. Rt. 117 & La. Rt. 118 on La. Rt. 118, 31.4671129N, -93.3696646W
Masticophis flagellum—1 adult DOR

Louisiana: Sabine Parish: 5.6 mi E jct. La. Rt. 117 & La. Rt. 118 on La. Rt. 118, 31.4165694N, -93.1809659W
Masticophis flagellum—1 adult DOR

Louisiana: Sabine Parish: Anderson Pond, 31.4031744N, -93.1410707W
Rana catesbeiana—calling
Rana clamitans—calling
Gastrophryne carolinensis—calling
Anolis carolinensis—active by day
Eumeces fasciatus—active by day

Returned to lodging at 5:00 pm.

Ate dinner and began road-cruising at 6:30 pm. Observed the following:

Louisiana: Natchitoches Parish: 0.1 mi SW jct. US Rt. 6 on Collins Road, 31.7127550N, -93.1772805W
Terrapene carolina—1 adult DOR

Louisiana: Natchitoches Parish: 4.7 mi SW jct. US Rt. 6 on Collins Road, 31.6593790N, -93.1937493W
Elaphe obsoleta—1 adult DOR

Louisiana: Sabine Parish: 0.8 mi W Sabine-Natchitoches Parish line on La. Rt. 118, 31.3961738N, -93.250875W
Scincella lateralis—1 adult AOR
Nerodia fasciata—1 adult AOR
Agkistrodon piscivorus—1 juv AOR

Louisiana: Natchitoches Parish: E of Sabine Parish line on La. Rt. 118, 31.3945001N, -93.2212044W
Agkistrodon contortrix—1 young adult AOR

Louisiana: Natchitoches Parish: E of Sabine Parish line on La. Rt. 118, 31.3962382N, -93.2191713W
Agkistrodon piscivorus—1 juv AOR

Louisiana: Natchitoches Parish: E of Sabine Parish line on La. Rt. 118, 31.4109743N, -93.1960935W
Agkistrodon contortrix—1 young adult AOR

Louisiana: Natchitoches Parish: E of Sabine Parish line on La. Rt. 118, 31.4147455N, -93.1878270W
Agkistrodon contortrix—1 young adult AOR

Louisiana: Natchitoches Parish: E of Sabine Parish line on La. Rt. 118, 31.4156467N, -93.1850482W
Agkistrodon contortrix—1 young adult DOR

Louisiana: Natchitoches Parish: Kisatchie, 31.4156306N, -93.1774414W
Elaphe obsoleta—1 adult DOR
Agkistrodon contortrix—1 young adult AOR

Louisiana: Natchitoches Parish: 8.1 mi E La. Rt. 117 on Long Leaf Pine Vista Trail, 31.4998680N, -93.0699600W
Nerodia erythrogaster—1 young adult DOR

Louisiana: Natchitoches Parish: 8.3 mi E La. Rt. 117 on Long Leaf Pine Vista Trail, 31.5025824N, -93.0669559W
Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: 13 mi E La. Rt. 117 on Long Leaf Pine Vista Trail, 31.4837319N, -93.0231286W
Agkistrodon contortrix—1 juv DOR

Louisiana: Natchitoches Parish: 14.8 mi E La. Rt. 117 on Long Leaf Pine Vista Trail, 31.4694947N, -93.0002601W
Elaphe emoryi—1 young adult AOR

Louisiana: Natchitoches Parish: 15.9 mi E La. Rt. 117 on Long Leaf Pine Vista Trail, 31.4601660N, -92.9887159W
Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: 5.6 mi W La. Rt. 119 on Long Leaf Pine Vista Trail, 31.4948362N, -93.0323554W
Agkistrodon contortrix—1 young adult AOR

Louisiana: Natchitoches Parish: 16.7 mi W La. Rt. 119 on Long Leaf Pine Vista Trail, 31.4896756N, -93.1820656W
Agkistrodon contortrix—1 juv AOR

Louisiana: Natchitoches Parish: 1.3 mi N jct Long Leaf Pine Vista Trail on La. Rt. 117, 31.5055221N, -93.1976546W
Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: 3.8 mi N jct Long Leaf Pine Vista Trail on La. Rt. 117, 31.5749753N, -93.1464834W
Agkistrodon contortrix—1 adult DOR

Louisiana: Natchitoches Parish: 7.2 mi N jct Long Leaf Pine Vista Trail on La. Rt. 117, 31.6038734N, -93.1019748W
Rana clamitans—1 adult DOR

Louisiana: Natchitoches Parish: Flora at jct La. Rt. 478 & La. Rt. 120, 31.6118556N, -93.0988152W
Agkistrodon contortrix—1 adult AOR
Agkistrodon piscivorus—1 adult DOR

Louisiana: Natchitoches Parish: 4 mi W Flora on La. Rt. 120, 31.6391337N, -93.1530494W
Masticophis flagellum—1 large adult DOR

Stopped collecting at 11:15 pm and returned to lodging.

