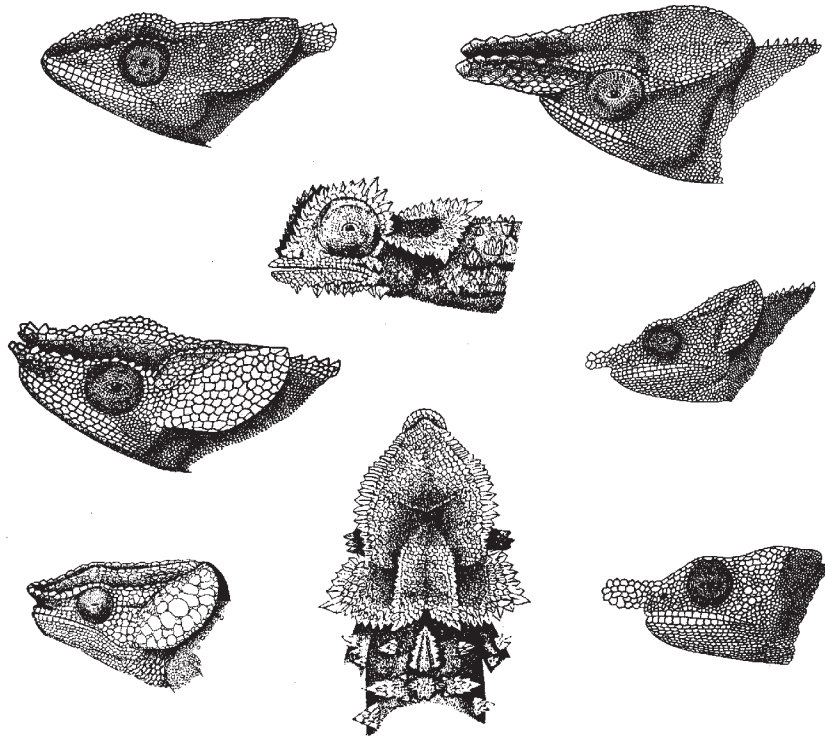


Kansas Herpetological Society



Newsletter

DECEMBER 1998



NUMBER 114

KANSAS HERPETOLOGICAL SOCIETY OFFICERS FOR 1998

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The front cover illustration is a scan of an original drawing of Chameleons,
taken from *Le Lezards de Madagascar* by M. F. Angel.

KANSAS HERPETOLOGICAL SOCIETY



NEWSLETTER No. 114

DECEMBER 1998



ANNOUNCEMENTS

THE 1999 SUZANNE L. COLLINS & JOSEPH T. AWARD FOR EXCELLENCE IN KANSAS HERPETOLOGY

This award, sponsored by the Kansas Herpetological Society and endowed by *The Center for North American Amphibians and Reptiles*, is given for excellence in research and photography of native Kansas amphibians and reptiles. In even-numbered years, the award is given for research; in odd-numbered years, the award is given for photography. All photographers entering the competition must be members of the Kansas Herpetological Society.

How to enter the 1999 KHS photography competition

One photograph will be awarded a prize of \$1,000.00, which will be presented on Saturday evening at the KHS annual meeting in November 1999 in Pratt, Kansas, just prior to the KHS auction. The winning photograph will appear on the KHS home page on the World Wide Web and may be used in public releases by the KHS.

The KHS is looking for striking images of amphibians and reptiles native to Kansas. These images may depict behavior or include portraits of amphibians and/or reptiles in a natural habitat. Images will be judged on originality, technical excellence, composition, color, action, drama and overall impact.

The competition is open to all members of the Kansas Herpetological Society. Entry to the contest constitutes agreement to allow the winning photograph to be published. Entrants retain all other rights to future use of their winning photograph.

A total of up to five photos may be submitted. Entries may be color or black and white prints. Prints must be mounted for display purposes; print and mount may be any size but must not exceed 11x14 inches. Prints may not be framed but must be mounted for ease of display.

The back of each photograph must bear the photographer's name, address, phone number and entry number (1 through 5). The identity of the photographer will not be revealed to the panel of judges. All entries must be

delivered by the photographer to the KHS meeting chairperson by 9:00 am on Saturday of the KHS annual meeting in November 1999, in Pratt, Kansas. All entries must be picked up by the photographer prior to leaving the meeting. Entries not claimed cannot be returned to the photographer.

Photographers are responsible for their entries at all times. KHS assumes no responsibility or liability for entries. For more information, contact KHS 1999 Meeting Chairperson Chris Mammoliti at (316) 672-5911.

The Collins Award was established by an initial grant from Western Resources, to encourage the study of amphibians and reptiles native to Kansas. Because it is endowed by *The Center for North American Amphibians and Reptiles*, Joseph and Suzanne Collins, officers of CNAAR, are not eligible for the contest, nor are any members of the CNAAR Board of Directors. The Collins's will serve as *ex officio* (non-voting) members of the panel of judges who will select the winner.

FREE TO GOOD HOMES

Several herps are being phased out of teaching use at the University of Kansas and are available to qualified institutions and persons. The snakes are as follows: 1 Common Snapping Turtle, 1 Bullsnake (very large), 1 Common Boa (+ 7 ft.), 1 Broad-banded Copperhead, 2 Osage Copperheads, and 3 Western Diamondback Rattlesnakes (2 large captive-bred specimens and 1 snake of Mexican origin that will only be placed in a zoo or research institution with qualified staff). The venomous snakes can only go to zoos, research facilities, universities, or schools with experienced handlers.

If you are interested in acquiring one of these animals, contact Nancy Schwarting or Eric Rundquist, Animal Care Unit, B054 Malott, University of Kansas, Lawrence, Kansas 66045; phone – NS 785-864-8842, ER 785-864-8848.

NEW BOOKS

A number of herp volumes have recently been released. Perhaps the most important recent release is *Status and Conservation of Midwest Amphibians* by the University

of Iowa Press, edited by Michael Lannoo. This 507 pp. book is essential reading for anyone involved with conservation of Midwestern U.S. amphibians. Softcover is \$30.00, hardcover lists for \$50.00 and may be ordered by calling 773-568-1550.

The Smithsonian Press has just issued *Rattlesnake: Portrait of a Predator* by well-known wildlife photographer Manny Rubio. This book, packed with spectacular photographs of these serpents, has been many years in the making and is well-worth the \$39.95 list price. It can be ordered from Smithsonian Institution Press, P. O. Box 960, Herndon, Virginia 20172-3738. Include \$3.50 postage and handling.

Finally, *Of Frogs and Toads: Poetry and Short Prose Featuring Amphibians*, edited by Jill Carpenter, has also just been published. The book is a collection of pieces from 70 contemporary authors who range in stature from Pulitzer Prize winners to first-published writers. It "explores everything from 'frog storms' to the place of amphibians in fable and folklore." This book may be ordered from Ione Press, P. O. Box 3271, Sewanee, Tennessee 37375, phone – 931-598-0795, email: jillc@inofave.net for \$10.95 plus \$3.50 shipping.

KHS 1999 FIELD TRIPS SCHEDULED

Larry L. Miller, esteemed and longtime KHS Field Trip Chairperson, has selected the Society's wilderness menu for 1999. On the eve of the new millennium, he has chosen the following sites and dates for our twice-yearly forays in search of herpetological treasures:

KHS Spring Field Trip
21–23 May 1999

The 1999 Spring KHS Field Trip will be held at Kanopolis State Park in Ellsworth County. KHS members will gather as early as Friday night (21 May) at a location in the park displaying the large KHS sign. Stay tuned for more details on lodging, camping, etc. Access the field trip link on the KHS website at

<http://eagle.cc.ukans.edu/~cnaar/khs/fieldtripinfo.html>

and peruse the informative maps about the field trip area, compliments of Travis W. Taggart.

Field herp counts will officially begin at 9:00 am at the campsite on Saturday (22 May), and continue until noon on Sunday (23 May).

KHS Fall 1999 Field Trip
1–3 October 1999

The 1999 Fall KHS Field Trip will be held at Baxter Springs Park in Cherokee County. KHS members will

gather as early as Friday night (1 October) at a location in the park displaying the large KHS sign. Access the field trip links on the KHS web site at

<http://eagle.cc.ukans.edu/~cnaar/khs/fieldtripinfofall.html>

and peruse the informative maps about the field trip area, compliments of Travis W. Taggart.

Amphibian and reptile counts begin at 9:00 am at the campsite on Saturday (2 October), and adjourns at noon on Sunday (3 October).

Lodging is available at:

Baxter Inn
2451 Military Ave.
Baxter Springs, KS
(316) 856-2106

Any questions about these KHS field trips should be directed to Larry L. Miller. Enquiries may be in the form of email, a telephone call, or U.S. mail.

