KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER NO. 71

March, 1988

ANNOUNCEMENTS

Spring KHS Field Trip Set for Harper County

The annual spring field trip of the Kansas Herpetological Society will be held the weekend of 15-17 April 1988 in Harper County, Kansas. The base camp for the activities will be the Anthony City Lake, located about one mile north of Anthony, Kansas. The legal location of the lake is sections 11 and 14, township 33 south, range 7 west (Sec 11 + 14, T33S, R7W). The lake is on the west side of Kansas State Highway 2/14, and signs mark the way to the lake and camping area.

Signs should be posted marking the KHS camp area by Friday evening, 15 April. CB channel #4 will be monitored in order to help herpers that have a CB radio find the camping area. Just call for the KHS and with a little luck, a friendly voice will answer.

Water, electricity, and above average rest rooms are located at the lake. Camping fees start at about $3.00 per night. There are also two nice motels located in the city of Anthony. The Silver Top Motel, 423 West Main Street, has rooms starting at $18.00, phone (316) 842-5188. The Trade Winds Motel is located at 322 West Main Street, and has rooms starting at $24.95, phone (316) 842-5125. Both motels accept credit cards. The Trade Winds Motel has HBO and cable TV as well as direct dial phones, for KHS members needing immediate contact with their stockbrokers.

Anthony has a number of eating places, with food generally available from about 6:00 AM until late at night. These range from two pizza places to fast food stops to a restaurant and club.

There are also convenience stores, several gas stations, drug stores, a Gibson's Discount Center, and a number of other places to spend money in Anthony. There is an aiport on the west edge of town for KHS members who wish to fly to the field trip.

Anthony does not have a liquor store. The nearest such store can be found in Harper, which is located about eight miles north of Anthony.

There are a number of churches in Anthony.

This field trip to Harper County may result in the discovery of several new county records. The county has a diversity of

habitat that should provide something of interest for everyone. There are also a number of species of other interesting animals (such as birds and mammals) to observe as herpers search for the more important amphibians and reptiles.

Maps of Harper County will be available at the meeting. A number of land owners have indicated that they will allow KHS members access to their land. There are a lot of good roads for morning and evening collecting, too.

Start planning now for an enjoyable weekend in southern Kansas. Bring friends and make this one of the best KHS field trips ever.

Contact Larry Miller at 524 North Osage Street in Caldwell, Kansas 67022, for further information.

The KHS officers look forward to seeing the society members and their friends this spring.

Herpetology at the University of Texas at El Paso

The University of Texas at El Paso (UTEP), with approximately 14,000 students, is located near the banks of the Rio Grande overlooking the states of Chihuahua, Mexico and Texas. The El Paso/Ciudad Juarez metropolitian area has a combined population of over one million, and is the cultural and entertainment center for the region. The international flavor and intellectual character of the campus draw much of their uniqueness from these geopolitical assets. Winters are mild, summers realistically bearable, and costs of living and housing are well below the national average.

The Department of Biological Sciences at UTEP offers the B.S. and M.S. degrees in biology. There are numerous opportunities for participation in undergraduate research and support for graduate students in the form of teaching assistantships is usually available. Faculty with general herpetological interests include Dr. Robert G. Webb and Dr. Richard D. Worthington, as well as adjunct faculty Dr. Jerry D. Johnson and Dr. Carl S. Lieb; ancillary faculty expertise is also provided by Dr. Arthur H. Harris (paleobiology) and Dr. Eppie D. Rael (venom biochemistry).

The entire departmental faculty takes pride in their informal and personal relationships with students. Field trips are commonplace, the learning environment is enhanced by access to the extensive herpetological libraries of the instructional staff, and by a weekly herpetological colloquium sponsored by Johnson, Lieb and Webb. In addition to its modern teaching and research facilities, the Department also includes the Laboratory for Environmental Biology and its associated collections (about 11,600 herp specimens).