20 April 2000

Left lodging at 9:30 am. Observed the following:

Louisiana: Natchitoches Parish: within Provencal city limits, 31.6534299N, -93.2009537W
Nerodia erythrogaster—1 adult DOR

Louisiana: Natchitoches Parish: 5.7 mi S Provencal on La. Rt. 117, 31.5725183N, -93.2058407W
Terrapene carolina—1 adult AOR

Louisiana: Natchitoches Parish: 0.7 mi W Kisatchie on La. Rt. 118, 31.4157700N, -93.1858475W
Elaphe obsoleta—1 young adult DOR

Louisiana: Sabine Parish: Peason WMA, 31.3852680N, -93.2519532W
Agkistrodon contortrix—1 adult DOR

Louisiana: Vernon Parish: Peason WMA, 31.3580704N, -93.2165266W
Masticophis flagellum—1 adult DOR

Louisiana: Vernon Parish: Peason WMA, 31.3479102N, -93.1899727W
Sceloporus undulatus—1 adult AOR

Louisiana: Natchitoches Parish: E of Mink on La. Rt. 118, 31.3892698N, -93.0522896W
Anolis carolinensis—5 adults

Louisiana: Natchitoches Parish: E of Mink on La. Rt. 118, 31.3949347N, -93.0642522W
Acris sp.—1 adult active along stream
Anolis carolinensis—3 adults; one under sheet metal
Eumeces anthracinus—1 adult under sheet metal
Eumeces fasciatus—2 adults; one an adult female on bark of pine tree
Scincella lateralis—1 adult under sheet metal

Louisiana: Natchitoches Parish: W of Mora on La. Rt. 118, 31.3842970N, -93.0342759W
Agkistrodon piscivorus—1 adult DOR

Louisiana: Rapides Parish: 0.2 mi W of Flatwoods on La. Rt. 119, 31.4047569N, -92.8718466W
Lampropeltis calligaster—1 adult hit by car near death

Louisiana: Natchitoches Parish: 1.1 mi W of Flatwoods on La. Rt. 119, 31.4080238N, -92.8845335W
Agkistrodon contortrix—1 adult DOR

Louisiana: Natchitoches Parish: 8.4 mi W of Flatwoods on La. Rt. 119, 31.4595222N, -92.9597051W
Elaphe emoryi—1 adult DOR

Returned to lodging at 5:00 pm. Ate dinner and began road-cruising at 7:00 pm. Observed the following:

Louisiana: Natchitoches Parish: 0.8 mi E of Sabine Parish line on La. Rt. 118, 31.4149654N, -93.1868399W
Agkistrodon piscivorus—1 young adult DOR

Louisiana: Rapides Parish: 0.9 mi E jct. La. Rt. 117 & La. Rt. 8 on La. Rt. 8, 31.3521588N, -92.8905416W
Nerodia rhombifer—1 adult DOR

Louisiana: Natchitoches Parish: 14.6 mi W of La. Rt. 119 on Long Leaf Pine Vista Trail, 31.4813930N, -93.1505121W
Agkistrodon contortrix—1 young adult DOR

Louisiana: Natchitoches Parish: 14.9 mi W of La. Rt. 119 on Long Leaf Pine Vista Trail, 31.4828736N, -93.1542993W
Agkistrodon piscivorus—1 juv DOR

Louisiana: Natchitoches Parish: 2.5 mi E jct. La. Rt. 117 & 478 on 478, 31.5692085N, -93.1678338W
Acris sp.—chorusing in roadside marsh
Hyla cinerea—chorusing in roadside marsh
Rana catesbeiana—chorusing in roadside marsh
Rana clamitans—chorusing in roadside marsh
Rana sphenoccephala—chorusing in roadside marsh

Stopped collecting at 11:45 pm and returned to lodging.

21 April 2000

Left lodging at 5:00 am. Observed the following:

Louisiana: Natchitoches Parish: SE of Mora, 0.6 mi NW jct Mora Road & La. Rt. 8, 31.3446862N, -92.9089309W
Kinosternon subrubrum—1 adult DOR

Louisiana: Natchitoches Parish: 10.9 mi W Vista Road on Long leaf Pine Vista Trail, 31.484772N, -93.1379701W
Opheodrys aestivus—1 adult DOR

Louisiana: Natchitoches Parish: 1.7 mi NE Provencal on Collins Road, 31.6701722N, -93.1836856W
Coluber constrictor—1 adult DOR

Returned to lodging at 4:00 pm.