Larry L. Miller
KHS Field Trip Chairperson
Kansas Herpetological Society
840 SW 97th Street
Wakarusa, Kansas 66546
Telephone 785-836-2119
email: wakarusa@cjnetworks.com

TEXAS HERP SOCIETY FIELD TRIP

The Texas Herpetological Society will be holding its spring field meet in Karnes County, Texas, on the weekend of 9–11 April 1999. If you would like to attend and need more details, contact THS Editor Julie Norman at 817-577-8340 or email to: pwnorm@fastlane.net

IGUANA DAY

National Iguana Awareness Day (NIAD) will be held 11 September 1999 and includes events in Kansas. The purpose of NIAD is "to educate the public about Green Iguanas and their care." Green Iguanas are among the most abused of all pets, primarily through owner and pet shop ignorance and thousands die each year because of neglect. NIAD is attempting to change that. If you would like more information about the event or would like to volunteer to help, contact Kansas NIAD Coordinator Deena Spielman at 1020 Willow, Concordia, Kansas 66901 or email to: spielmdk@mg.cloudccc.ks.us

KHS BUSINESS

KANSAS HERPETOLOGICAL SOCIETY SILVER ANNIVERSARY MEETING — THE MAJOR 1998 AMPHIBIAN AND REPTILE EVENT IN THE UNITED STATES

The Kansas Herpetological Society, founded in Lawrence, Kansas, in 1974, held its Silver Anniversary Meeting in Lawrence from 5-8 November 1998, dedicated to the memory of Alan H. Kamb, a founding member and strong supporter of the Society who passed away on October 25th. The 250-member KHS is devoted to the study and conservation of native amphibians and reptiles in Kansas, and is one of the strongest conservation and environmental organizations in the state. Although some of the presentations at the meeting featured the amphibians and reptiles of distant lands (Burma, Madagascar, New Caledonia, Navassa Island), most presentations followed the general meeting theme of *Great Plains Herpetology*.

Distinguished scientists speaking at the meeting were Aaron M. Bauer (Villanova University), David Chiszar (University of Colorado), David L. Hardy, Sr. (Tucson, Arizona; received his undergraduate degree from KU), Andrew Holycross (Arizona State University), Walter Meshaka (Everglades National Park), Dwight R. Platt (Bethel College, Kansas; received his doctorate at KU), Robert Powell (Avila College, KCMO), Christopher J. Raxworthy (the new curator of herpetology at the KU Natural History Museum), Richard A. Seigel (Southeast Louisiana University; received his doctorate from KU), and Joseph Slowinski (California Academy of Sciences; formerly a native of Kansas City). Nearly 150 people attended the meeting, making it one of the largest herpetological meetings held in the United States during 1998.

Thursday

At the opening KHS Social on Thursday evening, held at the Lawrence Union Pacific Depot, Edward Martinko, Director of the *Kansas Biological Survey*, welcomed the Society and its members to KU and Lawrence. Ed invited the ca. 60 KHS members present that evening to visit the KBS at its headquarters in Lawrence on the west campus at KU, and review numerous on-going KBS research programs of interest. The participants at this ice-breaker were also treated to the words and melody of KHS president and music-maker, John Lokke.

Friday

After an extensive array of scientific papers on Friday morning and early afternoon (moderated by Nancy Schwarting, KU Animal Care Unit, and David R. Edds,

Emporia State University), the Society General Business meeting took place at 3:20 pm, and featured the selection of Robert Powell as the KHS President-elect for 1999. Karen Toepfer and Daren Riedle were unopposed and re-elected Treasurer and Secretary, respectively. John Lokke automatically becomes Past-president for 1999, and Karen Graham finishes her term as same on 31 December 1998. The KHS Executive Council for 1999 is as follows: Chris Mammoliti (President), Robert Powell (President-elect), John Lokke (Past-president), Karen Toepfer (Treasurer), Daren Riedle (Secretary), and Eric Rundquist (Editor). KHS President John Lokke then announced that Lani Burress (Emporia State University) was the 1998 recipient of the *Howard Kay Gloyd-Edward Harrison Taylor Scholarship*. Joseph T. Collins (Kansas Biological Survey), honored Hank Guarisco (Lawrence) and Kelly J. Irwin (formerly of Topeka, now of Athens, Georgia) with *Bronze Salamanders*, the highest award given for distinguished service to the Society. The award, an exquisitely cast bronze image of our official state amphibian, the Barred Tiger Salamander (*Ambystoma mavortium*), was created by well-known artist Errol D. Hooper, Jr., who also drew and designed the striking official KHS Silver Anniversary T-Shirt that sold out so rapidly during the first day of the meeting. Highlight of the afternoon was a special presentation to KHS Distinguished Life Member Henry S. Fitch. The very first copy of his new book, *A Kansas Snake Community: Composition and Change over Fifty Years*, specially bound for the occasion, was shipped by Elaine Harland (Krieger Publishing) in advance of the meeting, and presented to Henry to the thunderous applause of those attending, a fitting tribute to probably the greatest ecologist in history.

Society President John Lokke hosted a social gala in the evening at the Lawrence Holidome, which featured a presentation of over 1,000 color slides by Larry L. Miller (Topeka Collegiate School), detailing the history of the Society, including far-too-candid shots of many people in attendance. Much to Larry's surprise, the assembled KHS membership rose in full voice to serenade him on the occasion of his *50th Birthday*, complete with black cake and balloons from his lovely wife, Suzanne. The cake was festooned with small herpetological replicas, and although not of edible material, some were consumed anyway. Concurrently, Olin Karch (Lawrence) showed videotapes of various Society field Trips, fascinating and candid examples of how KHS members endured (and survived) these annual pilgrimages into the wilds of the Sunflower State. Featured and nationally well-known amphibian and reptiles artists Martin B. Capron (Oxford, Kansas) and John Lokke (Omaha, Nebraska) displayed their renown art

work, to the admiration of all. And Keith Coleman (Lawrence) displayed copies of his unique and popular cassette, *The Calls of Kansas Frogs and Toads*, a rousing collection of sex-driven songs. Eric Thiss, John Levell, and their lovely assistants (*The Serpent's Tale & ZooBooks*) displayed an immense and diverse offering of books about the creatures we love and cherish; *The University Press of Kansas* proudly displayed many books on the wildlife of Kansas, including a display copy of the soon-to-be-published *An Illustrated Key to the Amphibians and Reptiles of the Continental United States and Canada*, by Robert Powell, Joseph T. Collins, and Errol D. Hooper, Jr.

Saturday

After another full slate of scientific talks on Saturday morning (moderated by Karen Graham, Sedgwick County Zoo, Wichita), KHS photographer Larry L. Miller (Kansas Heritage Photography, Wakarusa) herded the assembled participants at 11:00 am for a KHS group image beneath the southwest overhang of the Lawrence Holidome, a dry setting as the rain fell elsewhere around us. After lunch, scientific talks continued under the watchful guidance of moderator George R. Pisani (University of Kansas).

Evening festivities began with the Society banquet in the Holidome at 5:30 pm. Nearly 100 participants watched and applauded (and dined) as our four *KHS Distinguished Life Members* were presented. Stan Roth (former KHS President and teacher at Lawrence Free State High School) spoke in glowing terms of Robert F. Clarke (Emporia State University), who could not be present because of illness; John Simmons (KU Natural History Museum) extolled the greatness of Henry S. Fitch (Fitch Natural History Reservation), Robert Powell (Avila College) praised the accomplishments of Dwight R. Platt (Bethel College, North Newton), and Eric Rundquist (KU Animal Care Unit) celebrated the achievements of Hobart M. Smith (University of Colorado, and a former Kansan). Few state organizations can count among them scientists of the stature of these four. An unscheduled event followed, in which Joseph T. Collins (The Center for North American Amphibians and Reptiles, Lawrence) was announced and installed as the fifth *Distinguished Life Member of the Kansas Herpetological Society*. Collins was surprised, but not speechless, although he kept it remarkably brief.

Highlight of the Saturday evening gathering was the presentation of *The Suzanne L. and Joseph T. Collins Award for Excellence in Kansas Herpetology*, given by James L. Knight (South Carolina State Museum and a former Kansan) to Travis W. Taggart (KU Medical Center, KCK), for his excellent paper, Status of *Bufo debilis* (Anura: Bufonidae) in Kansas (1997. KHS Newsletter 109: 7–12). Travis received a commemorative plaque and a check for \$1000.00, the largest annual award in biology

given in the state, and the largest annual award given in herpetology nationwide.

But nothing could top our keynote banquet speaker, David Grow, Curator of Herpetology at the Oklahoma City Zoo. His stories of the early days and exploits of the *Kansas Herpetological Society* elicited continuous laughter as he regaled the assembled participants with stories both true and embellished (we hope). After Dave finished, the Society's collective thoughts turned to money. The auction. Our timeless (sometimes) pastime in which we extract great wealth from an assembled few to support the Society and its programs. Esteemed KHS Treasurer Karen Toepfer (Hays), skilled and wise in the ways of this affair, was joined by Suzanne L. Collins, Ann Rundquist, Carolyn Moriarty, Travis Taggart, Emily Moriarty, Matt Combes, Katie Reitz, and many others as items were offered and bid by auctioneer Joe Collins. Some were bargains, some weren't, but the evening ended after midnight with the KHS coffers richer by \$3213.00, more than doubling the previous auction record. Emily got the Holbrook. Eric got the Hyliid Frogs. And just about everybody got something (at least a great meeting and free beer).

Sunday

The Silver Anniversary Meeting concluded with the Sunday morning paper session (moderated by William Busby, Kansas Biological Survey). Scientific papers were presented until noon, and a goodly horde of tired, but happy, herpetologists descended on the residence of Joe & Suzanne Collins to drink yet more libation and consume yet more goodies, before they trekked homeward. Thus, did the meeting end.

The Silver Anniversary Meeting Committee consisted of Suzanne L. Collins (KU School of Education), Ann Rundquist (Lawrence), Eric M. Rundquist (KU Animal Care Unit), and Joseph T. Collins (Kansas Biological Survey). Joseph T. Collins served as Master of Ceremonies for the meeting. To these four, the Society extends its deepest gratitude, and fondly hopes they will return 25 years hence to celebrate yet another milestone in KHS history.