Those interested in undergraduate studies involving herpetology at UTEP should write one of the above mentioned faculty; potential graduate students should additionally contact the Graduate Advisor, Dr. Paul Goldstein. The address for all is:

Department of Biological Sciences
University of Texas at El Paso
El Paso, Texas 79968-0519

--J.D. Johnson, C.S. Lieb, and R.G. Webb, UTEP

Bunny Funnies

"Jackalopes: History of a Hoax" opened 15 March on the sixth floor of the KU Museum of Natural History in Lawrence. Jackalopes, a popular theme for souvenirs of western travel in the U.S., are the focus of this new exhibit. The traditional addition of antlers to a black-tailed jackrabbit mount may have originated with horny growths observed in local rabbit populations. The growths are caused by a virus. Variations of the jackalope image are also known from other areas of the world where the virus occurs.

--Christine A. Winner, Public Relations, University of Kansas Museum of Natural History

Herpetology DownUnder Underwater

A rather unusual tour program for Australia has recently been announced by Allen Photographics, Inc. The itinerary includes: the Australian Herpetology Symposium at the Queensland Museum, Brisbane, 17-26 August; Swain Reefs, Great Barrier Reef (sea snake research) 27 August to 2 September; Heron Island Research Station, Great Barrier Reef (more about sea snakes) 2-9 September; and an optional extension to the York Peninsula (the rainforest of northern Queensland). Cost is $2330 from Los Angeles. For details, contact:

Allen Photographics, Inc.
420 North 5th Street #825
Minneapolis, MN 55401
phone (612) 333-3635

In Search of Reptiles and Amphibians

A new book by Richard D. Bartlett with the above title is due out in April 1988: Experience the thrills of an accomplished naturalist's quest for snakes, turtles, lizards, frogs and toads. Go with him on his travels throughout the United States, Mexico, Central America and northern South America. This superb observer sees not only reptiles and amphibians, but also the variety of

plants and animals that are a necessary part of each habitat he describes. Contains 40 full color illustrations. Cloth, $24.95; paper $19.95. Order from:

E.J. Brill Publishing Co., Inc.
1780 Broadway, Suite 1004
New York, New York 10019
phone (212) 757-7628

Graduate Study on Amphibians and Reptiles, Indiana University

Indiana University--Bloomington has a very diverse group of faculty pursuing research on amphibians and reptiles. Interests range from molecular aspects of development and neurobiology to ethology and ecology. Students can pursue an M.A. or Ph.D. on the biology of amphibians and reptiles in several graduate programs. Most students are supported through Associate Instructorships. Some research assistantships and fellowships are available. Most offers include both a substantial stipend and a fee scholarship.

There are facilities to support modern research on amphibians and reptiles at all levels from molecular and neurobiology through community ecology. These facilites include animal quarters, instrument centers, a 300-acre woods on Lake Monroe, and the 90-acre Kent Farm research area. The 700 acre campus is in a community of 75,000, fifty miles south of Indianapolis. Most of the surrounding region is forested hills and valleys.

For more information write or call:

Graduate Study of Amphibians and Reptiles
c/o Department of Biology
Indiana University
Bloomington, IN 47405
phone (812) 335-1861

Eleventh Annual All Florida Herpetology Conference

The Florida State Museum and the Gainesville Herpetological Society are sponsoring the 11th Annual All Florida herp conference on 23 April 1988. Session topics include Wild Herp Population-Human Interaction: Collection, Harvest, and Management; Macrophotography of Amphibians and Reptiles; and a Workshop for Young Herpetologists.