22 April 2000

Departed Natchitoches at 8:00 am EST. Drove north and observed the following:

Louisiana: Red River Parish: 0.1 mi N Natchitoches Parish line on La. Rt. 1, 31.9063568N, -93.2721610W
Trachemys scripta—1 adult AOR

Louisiana: Red River Parish: 10.8 mi N Natchitoches Parish line on La. Rt. 1, 32.0118427N, -93.3865250W
Trachemys scripta—1 adult DOR

Louisiana: Bossier Parish: 1.3 mi N Caddo Parish line on La. Rt. 1, 32.2228682N, -93.4812070W
Elaphe obsoleta—1 adult DOR

Louisiana: Bossier Parish: 1.3 mi N Caddo Parish line on La. Rt. 1, 32.2559023N, -93.5164512W
Rana catesbeiana—1 adult DOR

Louisiana: Bossier Parish: 2.6 mi N Caddo Parish line on La. Rt. 1, 32.2654456N, -93.5283280W
Trachemys scripta—1 adult AOR

Louisiana: Bossier Parish: 7.1 mi N Caddo Parish line on La. Rt. 1, 32.3091280N, -93.5795904W
Rana catesbeiana—1 adult DOR

Louisiana: Caddo Parish: 3.2 mi S jct. La. Rt. 169 & La. Rt. 1, 32.6514423N, -93.9050336W
Elaphe obsoleta—1 adult DOR

Louisiana: Caddo Parish: Noah Tyson Park, 32.9300433N, -93.9755864W

Acris sp.—calling by day at swamp edge
Rana clamitans—calling by day at swamp edge
Pseudemys concinna—basking
Trachemys scripta—basking
Scincella lateralis—under log at water edge

Arkansas: Polk Co: Queen Wilhelmena State Park along trail behind amphitheatre, 34.6863484N, -94.3743772W
Desmognathus brimleyorum—1 large adult under rock

Plethodon ouachitae—5 adults & 2 young under rocks
Plethodon serratus—2 adults under rocks
Diadophis punctatus—1 subadult under rock

Oklahoma: LeFlore Co: 5.1 mi W Arkansas border on Okla. Rt. 1, 34.6902001N, -94.5444400W
Lampropeltis getula—1 adult DOR

Stopped collecting at 7:00 pm. Stayed overnight in Poteau, Oklahoma.

23 April 2000

Left Poteau, Oklahoma, at 8:15 am. Arrived back in Lawrence, Kansas, at 4:00 pm.

SHORT COMMUNICATIONS

CURTIS SCHMIDT
Department of Biological Sciences
Fort Hays State University
Hays, Kansas 67601

OBSERVATIONS ON REPTILIAN PREDATION

Some interesting herpetological observations were made in western Kansas during the spring of 2000. The first was by an unidentified rancher in Logan County who witnessed predation on a Western Rattlesnake (*Crotalus viridis*) by a large Coachwhip (*Masticophis flagellum*). According to Collins (1993), smaller snakes are often preyed upon by Coachwhips. The snakes were discovered in a maintained lot that appeared to be recently mowed. The rancher took several photographs of the ingestion and sent them to the author at Fort Hays State University for identification.

Recently, Jamie Timson and Connie Chen, both biology graduate students at Fort Hays State University, witnessed another instance of reptile predation. While netting for birds near a fork of Big Creek in Hays, they saw a Common Grackle (*Quiscalus quiscula*) pulling at a snake that was in the water near the bank. They saw the bird pull the snake on land twice, with the snake escaping, and retreating to the water both times. While in the water, the snake stayed near the bank with only its head emerging from the water. Jamie and Connie scared the bird off and approached to the snake. They observed that the snake had been in the process of swallowing a juvenile Plains Leopard Frog (*Rana blairi*). While they watched from a distance, the snake soon finished ingesting the frog and then swam away. The

species of snake was not determined, but it was probably a Northern Water Snake (*Nerodia sipedon*), which is common in Big Creek.

During the KHS spring field trip at the Flint Hills Tall Grass Prairie Preserve (see field trip summary in this issue), I witnessed a Great Plains Skink (*Eumeces obsoletus*) feeding on a Jumping Spider. As I attempted to collect the lizard, it held the spider in its mouth while scurrying away. Once captured, the skink finally dropped the spider, and began biting me.