Acknowledgments: In addition to many of those mentioned earlier, the *Kansas Herpetological Society* wishes to thank many others whose efforts led to the most successful meeting in the Society's history. Elizabeth Ganser (Topeka), Amy Wethington (Washburn University), Angela Bulger (Emporia State University), and Marc Linton (Logan Junior High School, Topeka) skillfully ran the projectors so necessary for our speakers. Katie Reitz (KU School of Education), ably served as hostess, helper, and assistant

at all social events. Jim Gubanyi (Topeka), Randy Reiserer (Los Angeles), and Ann Rundquist (Lawrence) ably assisted in delivering out-of-town speakers to and from the airport, and to them we are most indebted. The Friday night social was more enjoyable for the assistance of Allie Kossoy, Katie Nichols, and Sarah Sellers, all of *Topeka Collegiate School*. Conducting the Saturday night auction was made considerably easier with the help of Matt Combes (Emporia State University), Emily Moriarty (St. Mary's College, Notre Dame), and Travis W. Taggart (KU Medical Center). In addition, John Simmons and Linda Trueb of the Division of Herpetology at KU's Natural History Museum provided logistical support to the Local Committee throughout the year. To all, we are so grateful.

No meeting of this magnitude could be held without the support of sponsors. We thank Doug Bauer of BACO Corporation (Wichita), Eric and Ann Rundquist, the Lawrence Convention and Visitors Bureau, JTC Enterprises (Lawrence), Kansas Biological Survey (Lawrence), Kansas Department of Wildlife and Parks (Pratt), Lawrence Holidome, The Center for North American Amphibians and Reptiles (Lawrence), KU Athletic Department, KU School of Education, and KU University Relations. Thanks folks. See you in 25 years.

IN MEMORIAM

Alan H. Kamb

April 2, 1935–October 25, 1998

To the peaceful melody of *Amazing Grace*, Alan H. Kamb, 63, and a Founding Member of the Kansas Herpetological Society, was memorialized in a service held on Saturday, October 31st, in Lawrence, Kansas.

Al Kamb died Sunday, October 25th, at his home. He donated his body to the University of Kansas Medical Center in Kansas City, Kansas.

He was born April 2, 1935, in Rochester, New York, the son of Milton H. and Alvina W. Gerhard Kamb. He attended Syracuse University and the University of Rochester, and graduated from the University of Kansas in 1962.

He lived in Lawrence for 40 years and was an Assistant Curator for the Museum of Invertebrate Paleontology at KU for 36 years. His survivors include a son, Steve, Wichita, three daughters, Beverly Downing, Cross Timbers, Missouri, Janice Griffin, Lawrence, and Valerie Kamb, Mission, two grandchildren, and his former wife, Audrey.

Al Kamb was a gentle soul, a person who loved all creatures on the earth. He was especially fond of those

kinds most downtrodden, the snakes. His long-time interest in Milk Snakes was known to us all. Less well known by most folks was his diligent field work for new distribution records in north-central Kansas; there, he made many important finds of scientific interest, discoveries that helped to clarify where and why amphibians and reptiles were found in the Sunflower State. He and I were always amused when, on occasion, I pointed out that he had "progressed" from looking on top of rocks for "dead" invertebrate fossils, to looking under them for "live" salamanders, frogs and toads, turtles, lizards, and snakes. I certainly believe this progression expanded his interest in the world around him, and gave him an opportunity to grow intellectually in a new field of biology. But alas, he left us much too early. Those at his service and many others throughout the state and nation will miss Al; not many can appreciate the valiant battle he fought with the illness that finally defeated him. As we concluded our memorial service to mourn his brief time among us, to the sorrowful tune, *Now The Day Is Over*, I reflected that my life was so much the better for my friendship with Al Kamb. He was gone and, although he had lifted his last rock, he had also lifted us all with his generous and kind spirit.

Those wishing to assist the KHS in keeping the memory and spirit of Al Kamb alive and well in perpetuity, may wish to contribute to the *Alan H. Kamb Endowed Grant for Research on Kansas Snakes*, administered by the Kansas Herpetological Society. Donors can make contributions to the KHS Treasurer, 303 West 39th Street, Hays, Kansas 67601. The following individuals have already given generously to his endowment: Keith Coleman (Lawrence), Suzanne L. & Joseph T. Collins (Lawrence), Rochele Fortner (no address given), Paul Furnell (no address given), Ruth Gennrich (Lawrence), Lee C. & Darcy Gerhard (Lawrence), Hank Guarisco (Lawrence), Jean P. Hall (Eudora), Helmut E. & Ursula E. Huelsbergen (Lawrence), James W. & Ethlyn Irwin (Topeka), Lisa & Kelly Irwin (Athens, Georgia), James L. & Karin Knight (Aiken, South Carolina), Jama Kolosick (Lawrence), Dorothy M. Maxwell (Lawrence), Franklin D. & Sharon K. Miller (Lawrence), Emily C. Moriarty (Notre Dame, Indiana), Elizabeth Patton (Lawrence), A. J. "Bert" & Marge Rowell (Lawrence), Shelley A. Skie (Lawrence), Travis W. Taggart (Kansas City, Kansas), the Wichita State University Nursing Class (on behalf of Steve Kamb), Dana Wilkening (Wichita), and Dennis & Marsha Wilkening (Kinsley).

Joseph T. Collins
1502 Medinah Circle
Lawrence, Kansas 66047

RESULTS OF THE KHS SILVER ANNIVERSARY

FALL FIELD TRIP

From across the state on 9 October 1998, twenty-six members of the Kansas Herpetological Society converged in Marshall County and adjacent Nebraska to find and observe amphibians and reptiles, commemorating twenty-five years of field work by the Society. The weather was perfect for at least one collecting technique, but looking underneath things was the least productive. As a comparison, here are the results of the four efforts on two dates:

Kansas: Lawrence to Marysville

9 October 1998 (1300–1800 hrs)

Person hours = 10

Participants: Suzanne L. Collins and Joseph T. Collins
Road-cruising only (D = Douglas County, JE = Jefferson County, JA = Jackson County, N = Nemaha County). All specimens were found AOR or DOR on gravel roads.

Painted Turtle (JA)	1
Ringneck Snake (JE, JA, N)	7
Racer (JA)	1
Eastern Rat Snake (JA)	2
Prairie Kingsnake (JA)	1
Brown Snake (JE, JA)	4
Common Garter Snake (D, JE, JA)	6
Lined Snake (JA)	2
Copperhead (D)	1
Massasauga (JA)	1

10 species 26 specimens

Nebraska: Jefferson Co: (specific data withheld to protect the Milk Snakes)

10 October 1998 (1000–1200 hrs)

Person hours = 52

Lifting rocks and logs and walking along streams
Participants: Robert Acuff III, Robert Acuff IV, Joseph T. Collins, Suzanne L. Collins, Mark Ellis, James Gubanyi, Marla Gubanyi, Dan Johnson, Dustin Johnson, Olin Karch, Ricquelle Landis, Marc Linton, John Lokke, Vicky Martin, Larry L. Miller, Suzanne Miller, Dan Murrow, Jill Reimer, Kelly Shouten, Pat Stein, Margy Stewart, David Stineman, John Tollefson, Julie Tollefson, Jacob Tollefson, and Barb Tucker.

Northern Cricket Frog	46
Plains Leopard Frog	18
Six-lined Racerunner	1
Ringneck Snake	5
Eastern Rat Snake	1
Milk Snake	2
Common Garter Snake	1

7 species 74 specimens

Kansas: Marshall Co: Alcove Springs area

10 October 1998 (1300–1530 hrs)

Person hours = 65

Lifting rocks and logs and walking along streams
Participants: Robert Acuff III, Robert Acuff IV, Joseph T. Collins, Suzanne L. Collins, Mark Ellis, James Gubanyi, Marla Gubanyi, Dan Johnson, Dustin Johnson, Olin Karch, Ricquelle Landis, Marc Linton, John Lokke, Vicky Martin, Larry L. Miller, Suzanne Miller, Dan Murrow, Jill Reimer, Kelly Shouten, Pat Stein, Margy Stewart, David Stineman, John Tollefson, Julie Tollefson, Jacob Tollefson, and Barb Tucker.

Northern Cricket Frog	101
Plains Leopard Frog	15
Bullfrog	1
Painted Turtle	1
Ringneck Snake	10
Eastern Rat Snake	1
Prairie Kingsnake	1
Brown Snake	2
Common Garter Snake	1
Northern Water Snake	2

10 species 135 specimens

Kansas: Lawrence to Marysville

10 October 1998 (1530–1900 hrs)

Person hours = 7 hours

Participants: Suzanne L. Collins and Joseph T. Collins
Road-cruising only (M = Marshall County, N = Nemaha County). All specimens were found AOR or DOR on gravel roads.

Ringneck Snake (M, N)	4
Eastern Rat Snake (M)	2
Common Kingsnake (M)	1
Brown Snake (M, N)	7
Common Garter Snake (M, N)	2
Lined Snake (M)	1
Northern Water Snake (M)	1
Bullsnake (M)	1

8 species 19 specimens

These results indicate that road-cruising may be a more profitable method for finding a more diverse sample of snakes in the fall, particularly on warm days after the first cold front of the season has moved through the area to be searched. By road-cruising, Suzanne and I alone encountered 45 specimens involving 13 species in 17 hours, whereas the assembled KHS members discovered 159 specimens involving only 9 species in 117 hours.