For further information, contact:

Marilyn Whetzel
Department of Interpretation
Florida State Museum
University of Florida
Gainesville, FL 32611

Two New Publications from the Smithsonian

The Smithsonian Herpetological Information Service has issued two more of their very useful publications. No. 73 is "Amphibians and reptiles: predators and prey. Amphibians and birds" by William Cook. Included is "Bibliography of herpetological references in Australian ornithological journals" by Glenn M. Shea (total 45 pages). The second recent issue is No. 74, "Bibliography of Dipsosaurus dorsalis," by Arthur C. Hulse (25 pages). To obtain these interesting publications (and others in the SHIS series), send a self-addressed mailing label to:

George Zug
Division of Amphibians and Reptiles
National Museum of Natural History
Smithsonian Institution
Washington, D.C. 20560

KHS BUSINESS

Wichita Sports, Boat and Travel Show Review

The first year of participation in the Wichita show was an absolute success. We answered over a thousand questions. And, yes, everybody has definitely seen the alligator snapping turtle everywhere (or so they think). Everyone has seen a common snapping turtle as big as a wash tub when they were kids (they looked that big to me back then, too).

Friday, the Wichita Eagle and Beacon interviewed us for the Saturday morning edition. Over two hundred people signed up for the free drawing for Joe Collins' books, Amphibians and Reptiles in Kansas and Natural Kansas, and a year's free membership in the KHS. The winner of all three was Michael A. Nelson of Wichita. We also had three new members join at the show: Claton Baughman, Newton; Eric Padfield, Wichita; and Barry M. Raugust, Wichita. We welcome all three to the KHS. A definite thank-you goes to all the volunteers: Brad Lichtenhan, Jim Marlett, Eddy Stegall, Dan Schupp, Sherry Graves, Joe Collins, Suzanne Collins, Larry Miller, Eric Rundquist, Marty Capron, Jill Hege, Kirk Mullen, Greg Edson and Alan Volkman. Thanks also to Kirk Mullen for the use of his alligator snapping turtle and to Kevin Peavey for donating the three aquaria which will become KHS display tanks from now on. A very special thanks goes to Joe Collins for donating the two books for the drawing. Next year's program will be water snakes of Kansas. Hope to see you at the Coliseum for the 35th annual Sports, Boat and Travel Show.

--Jack Shumard
KHS Membership Chairperson
607 Marcilene
Wichita, Kansas 67218

ALL THE ZOOS THAT'S FIT TO PRINT

The following news items are all from the American Association of Zoological Parks and Aquariums (AAZPA) Newsletter, and were supplied by Ruth Gennrich (Lawrence).

From AAZPZ Newsletter 29(1), January 1988:

Texas Map Turtle Hatched at the Columbus Zoo

The hatching of a Texas map turtle (Graptemys versa) at the Columbus Zoological Gardens on 19 November is thought to be a first breeding for this species. It was the result of a program initiated in 1982 targeting several species of the genus Graptemys in which there was a paucity of prior captive reproduction and information on reproduction in wild populations, and which are declining in the wild due to habitat alteration. Hatchlings have also been produced from 20 clutches from G. flavimaculata, G. nigrinoda, and G. pulchra.

Dwarf Caiman Hatch at the Knoxville Zoo

Two dwarf caiman (Paleosuchus palpebrosus) hatched on 21-22 October, representing the first successful crocodilian breeding at the Knoxville Zoological Park. Seventeen eggs were laid in water on 14 July. One was broken, three were cracked and determined to be infertile, and the remaining 13 were incubated in vermiculite at 88-90o. Although 11 of these proved to be infertile, two hatchlings emerged after 99 and 100 days. Both fed readily on small crickets and chopped mice after six days. This species has also been successfully bred by the National Zoological Park and Rio Grande Zoological Park.

From AAZPZ Newsletter 29(2), February 1988:

Conservation News from World Wildlife Fund: Swapping Debt for Nature

"Debt-for-nature swaps" are an innovative method for conserving tropical rain forests while at the same time easing the external debt burdens in developing countries. World Wildlife Fund is seeking to purchase small amounts of debt from commercial lenders; then in cooperation with the debtor nation, convert those debts into conservation projects.

In December, WWF signed an agreement with Ecuador to purchase Ecuadorean external debt with a face value of $1 million. The debt will be converted into local currency bonds, the proceeds of which will be used by Fundacion Natura, Ecuador's leading conservation organization, to strengthen the country's park and reserve system, fund environmental education programs, and

train local conservationists.