Common names used are those of Collins (1997). Identifications were made with the use of Collins (1993) for reptiles and Peterson (1980) for the Common Grackle.

Literature Cited

- Collins, Joseph T.
1993. *Amphibians and Reptiles in Kansas. Third edition.* University Press of Kansas, Lawrence. xx + 397 pp.
- Collins, Joseph T.
1997. *Standard Common and Current Scientific Names for North American Amphibians and Reptiles. Fourth edition.* SSAR Herpetological Circular 25: 1–40.
- Peterson, Roger Tory
1980. *Peterson Field Guide to Eastern Birds. Fourth edition.* Houghton Mifflin, New York. 384 pp.

HERPETOLOGICAL PHYLOGENY AND BIODIVERSITY ON THE INTERNET

This is the second in a series of articles covering the free resources available to herpetologists on the Internet. This installment just scratches the surface of the many sites currently available that emphasize herp phylogeny, taxonomy, biodiversity, checklists, and research collections. Due the vast and ephemeral nature of the Internet this listing is far from exhaustive, however it provides a good representation of the variety of sites that exist. And undoubtedly, there is much more to be found by simply searching. Ten sites were selected and are represented by title, their URL, and brief text description.

—The Editor

THE CENTER FOR NORTH AMERICAN AMPHIBIANS AND REPTILES
(<http://eagle.cc.ukans.edu/~cnaar/CNAARHomePage.html>)

The Center for North American Amphibians and Reptiles (CNAAR) was established as a non-profit foundation with the objective of promoting education and conservation of amphibians, turtles, reptiles, and crocodylians in the United States and Canada. CNAAR is incorporated in the state of Kansas. CNAAR serves as a data bank for information about North American amphibians, turtles, reptiles, and crocodylians, and promotes the study and conservation of them by financial support. The site also hosts *Standard Common and Current Scientific Names for North American Amphibians and Reptiles: Fourth Edition*. Updated daily by Joseph T. Collins, Director.

MUSEUM OF VERTEBRATE ZOOLOGY DATA ACCESS, UNIVERSITY OF
CALIFORNIA, BERKELEY
(<http://elib.cs.berkeley.edu/mvz/>)

The MVZ collection is one of the first of the large herpetologically oriented institutions to put their data online. This site provides access to data and images in the Museum of Vertebrate Zoology collections. Users may query the database under several different criteria and the data are refreshed weekly.

ANIMAL DIVERSITY WEB

(<http://www.oit.itd.umich.edu/projects/ADW/>)

A taxonomic based listing of the North American herpetofauna, with general texts and pictures. Several of the picture are by KHS member Suzanne Collins.

THE COMBINED INDEX TO HERPETOLOGY COLLECTIONS
(http://dataserver.calacademy.org/herpetology/Comb_Herp_Index.html)

The Herpetology Combined Museum Collections Database is an attempt at putting together a searchable list that contains the taxa and number of specimens for each taxon housed in museums. The list contains museum acronym, genus, species and number of specimens and can be queried through any one or combination of these fields. The taxonomy might not always be consistent so synonyms should be queried. The database includes the holdings of 20 institutions.

KEY TO THE AMPHIBIANS OF CANADA

(http://www.cciw.ca/ecowatch/dapcan/key/c_0.htm)

This key will guide you in identifying a particular animal first as

to whether it is an Anuran (frog or toad) or Caudate (salamander or newt) or some other type of animal. Once this is determined, you will be presented with a series of questions. Each question consists of two or more descriptions of particular features of an organism. By selecting the description which most closely matches the animal of interest you will be lead either to its identification or further questions.

AMPHIBIAN SPECIES OF THE WORLD

(<http://research.amnh.org/herpetology/amphibia/index.html>)

Under the auspices of Darrel R. Frost, the online version of Amphibians Species of the World has become the most complete and invaluable reference to anyone with an interest in amphibians. To this end Frost has attempted to include complete synonymies (plus include literature sources of synonymy), reformat all records, include all relevant new literature, make extensive corrections, and expand abstracts of relevant taxonomic literature. This site is hosted by the American Museum of Natural History.

THE TREE OF LIFE

(<http://phylogeny.arizona.edu/tree/phylogeny.html>)

A multi-authored, distributed Internet project containing information about phylogeny and biodiversity. The Tree of Life is a collection of over 1630 World Wide Web pages containing information about the diversity of life. These pages are housed on 20 computers in four countries, and are authored by biologists from around the world. The pages are linked one to another in the form of the evolutionary tree of organisms, with the pages branching off from a group's page being about subgroups. In this way the Tree of Life project illustrates, by the connectedness of its own pages, the evolutionary tree that unites all living things.