Common names are those standardized for North America by Collins (1997).

Literature Cited

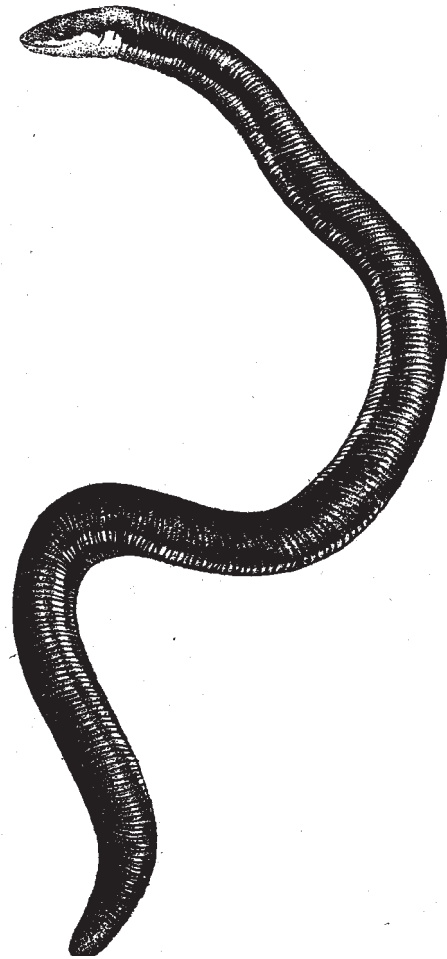
Collins, Joseph T. 1997. Standard Common and Current Scientific Names for North American Amphibians and Reptiles. Fourth Edition. SSAR Herpetol. Circ. 25: 1-40.

— Joseph T. Collins
*The Center for North American
Amphibians and Reptiles*
1502 Medinah Circle
Lawrence, Kansas 66047

DUES INCREASE & NEW AFFILIATION FOR SOCIETY

The KHS Executive Council has made a couple of decisions that will or may affect the KHS membership. First, upon the recommendation of KHS Treasurer Karen Toepfer, effective 1 January 1999 regular membership dues will be raised from \$10.00 to \$15.00 and contributing member dues will be raised to \$20.00. The primary reason for raising fees is due to printing and mailing costs that have risen substantially over the years. It should be noted that this is the first dues increase for the Society in well over eight years and membership in KHS is still substantially cheaper than the vast majority of herpetological societies world-wide.

Second, the Council has voted to affiliate with the *Kansas Grazing Lands Coalition* as an advisory organization, joining with other groups such as the Kansas Audubon Society, Kansas Rural Center, Kansas Wildlife Federation, and Kansas Department of Wildlife and Parks. The Coalition is a new group formed under a Federal initiative to promote conservation and sustainable economic practices on grazing lands throughout the nation. In Kansas, grazers hold nearly 40% of the state's surface area, most of which is of interest to herpetologists here. The KHS liaison to the *Kansas Grazing Lands Coalition* is Eric Rundquist. Anyone wanting additional information about the Coalition and KHS' affiliation should contact Eric.



KHS BRINGS YOU GREAT NEWS OF THE WORLD

KANSAS HOPS INTO FRAY OF FINDING DEFORMED FROGS

On August 8, 1995, a class of Minnesota middle school students on a field trip found a bunch of freak frogs. The local newspaper wrote about it. A few days later, a Minnesota TV news crew showed up. By August 25, the story had gone national courtesy of the Associated Press.

Since then, the reporting and study of amphibian abnormalities have become a minor American pastime. Biologist-certified incidences of deformed frogs, toads, and salamanders have poured in to the North American Reporting Center for Amphibian [Malformations] (NARCAM) from more than 40 U.S. states and Canadian provinces.

There is a variety in the defects reported. Some beasts have missing limbs or eyes. Some have split or stunted legs. Others have webbed knees or oversized jaws.

“Since 1995, reports have become increasingly common,” according to NARCAM literature, “and a number of scientists—herpetologists, developmental biologists, aquatic toxicologists, and parasitologists—are looking for causes.”

Since 1995, the National Institute of Environmental Health Sciences has spent at least \$600,000 studying the phenomenon of weird frogs and toads. And in December 1997, scientists gathered at Research Triangle Park, N.C., for a national conference on the subject.

But for the last three years, Kansas largely was left out of the fun.

That was before Linda Geiger’s eight-grade science class from Mayetta’s Royal Valley Middle School took to the field on September 17-18 to do some stream testing on nearby South Cedar Creek, which drains into Perry Lake.

“There were just hundreds of frogs jumping around,” Geiger said in a recent interview. “But they weren’t our focus that day.”

Instead the class was collecting water samples and specimens of macro-invertebrates. In layman’s terms, that’s spineless critters such as leeches and dragonfly larvae, small but large enough to be seen with the naked eye.

Geiger said the quantity and condition of macro-invertebrates found in a stream are an indicator of the waterway’s health.

“We gathered our macro-invertebrates and did our water testing and in our investigation we found all kinds of frogs hopping around,” she said. “In catching them we found some that looked different. It was like: Oh, look this one has only three legs. Then we found one that had like little club feet.”

The class found three deformed frogs, actually two Woodhouse’s Toads and a Bullfrog. One toad had a “club

foot”, the other specimens were missing limbs and resembled little frog amputees.

“We’d heard about the Minnesota frogs,” Geiger said. “I called around and got Eric Rundquist’s number.”

Rundquist is the coordinator for the state of Kansas for NARCAM.

Geiger sent him the animals. The clubfoot, the smallest of the three, died. But the two three-legged ones are being kept by Rundquist in a large plastic container that looks like a pickle jar.

Rundquist said his reaction to the frogs was fascination tinged with alarm. They weren’t the first amphibian abnormalities to arrive on his doorstep. But it was the first time he received multiple freaks from two species taken at the same spot.

“Statistically, that just isn’t going to happen,” he said. “If this were a natural occurrence, the odds would be astronomical. We have tens of thousands of specimens. To my knowledge, we don’t have anything like this.”

Last year, Rundquist said, the Kansas Department of Wildlife and Parks sent him a lone frog with a missing limb. Earlier this year, he received a frog from Leavenworth County with an extra hind leg. There have been scattered reports of deformed amphibians over the years, he said, but some he’s attempted to investigate didn’t check out.

Rundquist said he is certain the two toads are deformed and fairly certain the frog is, too. Radiographic examination will confirm whether the frog is deformed or merely lost the leg, perhaps to a feeding heron or other predator.

He estimated the larger specimens are about three months old.

There are several theories why the amphibian abnormality rate is on the rise.

Some scientists, including Rundquist, suspect the might result from synergistic reaction to various industrial and agricultural pollutants. Although amphibians have been around since [before] the time of the dinosaurs, they are more sensitive than most species to changes in their environment.

Other scientists link the freaks to trematodes, a naturally occurring amphibian parasite that can alter limb development.

There is no dispute among scientists that many amphibian populations throughout the world are in decline. Habitat destruction is a leading and obvious cause. But some wilderness species also are dwindling and that remains a puzzle.

A mysterious, newly discovered fungus was reported in the June 27 issue of the journal *New Scientist*. The fungus, which is decimating frogs worldwide, is thought to suffo-

cate the animals by coating their undersides and legs. Frogs and toads breathe through their skin [sic].

The very thing that took Geiger's students to South Cedar Creek was their participation in a state-sponsored stream checking project called Kansas Student Water Monitors or KSWIM, which enlists students to help measure pollution levels in Kansas streams.

The program calls for water testing of local streams twice a year.

"From the data that we've taken in the spring and fall the (South Cedar Creek) water is testing very good," Geiger said. "We've tested for nitrates and dissolved oxygen and pH and that's all good. The water's clear. It's not murky or anything."

Rundquist said the school program is helpful to grown-up scientists because it sends a veritable army of researchers into the field.

"It's a real boon for us," he said, "because we don't have the money or resources to do this very thoroughly," without the student's help.

—Lawrence Journal-World, 12 October 1998

Submitted by Larry Zuckerman, Pretty Prairie, Kansas

(Editors Note: Since this report, Ms. Geiger and her students have discovered two more malformed anurans at this site, making it the most significant deformed amphibian site in the state.)

VIRUS ASSOCIATED WITH TIGER SALAMANDER MORTALITY ON UTAH LAKE

On September 2, 1998 the USGS National Wildlife Health Center (NWHC) received eight sick Tiger Salamanders from a mortality event involving about 200 salamanders at Lake Desolation, Utah. U.S. Fish and Wildlife Service biologists reported that salamander carcasses littered the shoreline and lake bottom. Most of the sick salamanders were lethargic, swam in circles, and were unable to remain upright. Red spots and swollen areas were also observed on the skin. The few "healthy" salamanders seen quickly swam into deeper water. Although there was evidence that other wildlife were in the area of the lake, only salamander carcasses were observed.

USGS wildlife pathologists closely examined the salamanders for gross lesions, and affected tissues were examined by light microscopy for cellular changes. Small hemorrhages were noted underneath the skin of some of the salamanders; and cellular changes, consistent with a viral infection, were microscopically associated with affected tissue. A virus was isolated in cell culture from the affected tissues. The virus – tentatively described as iridovirus-like after electron microscopic examination – was isolated in cell culture from the affected tissues. Work is currently

underway to further identify the viral isolate.

This is the third mortality event from which NWHC virologists have isolated a virus from salamanders this year. The other die-offs occurred in Maine and North Dakota. The significance of the isolates to general amphibian decline is unknown.