Costa Rica has also announced a debt-for-nature program in which WWF will participate. WWF has pledged $100,000 to Costa Rica's program for protection and management of a 40,000-acre tract of dry tropical forest to be added to Santa Rosa National Park in Guanacaste Province.

Significant Hatchings Occur at Life Fellowship Bird Sanctuary

Nineteen Galapagos tortoises were hatched at Life Fellowship Bird Sanctuary, Seffner, Florida, between 27 March and 10 May 1987 from three females, each depositing two clutches ranging from 11 to 19 eggs. The eggs that were not defective were placed half-buried in plastic containers and incubated at 31oC to 33oC. Hatching time varied from 102 to 115 days. Fertility per clutch varied from 90.9% to 28.5%, the lower percentage being attributed to the separation of the breeding male in October 1986 when it was thought the females would begin to nest. They did not nest until December, thus the low percentage from the second clutches. Two clutches of 9 and 11 fertile eggs deposited in October and November 1987 from the same female have disclosed 100% fertility. The group consists of 12/14 adult tortoises acquired since 1985, including specimens on breeding loan from the Brookfield, Detroit, and St. Louis Zoos. The hatchling weights varied from 48 to 74 grams, with the two extremes increasing to 357 and 467 grams, after being reweighed in late November. Most others ranged from 240 to 331 grams. The rapid growth and perfect-shaped shell of the hatchlings are attributed to the proper diet developed at the sanctuary in 1965, coupled with the exposure to regular sunlight.

Forty-three Cyclura hatched at Life Fellowship between July and September 1987. Five are second-generation, captive-bred Grand Cayman blue iguana (Cyclura nubila lewisi). This extremely endangered iguana is one of the largest and most colorful of the Cyclura. Its estimated wild population is nine adults, and habitat is limited to less than four square kilometers on the eastern tip of Grand Cayman.

Abilene Zoo Reports Significant Breeding

Four litters of West African bush vipers (Atheris choloroechis) were produced in 11 months. This may be a first breeding for both the genus and species. Seven Cameroon mountain chameleons (Chameleo montium) were hatched after a 127-day incubation period. This is the first of two fertile clutches laid to date. The zoo's first hatching of a Storr's dwarf monitor (Varanus storri) occurred in 1984, which was possibly a first zoo breeding. After a two-year period of failing to hatch fertile eggs, a male was hatched on 6 November 1987, after a 128-day incubation period.

African Spurred Tortoises Hatched at Research Institute

Nineteen African spurred tortoises (Geochelone sulcata) were hatched at the Institute for Herpetological Research, Stanford, California, between 10 August and 21 September 1987. From a clutch of 28 eggs laid on 6 April, 22 were incubated at approximately 28oC, while 6 were cracked in the egg-laying process. The institute has hatched 41 African spurred tortoises from five clutches since 1983.

From AAZPZ Newsletter 29(3), March 1988:

Gould's Monitors Hatched at the Dallas Zoo

Two Gould's monitors (Varanus gouldii) hatched at the Dallas Zoo in December 1987. The infant's mother was acquired on 24 May 1982 as a juvenile from the U.S. Fish and Wildlife Service, and the father was acquired on 6 May 1970 as a hatchling. The adults were observed copulating on several occasions during April 1987, and oviposition occurred on 30 April 1987. Two fertile and five infertile eggs were laid. One young emerged on 13 December, and the other on 22 December. This is the third species of varanid reproduced at Dallas Zoo. The New Guinea tree monitor (Varanus prasinus kordensis) and the pygmy mulga monitor (Varanus gilleni) reproduced in 1978.

KHS BRINGS YOU NEWS FROM BEYOND THE WORLD

INVERNESS, FLORIDA: A judge ordered a man to execute his seven poisonous pet snakes after an eastern diamondback rattlesnake he gave a friend for Christmas bit a woman three times as she tried to rescue some mice dropped in the snake's cage for it to eat.