A KEY TO THE ANURAN TADPOLES OF THE UNITED STATES AND CANADA
(<http://www.selu.edu/journals/ContemporaryHerpetology/chis/1998/2/index.htm>)

A key is presented for the tadpoles of the United States and Canada. More details of ontogenetic variation are included than in many keys and more attention is paid to identifying species by using characteristics of living tadpoles.

THE EMBL REPTILE DATABASE

(<http://www.embl-heidelberg.de/~uetz/LivingReptiles.html>)

This database is intended to provide information on the classification of all living reptiles by listing all species and their pertinent higher taxa. The database therefore covers all living snakes, lizards, amphisbaenians and crocodyles. It is supposed to be a source of taxonomic data, thus providing primarily (scientific) names, synonyms, distributions and related data. However, a limited number of species accounts contain links to external sources including pictures. The database has no commercial interest and therefore depends on contributions from volunteers.

NCBI TAXONOMY BROWSER

(<http://www.ncbi.nlm.nih.gov/htbin-post/Taxonomy/wgetorg?mode=Root>)

An interface to access nucleotide and protein sequences of species for which such data exists. The NCBI taxonomy database contains the names of all organisms that are represented in the genetic databases with at least one nucleotide or protein sequence.

RETROSPECTIVE

The following article was the first essay published in the KHS newsletter describing the atrocities associated with modern "rattlesnake roundups." This was at a time when the probability of a similar event occurring in Kansas, involving our smaller Prairie Rattlesnake, was unheard of. And now, last month, twenty-four years later, such an event has taken place for the eighth consecutive year at the Wallace County, Kansas, fairgrounds. This essay describes the critical problems with rattlesnake roundups then, and unfortunately, still today. This includes the unethical and inhumane treatment of snakes during capture, transport, and display, the presentation of inaccurate and misleading information, and the almost impossible task of quantifying the extent of the unregulated rattlesnake trade.

RATTLESNAKE HUNTS: CRIMES AGAINST NATURE

by Lawrence A. Capron
KHS Newsletter Number 13 (June 1976)

I have recently returned from the annual rattlesnake hunts in a small town in Oklahoma, and can best describe the proceedings by review a small booklet on the event which I purchased while there. The booklet calls rattlesnake hunting a "true American sport." As a "true American" I can only regard this as an insult to my nationality. I must admit that while I was there my family did in fact collect several rattlers, but only for the sake of scientific study. The snakes we capture will fare far better than those caught that weekend of which most will be exhibited, exploited or dismembered for use in various "novelty" items.

On the opening page a motive is put forth for hunting rattlesnake. It is something to the effect of the "THRILL OF THE CHASE" and the excitement of capturing a big rattler (though many of those pictured being big). These arguments for the wholesale slaughter and destruction of rattlesnakes do not hold up when one examines the methods used in some instances and the actual degree of thrill one experiences.

The various activities pictured in the book are unbelievable in an ecological or moral sense. Snakes are shown being butchered, funneled full of liquor, and piles in stacks to be smothered and crushed to death.

To criticize these actions categorically, I should start with the practice of eating rattlesnakes. The book describes snakemeat as "the original health food". I can see no valid reason why one should be forced to resort to snakes as food except in case of emergency survival in the wilderness. The amount of usable food on a snake should discourage the widespread use of them as anything but a strictly gourmet (?) food item. In an indescribably poor manner there are descriptions explaining how the butchers' make a fascinating show of the decapitation of the snakes.

Next I should say something of the contest held at the climax of the affair. It seems there is sort of a booby-prize

given for the smallest snake captured. Since these snakes are difficult to pin and measure the prescribed method of measuring them is to drop them onto the stage and crush their head flat with the heel of the judges boot. These proceedings are called "clean western fun".

The most appalling aspect of the hunts is the treatment of the snakes in the "snake pit." They are kicked about, thrown around, teased and chased in a most cruel manner. At least they are not so thick as those told about from the 1960 "harvest" which arrived at the "zoo" that purchases those lucky enough to escape being eaten. These lay in piles so thick that hundreds died daily of suffocation.

Snake hunts such as these are now receiving critical fire from herpetologists and ecologists nationwide. This book (which in its entirety is both a laugh-producer and a horror story) will serve only as good ammunition for those fighting the "thrilling" example of "sport" that it honors.

—Lawrence A. Capron
Box 542
Oxford, Kansas 67119