In 1995, researchers at the University of Arizona reported a similar die-off of Tiger Salamanders in southern Arizona. These deaths were attributed to an iridovirus infection. Canadian scientists recently announced that they had isolated an iridovirus from a Tiger Salamander die-off near Regina, Saskatchewan, Canada.

If you notice amphibian mortalities please contact the National Wildlife Health Center at (608) 270-2400 and speak with the one of the Center's wildlife disease specialists. Please do not send specimens without contacting the Center, since special care in handling and shipping is required for amphibians.

Wildlife Health Alerts are distributed to natural resource/conservation agencies to provide and promote information exchange about significant wildlife health threats in their geographic region.

—Submitted by Chris Mammoliti
Pratt, Kansas

AMPHIBIAN MORTALITY INFORMATION SHEET

This sheet has been produced (for non-pathologists) by the Declining Amphibian Populations Task Force (DAPTF) to provide simple guidelines for dealing with dead and diseased amphibians that are found during a suspected disease outbreak or amphibian mortality event.

Introduction

The optimum specimen for diagnostic tests is a still-living, diseased amphibian. Dead specimens are less informative because of rapid decomposition, but may still provide some information. Generally, it is desirable to submit normal animals together with sick specimens in order to provide a comparative control. Amphibians and fish of sympatric species may also be useful, and these should be collected where possible along with sick and "normal" animals of affected species.

Sources of Diagnostic Assistance

In many countries, diagnostic laboratories are located within a veterinary college or university animal sciences department. Commercial laboratories, chemical and pharmaceutical companies, and governmental research facilities may also have staff veterinary pathologists. Most veterinarians will know the location of their nearest diagnostic laboratory.

Collecting from an Amphibian Casualty Site

In order to minimize any potential spreading of disease to other areas, it is important that the guidelines on working with amphibians produced by the DAPTF (see the DAPTF Fieldwork Code of Practice) are followed whenever investigating, or collecting from, an amphibian casualty site. Sick and dead amphibians should be collected immediately and submitted to a diagnostic laboratory as soon as possible. Before submitting any specimens, it is crucial to identify and consult a suitable laboratory which is willing to receive them. Bear in mind, too, that pathological investigation can be expensive, and a source of funding may be needed in order to cover sufficient testing for any worthwhile result. Live specimens should be delivered in person or sent by express mail or courier. Dead amphibians should be divided into two groups, one group should be promptly frozen (ideally to -70°C , but the temperature of a normal household freezer (-20°C) is sufficient for most diagnostic investigations) and the second group should be placed in a fixative solution (e.g. 70% ethanol or neutral buffered 10% formalin). The coelomic cavity must be opened (via a single midline cut through the skin and muscle of the ventral body wall) before carcasses are placed in fixative. Also, to ensure thorough fixation, specimens should be immersed in approximately 20 times the volume of fixative to tissue volume. If a suitable diagnostic laboratory cannot be located at the time of the incident, representative samples of carcasses should be saved, fixed and frozen (as above) until such a laboratory can be found. If unknown or cryptic species are collected, a number of specimens should be retained for species identification and preserved by both the above methods. Many mass mortality events occur quickly, and sufficient specimens for pathological analysis should be collected immediately, as carcasses or sick animals might not be found on a return visit to the site. Submission of as many life-stages (egg, tadpole, metamorph, adult) as possible is desirable, along with control specimens such as apparently-healthy animals of the affected species and any sympatric amphibian or fish species. Again, check that the laboratory is willing to receive apparently "normal" specimens. It may also be illegal to submit live or control animals for investigation without the specific request of a veterinarian or appropriate licenses.

Sample Size

The number of submitted animals may be the limiting factor in determining which diagnostic tests can be performed. Many amphibians are very small, and may prove daunting to pathologists. Generally, the smaller the amphibian, the greater the number of animals required to perform a thorough diagnostic investigation. A sample size

of 60 fish is recommended to assure 95% confidence that all serious diseases are detected in commercial hatchery operations. Although this number of tadpoles, frogs, salamanders or caecilians is not suggested here, the figure is cited as an example of the sample required in order to have confidence that important infectious diseases are detected.

The Casualty Site

It should be ascertained at any casualty site whether any other vertebrate classes have apparently suffered any mortality. If this is the case, the event may have been caused by a toxic chemical or a predator. The appropriate authorities should be informed if any listed endangered species are involved. Accurate records of all aspects of the casualties, specimens collected and location(s) of their collection should be kept, and each specimen should be carefully and individually labeled with similar information. This is especially important if endangered species are involved and/or criminal proceedings are likely to follow against a possible polluter.

Sample Records

1) Date and time of day, 2) Location: river; meters of river, pond, pond area, nearby roads, landmarks and towns, map reference if possible, 3) Name of observer(s), 4) Estimated time when deaths began, 5) Water quality characteristics such as color, odor, temperature and (if possible) dissolved oxygen concentration, pH, conductivity, osmolarity, nitrates and salinity, 6) Condition of each species and life-stage at the site: e.g., numbers of live, moribund, dead, scavenged and decaying eggs, larvae, metamorphs and adults (with common, scientific and/or local species names as appropriate), 7) Physical examinations of each affected animal: e.g., discoloration or other changes, abnormal postures, abnormal swimming patterns, amount of mucus on the skin and any lesions or other abnormal features, 8) Other animals at the site: e.g., numbers of dead fish, abnormal fish behavior, snails out of the water, crustaceans or fish attempting to leave the water and discolored vegetation, 9) Weather conditions on the day and the previous day and night, including temperature, cloud cover, precipitation and wind speed and direction, 10) Names of persons notified or contacted, with dates and times.

Containers and Transportation

Live animals of any stage should be placed in a large, solid container holding 1–2 times as much air as water. Water-tight, durable plastic bags may be used as an alternative. Separate containers should be used for control animals, different species, different stages, sick animals, healthy animals and animals from different sites. For

terrestrial amphibians, use a solid container with some air holes and well-moistened, unbleached paper towels. Animals from cool or high-altitude environments may be transported with the use of ice-packs, but the animal should not be in direct contact with the ice. Containers of live animals should be packed for transport into cardboard boxes lined with non-toxic, insulating material. Frozen and refrigerated specimens should not be transported in the same container, and specimens preserved in fixative should never be frozen. Transportation to a diagnostic laboratory should occur as soon as possible, and preferably within 24 hours of collection.

Remember, if in any doubt, contact a local veterinarian.

This information sheet has been produced with the assistance of Andrew Cunningham and is based on guidelines originally set out by D. Earl Green and John E. Cooper.

Produced by The Declining Amphibian Populations Task Force, Department of Biology, The Open University, Walton Hall, Milton Keynes MK7 6AA, UK.

For further information on the DAPTF or details of local DAPTF Working Groups who may be able to assist with investigation of mortality events, please contact John Wilkinson at this address or Tel: +44 (0) 1908 - 652274 Fax: +44 (0) 1908 - 654167. E-mail: DAPTF@open.ac.uk

Malformed amphibians in the USA & Canada can be reported to the North American Reporting Center for Amphibian Malformations at: <http://www.npwrc.usgs.gov/narcam/>

For advice on other aspects of amphibian sickness and veterinary care, visit the Association of Reptilian and Amphibian Veterinarians web site at: <http://www.arav.org/>

—Submitted by Karen S. Graham
Wichita, Kansas

AMERICANS ARE WARMING TO REPTILES AND AMPHIBIANS

Kermit made the first inroads. Then came a chorus of chirping Bud-wei-ser frogs. And now Louie the Lizard is selling lots of brew on TV and radio.

Gone are the days when people loathed swamp creatures. In fact, it seems many warm-blooded Americans are having a love affair with reptiles and amphibians.

At least that's what about 130 members of the *Association of Reptilian and Amphibian Veterinarians* said during a four-day conference in Kansas City that ends today. (As for those beer-drinking lizards, the vets say that they are chameleons common to Madagascar.)

During a tour Monday of the Kansas City Zoo, associa-

tion members said their business is booming as many children and adults alike are choosing cold-blooded, scaled and slimy creatures as pets over their furry brethren.

"There's definitely a 'cool' factor involved" in the growing popularity of reptiles and amphibians, said Douglas Mader, a reptile medicine specialist from Florida.

It's "You have a gerbil? Well, I have a Komodo Dragon," he said.

Association membership alone mirrors the trend. The group was founded eight years ago with about 200 members, and executive director Wilbur Amand now estimates there are roughly 1,200 veterinarians, breeders and zoo officials who belong worldwide.

As a youth in the Florida Keys, Mader first got excited about reptiles when he witnessed what household havoc the small creatures could create.

"When my older bother could handle all these animals that scared the heck out of my mom," Mader recalled, "then that was OK."

Some breeders attribute the popularity to other factors in today's fast-paced society—many reptiles and amphibians are cheap, easily available and low maintenance.

"People are finding out you can keep a corn snake in a 10-gallon tank for its whole life," said breeder Charlie Green, who runs a business called *Turtle Talks* in Asheville, N.C. "There is something wonderful about never having to take the snake outside. It never whines."

But members recommend that beginners become educated. Read up before running out and buying that python. Among key considerations: how big the reptile will grow, if it can scale walls in a single slither, or if it bites.

Reptiles also suffer ailments. Mader has seen lizards with cancer and snakes that don't shed properly. Many health complications, such as skin shedding, can be corrected through diet or change in environment.

Also, before taking that ailing iguana to a veterinarian make sure the veterinarian has the qualifications necessary to treat and diagnose problems specific to reptiles and amphibians.