Danny Sullivan, 19, also was ordered to pay $800 toward hospital expenses for Tina King, who reached into the venomous rattler's cage in an attempt to rescue several mice that had been placed in the cage for the snake's meal. The angry rattlesnake bit her three times on the hands.

Although Citrus County Judge Gary Graham said Ms. King was culpable in the incident, he said Sullivan was partly to blame because he gave the snake to Ms. King's boyfriend.

Sullivan later was accompanied home Tuesday by two sheriff's deputies to witness the court-ordered execution of his poisonous snake collection. In addition to killing the eastern diamondback that bit Ms. King, Sullivan was forced to shoot two cobras, four rattlesnakes and a prized $250 Gaboon viper named Slug.

--The Hutchinson News, 8 January 1988
(Submitted by Kathy Friend, Caldwell)

The Kansas Natural Heritage Program: Taking Stock of Kansas' Natural Heritage

By
Bill Busby
Kansas Natural Heritage Program
Kansas Biological Survey
2291 Irving Hill Drive
Lawrence, Kansas 66045-2969

With a mission of documenting the biological diversity of Kansas, the Kansas Natural Heritage Program (KSNHP) was established in 1986 by The Nature Conservancy and the Kansas Biological Survey. This brings to 47 the total number of states that have established such heritage programs in cooperation with The Nature Conservancy, a non-profit conservation organization dedicated to the preservation of ecologically significant areas and the diversity of life they support.

A Natural Heritage Program consists of a team of biologists who collect information about the rarest plant and animal species, the best remaining examples of natural communities, and other special natural features of the state. The exact location and current status of examples of these most endangered or unique elements of biological diversity are obtained, then the information is mapped and stored in a centralized data management system. Information in the data base is continually updated and refined to reflect the most current and accurate information available. Heritage Program data bases use standardized methods in every state. With this national network of heritage programs, a detailed picture of the country's biological heritage is emerging. In recent years, heritage methodology has also been introduced in Canada, Latin America, and the Caribbean to inventory biological diversity.

The Kansas Natural Heritage Program is a cooperative effort between The Nature Conservancy and the Kansas Biological Survey and is based at the University of Kansas in Lawrence. Funds for two-year start-up costs have come from federal, state, and private sources. With the end of the initial two-year period approaching, efforts are underway to transfer the program to the Biological Survey and to secure on-going financial support for the program from the state. The KSNHP currently has a staff of three: Dr. Craig Freeman is the program's Coordinator and Botanist, Dr. William Busby is the Zoologist and Data Manager, and Dr. Chris Lauver is the Community Ecologist.

A natural community classification is being developed to cover the entire state of Kansas. This classification will provide a basis for community inventory efforts. At the present time, Dr. Lauver is concentrating his efforts on the County Natural Areas Inventory. The inventory is a thorough and system-

atic survey designed to identify all remaining natural areas of high quality in a seven-county area in northeastern Kansas. Through use of aerial photographs, aerial reconnaissance, and field surveys, several hundred potential natural areas, including prairies, forests, and wetlands, have already been identified.

The KSNHP is currently gathering data on 658 plant and animal species, including 493 vascular plants and 165 vertebrate and invertebrate animals. Species of interest to the program include listed and candidate species of the U.S. Fish and Wildlife Service, all threatened and endangered species and most species-in-need-of-conservation recognized by the Kansas Department of Wildlife and Parks, and numerous additional species not mentioned by the above agencies but known or believed to be rare in Kansas.

Data gathering on plant and animal species was initiated by first exploring existing sources of information, including the literature, knowledgeable individuals, and scientific collections. Current efforts are focusing on extracting information from two of the state's largest collections, the University of Kansas Museum of Natural History and the University of Kansas Herbarium. Fieldwork is not emphasized during the first few years of program operation, largely because it takes several years to locate, sort, and process the copious information available from existing sources. Once this information is in hand, however, heritage scientists spend more time in the field. Field studies permit old records to be updated and frequently result in the discovery of new plant and animal populations.