Otherwise, that lizard may croak.

"Reptile medicine is not the same as with a dog or cat," Mader said. "It is definitely a special interest area."

—Kansas City Star, 9 September 1998
Submitted by Eric M Rundquist, Lawrence

REPTILE SMUGGLER ARRESTED IN STING

A lengthy undercover operation netted a Malaysian described as a flagrant international wildlife trafficker, along with two alleged accomplices charged with smuggling more than 300 exotic tortoises, lizards and other animals into the United States, prosecutors said Tuesday.

The three men were arrested Monday and charged in a

55-count federal indictment alleging conspiracy, money laundering, smuggling and other crimes over a 2 and 1/2 year period.

Ken Liang “Anson” Wong, 40, was arrested in Mexico City as he arrived for a meeting with an undercover U. S. Fish and Wildlife Service Agent.

—Lawrence Journal World, 16 September 1998
Submitted by Suzanne Collins, Lawrence

(Editors Note: Anson Wong is the world’s most notorious wildlife smuggler and has been pursued by wildlife authorities for years. Among the animals confiscated in the bust were Komodo Dragons, the world’s largest and one of its rarest lizards.)

BAREFOOT ANACONDA CHASE

Pursuit of knowledge leads Jesus Rivas on barefoot chases to catch Anacondas

There’s more than one way to catch an Anaconda, but that surely begs the question: Why would anyone want to catch a 18-foot, 200-pound snake that could squeeze the life out of you?

For Jesus Rivas, 34-year-old snake hunter, conservationist and doctoral student at the University of Tennessee it’s about the pursuit of knowledge.

The Anaconda is the subject of Rivas’ dissertation, which will look at the snake’s history with an emphasis on the reproductive biology.

Surprisingly little is known about Anacondas, although they are frequent fodder for myth and folklore in tropical South America. In the United States, the snake played the title role in a 1990s horror movie.

Rivas uses his considerable talents to track, trap and sometimes wrestle with these powerful reptiles in his native Venezuela.

“They’re hard to find,” he said. “But I grew up in the area. . . and I’ve been around snakes all of my life.”

Rivas and his research sidekicks tromp barefoot through the wetlands of the Orinoco River basin a few degrees north of the equator. They locate the big creatures by stepping on them or otherwise rousing an Anaconda from a hiding spot in the mud.

Once captured, a snake is measured, weighed, analyzed in every way possible and then implanted with a radio transmitter so its activities can be monitored more easily.

“They can be dangerous,” Rivas admits. “I have two of my assistants who have been attacked by snakes, but we were there to save them.”

That’s why it is important for search parties to travel in

groups of two or more. If one gets “wrapped up” in his or her snake research, the others can help untangle the trouble before becoming prey to the green beast (with black and yellow markings).

UT Professor Gordon Burghardt, who is Rivas’ academic advisor and chairman of his doctoral committee, thinks bravery may be one of his student’s most valuable traits.

“Not many people are going to go out in the swamp and walk barefoot. You have to be pretty fearless. But you also have to have an understanding. What really sets Jesus apart is he’s a very innovative thinker. He comes up with solutions to things.”

Rivas came to Tennessee to study with Burghardt, a noted expert in animal behavior who holds appointments in UT’s Psychology and Ecology and Evolutionary Biology Departments. Burghardt has done field projects in Venezuela (although not with Anacondas), and Rivas was familiar with his work.

After Rivas arrived at UT in 1993, an immediate priority was improving his English for the necessary course work. Burghardt also counseled him in paring his research interests. Rivas previously has researched iguanas and studied reptile behavior in general, looking at turtles, lizards and snakes.

His attention shifted almost entirely to Anacondas.

Having completed his classwork at UT, he now is working on his dissertation (which Burghardt believes will ultimately become a book).

Rivas does most of his Anaconda hunting in the dry season, December to May, when the snakes congregate near the shrinking wetlands. The big snakes—females are much larger than males—never stray too far from a pool of water.

“I must go stomping and mucking where the snakes are,” he said.

“For legless animals, they can move pretty fast in the water. They are very good swimmers. On land, they are slow. The bigger they are, the more slow they are. . . They are easier to subdue on land, but they never come on land.”

Once a transmitter is implanted beneath the skin, an Anaconda can be tracked for a range of about 500 meters.

In his research, Rivas has witnessed some extraordinary snake events—including the so-called “mating ball.”

That’s where numerous male snakes—six or more—wrap themselves around a female, each seeking entry for reproductive purposes. These mating balls can stay together for days at a time.

A small female may have 12 to 15 snakes in a litter, while larger snakes are capable of 80 or more offspring at a time.

“Is it the largest? The most active male? The one who gets there first?”

The possibility also exists for multiple paternity in the

same litter, as has been demonstrated by genetic testing.

Although he's been researching the large, semi-ambigious snakes for seven years, Rivas said he's still at an early stage in understanding Anaconda biology.

He's already gained quite a reputation. His work will be featured in a National Geographic TV special later this month, with a magazine piece expected to follow early next year.

He plans to return Venezuela after he completes his dissertation and devote efforts to research and protecting savannas in the Llanos region that are not only beautiful but home to many endangered species.

The tropical rain forests of South America have become an important cause for environmentalists, but Rivas said the grassy ranch land in Central Venezuela deserves the same kind of concern and protection.

"It's very unknown to most people" he said. "It is much ignored."

—Knoxville News, September 1998
Submitted by Jerry & Nancy Green
Knoxville, Tennessee

SAILING IGUANAS MAKE HISTORY

Fifteen iguanas on a tangle of waterlogged trees, tossed into the Caribbean Sea by a hurricane, have apparently sailed 200 miles from Guadeloupe to Anguilla and into biological history, scientists say.

Their report, being published today in the journal *Nature*, has amazed scientists, who have been arguing since early this century about whether such journeys were possible.

By documenting the 1995 voyage of the 15 large, land-loving creatures—enough to form a new population—the report provides the first clear-cut evidence in support of biologists that argue that seemingly impossible journeys like this one could have been an important avenue for the dispersal of species around the world.

"It was a major invasion," said Ellen Censky, a reptile expert who has worked on Anguilla and was the lead author of the paper.

"I got a phone call saying iguanas had come onto the island," said Censky, now director of the Connecticut State Museum of Natural History at the University of Connecticut. "My first thought was that that couldn't have happened. Then somebody sent a snapshot. I thought, 'My God, that's it, that's it.'"

James Brown, ecologist and biogeographer at the University of New Mexico, said: "It's a spectacular observation. Some of the things nature can do are pretty incredible."

The iguanas' journey began in September 1995 when two powerful hurricanes moved through the eastern Caribbean. A month later, the iguanas, fearsome-looking creatures up to four feet long that resemble dinosaurs, washed up on Anguilla's shore on an immense raft of trees, the *Nature* paper reported.

Censky said the lizards, which rest in trees, were probably blown into the sea when the trees were uprooted. She and her colleagues studied the tracks of the two hurricanes, Luis and Marilyn, and ocean currents and decided that the lizards probably came from Guadeloupe.

"I was completely surprised to see iguanas coming," Cleve Webster, a fisherman on Anguilla, said in a telephone interview.

Censky, along with Judy Dudley, a U. N. volunteer in Anguilla, and Karim Hodge, an employee with the Anguilla National Trust, interviewed eyewitnesses to the iguana landing and then tracked and monitored the iguanas as they dispersed. Censky said they were able to verify 15 animals, but suspected there were more. Identifying the lizards, known as green iguanas, as outsiders was simple, researchers said. They have a blue-green coloration and dark rings around their tails, making them easily distinguishable from the other iguana species on the island, which is brown and has a plain tail.

Though arriving iguanas appear to have been weak, dehydrated and, in some cases, injured, some survived. In March, researchers said they found what appeared to be a pregnant female iguana, the last element of a successful colonization of a new species, which made the observation of the rafting significant. Because the animals appear to be reproducing, the researchers said they believed the new arrivals had established themselves, though other scientists said it was still too soon to tell.

The new study bolsters the claims of those, like Blair Hedges, an evolutionary biologist at Pennsylvania State University, who have been advocating this type of rafting as a major explanation for the distribution of animals on island in the Caribbean and elsewhere. Isolated ocean islands like the Hawaiian islands would be devoid of terrestrial animals were it not for rafting, or the transportation of species by people.

"In my mind, it's not unexpected," Hedges said. "If we can see green iguanas land on Anguilla in 1998, just think of all the storms in all the millions of years and there is a real probability of getting anywhere in the world."

—Kansas City Star, 8 October 1998
Submitted by Mary Kate Baldwin
Topeka

HOW ABOUT A 150-POUND TURTLE?

Usually the mail holds unpleasant surprises like the Visa bill, or junk mail from bill collectors.

Every now and then, though, you get something of real interest, like this photo of a large (really large!) alligator snapping turtle.

The picture was sent in by Roy Winslow of Grantville. The story was documented by the Vinita, Oklahoma, chamber of commerce.

Here's the story:

Back in 1922, a boy named Kenneth Allensworth was limb-lining for catfish on Cabin Creek, north of Vinita.

The turtle caught its foot on one of the hooks. A horse was used to pull it from the creek. The turtle was so big it wouldn't fit into the back of a wagon bed.

According to info on the back of the photo, the turtle weighed 147 pounds.

Discerning readers of this newspaper will immediately notice a resemblance to fellow columnist Dick Snider, who is also from Oklahoma.

The turtle's age was estimated to be 400 years old, which also puts him in Snider's age bracket.

The snapper was eventually sold to a man named Claude DeWess, who ran a medicine show in those parts. DeWess might have known his painkillers, but he didn't know squat about turtles.

Snappers bury themselves in the mud during winter and hibernate. DeWess didn't provide any mud and the big

turtle froze to death. DeWess had the turtle stuffed but beyond that, no one is sure what became of the giant.

Let's face it, you don't see critters like that anymore. Looking back, I really can't recall seeing any big snakes lately. It's been pretty well documented that frogs and lizards are disappearing at an alarming rate.

Some scientists blame the ozone layer, others lay the blame on pesticides like DDT.

I don't know how many bullfrog hunters are out there, but when was the last time you saw a pond full of big frogs? In my (long-ago) youth, it seemed that every pond we came to had a healthy population of croakers.

Maybe the snakes ate them all and then starved to death themselves.

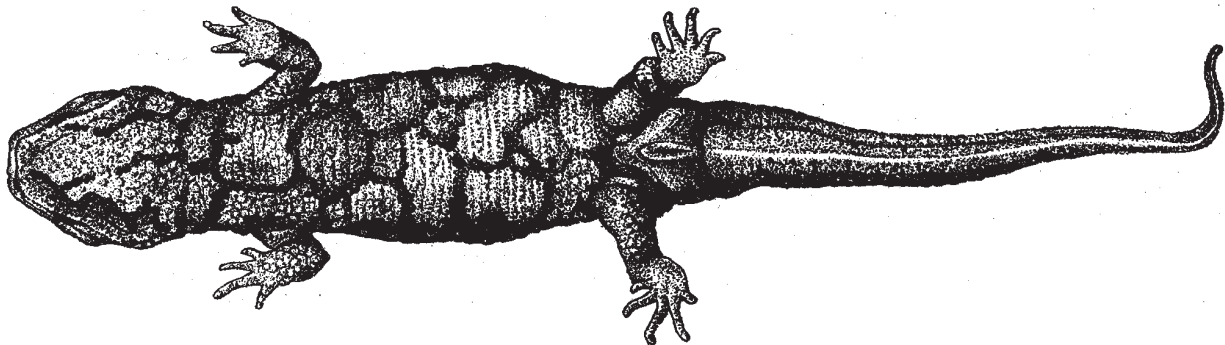
Perhaps we'll see a turnaround. For example, it was big news when a deer (or even a deer track) was spotted in these parts. Pretty hum-drum now.

The same goes for wild turkey. When they first started showing up in these parts, a lot of farmers said, "I like watching them. Go ahead and hunt the quail, but leave the turkey alone please."

The flocks then grew to 10, 15, 50, and over 100. Birds that weigh over 10 pounds eat a lot of grain. Nowadays the mood among many farmers is "Shoot 'em all!"

And keep your hands away from a mouth like that turtle's.

— Topeka Capital-Journal, 27 September 1998
Submitted by Mary Kate Baldwin



FEATURE ARTICLES

SOUND RECORDING REVIEWS

The Calls of Kansas Frogs & Toads by Keith Coleman, with narration by Joseph T. Collins. Sponsored by the Kansas Department of Wildlife and Parks. 1998. Kansas Heritage Photography. Available for \$14.95 plus \$3.00 shipping from Kansas Heritage Photography, 840 S.W. 97th Street, Wakarusa, Kansas 66546. Telephone 785-836-2119; email: wakarusa@cjnetworks.com

There is nothing easier than recording frog songs. You just wait until dark, go to the pond, and turn on your tape recorder. That's all there is to it. Of course, the recording you get will be terrible, indistinct and full of unwanted background noises. If you want to make a good recording of frog calls, it's a bit more difficult. To get a good recording of a frog, you have to invest a substantial amount of money in a quality tape recorder and stereo microphone. Then you locate a suitable site where frogs are calling, and wait for a dark, damp night. Plan to spend several hours of watching, waiting, positioning, and repositioning yourself for every few seconds of good frog song that you get on tape. Night in Kansas is a lot noisier than most of us realize. When someone says, "Listen to that bullfrog," our brains are pretty good at filtering out all the extraneous noises so that we can concentrate on the bullfrog. But the tape recorder will pick up everything, such as the slamming of a car door in the distance, insect noises, airplanes flying overhead, barking dogs, rumbling trucks, the wind. Once the frogs have adjusted to your presence, and began calling again, you then have to be able to turn on and adjust your recording equipment in the dark, without disturbing the calling frogs. This is more difficult than you might think. It requires endless patience to get a clear and distinct recording that is free of distracting background noises.

KHS member Keith Coleman is a very patient man. He has devoted thousands of hours over many long, lonely nights to recording 21 of the 22 species of Kansas frogs and toads on this tape. These stereo recordings are of very high quality, with no distracting background noises.

Side one (43:50 minutes) of this cassette contains a systematic arrangement of the frog calls by species, introduced by the sonorous voice of KHS member Joseph T. Collins. Side two of the cassette (42:48 minutes) can be used to test your skills at identifying frogs, or better, as a wonderful relaxation tape.

On side one, each frog call is introduced with a short commentary by Collins, including the frog's name, some remarks about distribution and habitat, and some field

identification characteristics. Most of Collins' comments convey useful information about the calling species, putting the call in a useful context. However, at times he waxes a bit more poetical than necessary. I found some of his digressions needless and distracting. For example, he refers to Woodhouse's Toads as "little fellas" and then to a chorus of them as "a herd of these critters." Occasionally he gets a little too personal, such as telling us that while listening to Strecker's Chorus Frogs one night he and his companions had "stimulating refreshments to take off the chill, making the evening even more memorable." Some of his comments are so anthropomorphic that they are misleading. For example, in describing the sexual dimorphic coloration of the Green Toad, Collins says that the females, "showing a streak of independence, are yellow." In an age when more than 40% of the US population glibly believes that special creation and not evolution is responsible for the diversity of life on the planet, biologists should not make statements that imply that coloration in animals is the result of personality rather than selection. Collins' commentaries are intended to set the mood for the frog calls as well as to give the listener information, and most of the time he succeeds quite well.

The first successful, popular recording of North American frog and toad calls dates from 1947. Called *Voices of the Night*, it was released as part of the Sounds of Nature series published by Houghton Mifflin Company and The Federation of Ontario Naturalists as a 78 rpm record. It featured the calls of 34 species, recorded by Paul Kellog and Arthur A. Allen. In 1958, a record of the calls of 57 species, recorded by Charles Bogert of the American Museum of Natural History in New York. The recording was distributed by Folkways Records as a 33 1/3 LP record album. (The original recordings are now available on CD as Smithsonian Folkways 45060, telephone 1-800-410-9815). Considering the enormous difficulty of lugging heavy, cumbersome and cantankerous recording equipment around in those days, the quality of these recordings was remarkable, though a far cry from the quality of Coleman's field recordings. Each frog call on the Folkways record was introduced in a rather flat monotone by Dr. Bogert. At the time of this recording, frog calls were thought to be pretty straightforward. It was assumed that frogs called to attract mates and that a few made squeaks if you picked them up, commonly referred to as "release calls." We know a lot more about anuran vocalizations now, 40 years later. As Collins explains in his narration, frogs do call to attract mates, but also to position themselves within a chorus and to establish territory. We now

know that a frog chorus is not a random cacophony of sound, but a structured, ordered sequence of sounds carefully coordinated to assure the reproductive success of the entire population.

Side two of the cassette begins with a short introduction, and then continues without interruption through a Kansas thunderstorm and recordings of frogs and frog choruses throughout the state for 40 minutes, ending with another thunderstorm. My wife and I listened to both side of this tape one late summer's day as we drove out into the Flint Hills from Emporia at sunset. It was the perfect ambiance to appreciate the stunning quality of Coleman's recordings and to enjoy Collins' commentary. As the light changed to yellow and then faded to dusk, the Flint Hills came alive with the melodious croaking coming from the car stereo. I highly recommend this cassette not only for herpetologists, but as an excellent holiday gift for anyone who is interested in nature. It will provide many hours of listening enjoyment as well as teaching you how to identify the anuras of Kansas by their voices.

My only serious complaint about this recording is that it is not available in CD format. This is due to the much higher production cost of a CD compared to an audio cassette. I hope that future editions of this excellent recording will be in CD format so that the calls of individual species can be quickly selected, and so that on long winter nights, I can listen to part two of the recording continuously, over and over and over again, dreaming of spring.

Alterna Rush. Songs of Herps and Herpin' by Mark L. Heinrich. Distributed by Mark L. Heinrich. Thirteen songs, total time 44:38. Available for \$15.95 + \$2.50 shipping and handling from Mark Heinrich, 103 E. Blodgett, Carlsbad, New Mexico 88220. Website at <http://heinrich.iuma.com>

Long ago and far away, in a mythical place called West Texas, there dwelt a rare and seldom seen serpent named *Lampropeltis alterna*. But some called it *Lampropeltis mexicana*. Others preferred *Lampropeltis mexicana alterna*, or *Lampropeltis alterna mexicana*, but no matter*. This snake had strange powers of attraction. Like a siren's song, it would lure otherwise responsible adults to its lair and then reduce them to gibbering, feverish bundles of nerves and desire. Okay, it would reduce occasionally responsible people old enough to be adults to that status, but you get the idea. Even today, in the age of the internet and the cell phone, each spring and summer, hundreds of these hapless, doomed souls drive endless hours over some of the longest highways in North America just for the pleasure of being seduced by the charms of this snake species. First hand accounts of these experiences are many, and varied. (You can find two of them in back issues of the Kansas Herpetological Society Newsletter, numbers 16 and 54; and a new chapter in this never-ending saga just appeared in Reptile

and Amphibian Magazine #58, pages 38-47, "The cult of the gray-band" by Rod Dearth.) What these hapless herpetologists are seeking is the indescribable thrill that comes from seeing a *Lampropeltis alterna* in the wild, a feeling commonly known as "The Alterna Rush."