Information gathered by Heritage staff on the existence, numbers, condition, and location of remaining biological elements is stored in the program's data management system in computer files, map files, and manual files. The main purpose of the data management system is to maintain up-to-date, readily-accessible information on the elements of biological diversity in Kansas. This information has many applications:

Natural Areas Protection - Data helps identify those sites most needing protection. This information is used by The Nature Conservancy and other agencies and organizations active in land conservation.

Environmental Review Process - Planners can use the data to help evaluate the environmental impacts of routing and siting options on development projects.

Natural Resource Development - Developers use heritage information to direct projects to the least sensitive lands, often preventing costly conflicts.

Research and Education - Scientists and educators can focus their education on key natural areas.

List of KSNHP Inventory Reptiles and Amphibians

Listed below are the reptiles and amphibians currently being inventoried by the KSNHP. These are species for which accurate location and status information is sought. If you know of localities for any of the following species that are not already documented in a museum collection or in the literature and are willing to share this information with the KSNHP, you can assist in the growth of this data base. Assistence from knowledgeable individuals enables the Kansas Natural Heritage Program to develop a complete and accurate assessment of the status of Kansas' rarer species of reptiles and amphibians. Information may be submitted to Bill Busby at the address above or phone (913) 864-3453. Additionally, observations that constitute new county records for Kansas may be reported to Joseph T. Collins at the Museum of Natural History, University of Kansas, Lawrence, KS 66045, (913) 864-4540.

Please include as much of the following information as possible: location (county, legal description of sites with as much accuracy as possible, directions to site), date first and last observed, information regarding the habitat, information regarding the population or individual (numbers, condition), possible threats, land owner, and observer. Please do not collect specimens. Photographs would be useful to help verify identifications.

Dark-sided salamander, Eurycea longicauda melanopleura
Cave salamander, Eurycea lucifuga
Graybelly salamander, Eurycea multiplicata griseogaster
Grotto salamander, Typhlotriton spelaeus
Central newt, Notophthalmus viridescens louisianensis

Western green toad, Bufo debilis insidior
Red-spotted toad, Bufo punctatus
Northern spring peeper, Hyla crucifer crucifer
Strecker's chorus frog, Pseudacris streckeri streckeri
Eastern narrowmouth toad, Gastrophryne carolinensis
Northern crawfish frog, Rana areolata circulosa
Green frog, Rana clamitans melanota
Pickeral frog, Rana palustris

Alligator snapping turtle, Macroclemys temminckii
Map turtle, Graptemys geographica
Mississippi map turtle, Graptemys kohnii

Broadhead skink, Eumeces laticeps

Kansas glossy snake, Arizona elegans elegans
Eastern hognose snake, Heterodon platyrhinos
Texas night snake, Hypsiglena torquata jani
Texas longnose snake, Rhinocheilus lecontei tessellatus
Northern redbelly snake, Storeria occipitomaculata occipitomaculata
Checkered garter snake, Thamnophis marcianus marcianus
Rough earth snake, Virginia striatula

Western earth snake, Virginia valeriae elegans
New Mexico blind snake, Leptotyphlops dulcis dissectus

Winter Sightings

By
Tom Dillenbeck
905 South Pearl Street
Pratt, Kansas 67124

During a frigid Kansas winter, herping should seem absurd. Reptiles and amphibians can be most unpredictable creatures, though, and because of the midwinter forays of a frog and a snake, I now sit at my word processor.

At 3:45 p.m. on 22 December 1987, I found a fresh DOR red-sided garter snake, Thamnophis sirtalis parietalis, on the asphalt at Pratt County Lake. Collins (1982) reports activity in this species from March to November with air temperatures from 55 to 100 degrees F, and during warm periods from December to February. The air temperature at the time I found the snake was 50 degrees F. There was still ice on the lake from freezing temperatures during the previous several days.