Mark Heinrich is a veterinarian in Carlsbad, New Mexico. He plays the banjo. He sings. He writes songs. He is a herper. Thanks to this unusual combination of talents, he has produced a 13-song CD that must be heard to be believed. It opens with the quasi-psychedelic number, *Alterna Rush* (well, it's as psychedelic as one can get on the banjo), which has lyrics that say "If you feel it you must be careful, it's an obsession, a disease/And you may loose all other senses of responsibility/alterna rush/alterna rush."

Following this paean to gray banded addiction, Heinrich sings about *Crotalus ruber*, with the improbable lyrics, "Thank God you are mellow and you will not bite me/When I surprise you most of the time/Cause if your fangs poked into my gastrocnemius muscle/I would not feel sublime." I imagine not. All herpers and their significant others will find solace and consolation in the ditty called *Debbie's Song (I Hate Snakes)*. This number is a cautionary tale about who's interests will prevail in a relationship, those of the herp freak or the person who has the misfortune to fall in love with the herp freak.

The songs include a tour de force on the banjo titled *He's Coachwhip*, a song about amphibian amplexis called *Safe Sex*, and a pre-coming of age song, *Gray Banded Freak*. Anyone who has ever tried to cope with a pet iguana will love the song *Iggy*. Those who have had a backyard plowed under and a house almost destroyed by the actions of a large tortoise will relate to *Sulcata Blues*.

Despite the humor in every song, there are also some serious messages on this album. In *Whatever Happened*, Heinrich laments what appears on animal price lists these days with the words, "albino boas and womas and such/And everything upon costs at least five hundred bucks/Whatever happened to all the common stuff/Whatever happened to those things we loved so much?" This same theme is continued on the song *Snake Breeder*. Bad field trip habits are good humoredly addressed in *Put That Rock Back*.

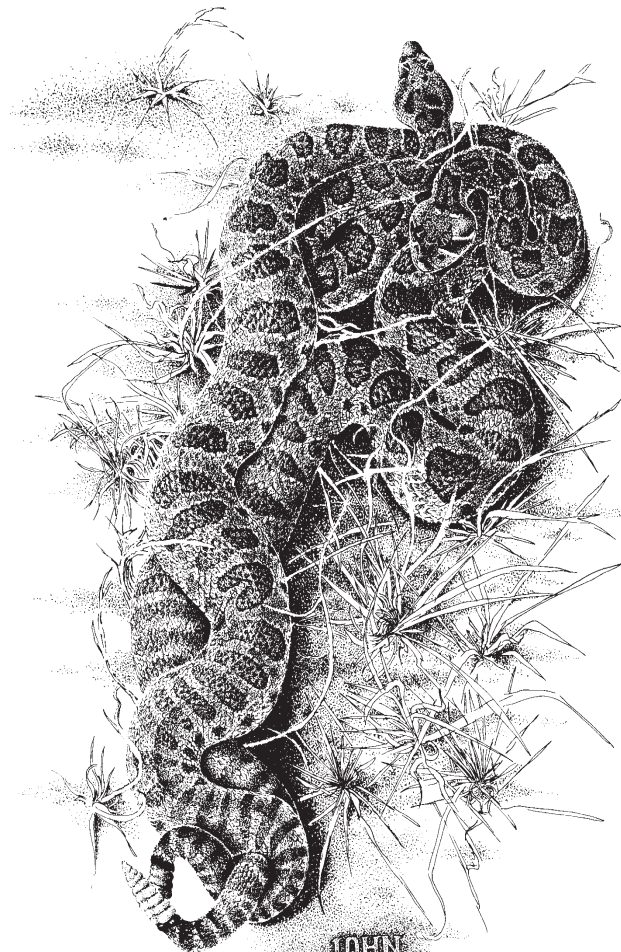
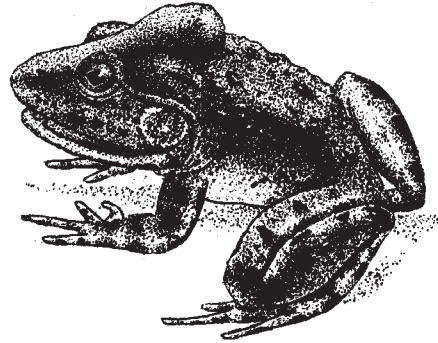
The saddest song is one clearly based on Heinrich's experience as a veterinarian. The title is *Walking Death*, and it tells the tragic stories of three pets and their stupid owners: a ball python with pneumonia, a dehydrated and undernourished green iguana, and a turtle that failed to awake from hibernation.

Production values for this music are excellent. Heinrich is a good banjo and harmonica player, and sings his lyrics with marvelous comic timing. He is backed up by a very good musician named Dave Shanks on various keyboards, guitars and programmed backgrounds, and by Debbie Heinrich and Susan Siepel with background vocals. All in

all, this is a wonderful collection of very funny songs, enthusiastically delivered by an artist who obviously had as much fun recording this album as you will have listening to it.

*But of course it matters. The correct name for the gray-banded kingsnake is *Lampropeltis alterna*, according to R. Conant and J. T. Collins. 1998. *Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America, Third edition, Expanded*. Houghton Mifflin Co., Boston.

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7 DECEMBER 1991

SHORT COMMUNICATIONS

A TECHNIQUE TO REMOVE REPTILES FROM GLUE BOARDS

Glue boards are pieces of cardboard coated with a viscous, sticky chemical compound, sold to serve as traps for insect pests or rodents. Occasionally, other animals or objects become stuck to these traps. Most fluids which will remove objects from glue boards are toxic (e.g., alcohol) or are skin irritants (e.g., mineral spirits). At a workshop on integrated pest management a few years ago, I was told that mineral oil could be used to remove animals from glue boards without causing them further injury. I recently had occasion to try this technique out personally.

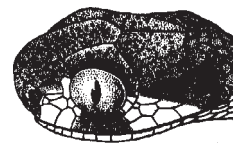
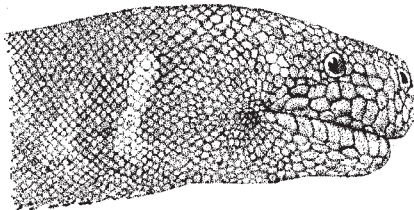
On 19 November 1998, a member of the public brought two snakes to the Natural History Museum at the University of Kansas for identification. Both were adhered to the same rodent glue board (along with a quantity of insects). The glue board had been in the basement of a residence just outside the city limits of Lawrence, Kansas. The two snakes were a young Prairie Ringneck Snake (*Diadophis punctatus arnyi*) and a juvenile Eastern Yellowbelly Racer (*Coluber constrictor flaviventris*). Both snakes had probably entered the basement of the house seeking hibernacula. This year was an unusually warm year in eastern Kansas, which would account for their movements so late

in the season. The ringneck snake was already dead, but the racer was still alive, although thoroughly stuck to the glue board.

With the assistance of the Associate Director of the museum, Jordan Yochim, a liberal quantity of mineral oil was poured over the snake and glue board. The blunt edge of a teaspoon was used to carefully free the racer, working from tail to head. The snake could not be simply pulled free of the adhesive, but rather the mineral oil had to be slowly worked underneath the snake with the edge of the spoon, while gently prying the snake free.

The snake came free from the glue board surprisingly easily, and the remaining adhesive was removed from the snake by massaging it gently with mineral oil. The snake was then gently washed with mild hand soap and warm water, rinsed, and allowed to soak in clean water for several hours to recover from the effects of dehydration. The snake was retained in a cloth bag for 24 hr, and as it showed no sign of injury or ill health, was later released into suitable habitat.

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The Kansas Herpetological Society

The KANSAS HERPETOLOGICAL SOCIETY 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 amphibians and reptiles in Kansas in particular; and to achieve closer cooperation and understanding between herpetologists, so that they may work together in common cause. For up-to-date information about the Society and its activities check the KHS home page on the World Wide Web at <http://eagle.cc.ukans.edu/~cnaar/khs/khsmain.html>

Membership

All interested persons are invited to become members in the Society. Membership dues per calendar year are \$10.00 (U.S., Regular), \$15.00 (*outside* North America, Regular), and \$15.00 (Contributing) payable to the KHS. Send all dues to: KHS Secretary-Treasurer, 303 West 39th Street, Hays, Kansas 67601.

All members are entitled to participate in Society functions and have voting privileges. They receive copies of Society publications, which include KHS NEWSLETTERS, as well as other publications of interest or those co-sponsored by the Society.

Editorial Policy

The KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER, issued quarterly, publishes manuscripts and notes of interest dealing with the biology of amphibians and reptiles. Manuscripts should be submitted to the Editor no later than the 15th of the month prior to the month of issuance. All manuscripts become the sole possession of the Society, and will not be returned unless special arrangements are made with the Editor.

Pen and ink illustrations and photographs are also welcomed. These should be sized accordingly as no reductions can be made. Illustrations and photographs will be returned to the author only upon request.

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