On 31 January 1988, Scott Hillard and I were seining small fish from a stream west of Lawrence, when to our surprise, we brought up a cricket frog, Acris crepitans blanchardi. The air temperature at the time was 40 degrees F and there were large amounts of ice on the stream. Clark (1958) found this species active at air temperatures above 42 degrees F from February to November. Burkett (1969) said a few warm days during the winter could cause activity.

Winter activity by reptiles and amphibians might be more common than previously thought, and the keen herpetologist would do well to keep a sharp lookout for the odd snake during winter warm spells.

Literature Cited

Burkett, R.D. 1969. An ecological study of the cricket frog, Acris crepitans, in northeastern Kansas. Doctoral Thesis, Univ. Kansas, 111 pp.

Clarke, R.F. 1958. An ecological study of reptiles and amphibians in Osage County, Kansas. Emporia State Res. Stud., 7(1):1-52.

Collins, J.T. 1982. Amphibians and reptiles in Kansas. Second Edition. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser. 8:1-356.

NEW RECORDS OF AMPHIBIANS AND REPTILES IN KANSAS FOR 1987

By

Joseph T. Collins
Museum of Natural History
The University of Kansas
Lawrence, Kansas 66045

The new county or maximum size records listed below are those accumulated or brought to my attention since the publication of records for 1986 (Collins, 1986). Publication of these new records permits me to give credit and express my appreciation to the many individuals who collected or obtained specimens and donated them to me for deposition in an institutional collection. Further, recipients of this list are permitted an opportunity to update the range maps and size maxima sections in *Amphibians and Reptiles in Kansas* (Collins, 1982). Finally, these new records represent information that greatly increases our knowledge of the distribution and physical proportions of these creatures in Kansas, and thus gives us a better understanding of their biology. This report is my thirteenth in a series that has appeared annually since 1976.

The Kansas specimens listed below represent the first records for the given county based on a preserved, cataloged voucher specimen in an institutional collection, or represent size maxima larger than those listed in Collins (1982). Any information of this nature not backed by a voucher specimen is merely speculation. All new records listed here are presented in the following standardized format: common and scientific name, county, specific locality, date of collection, collector(s), and place of deposition and catalog number. New size maxima are presented with the size limits expressed in both metric and English units. Common names are those now generally accepted and in use across North America, as proposed by Collins *et al.* (1982).

The records listed below are deposited in the herpetological collections of the Museum of Natural History, The University of Kansas, Lawrence (KU) and the Museum of Vertebrate Zoology, The University of California, Berkeley (MVZ). I am most grateful to the members of the Kansas Herpetological Society, and to personnel of the Kansas Wildlife and Parks Commission, who spent many hours in search of some of the specimens reported herein. Support for field work, that led to discovery of some of the specimens listed below, was given via research grants from the Kansas Nongame Wildlife Advisory Council (Chickadee Checkoff Funds). Special thanks are due also to Philip S. Humphrey, Director, and William E. Duellman, curator, of the Museum of Natural History, The University of Kansas, and to David B. Wake, Harry W. Greene, David C. Cannatella, and David A. Good of the Museum of Vertebrate Zoology, The University of California, Berkeley.

NEW COUNTY RECORDS

TIGER SALAMANDER (*Ambystoma tigrinum*)

TREGO CO: 4.8 km W Wakeeny, Sec. 11, T12S, R24E, 4 August 1987, T. Taggart (KU 208083).

PLAINS SPADEFOOT (*Scaphiopus bombifrons*)
HODGEMAN CO: Sec. 15, T21S, R22W, 26 June 1987, L. Good (KU 208086).

AMERICAN TOAD (*Bufo americanus*)
RILEY CO: Manhattan, May 1937, H. I. Fisher (MVZ 36857).

WOODHOUSE'S TOAD (*Bufo woodhousii woodhousii*)
ALLEN CO: within Humboldt city limits, 17 July 1987, T. Taggart (KU 208088). **ATCHISON CO:** Sec. 20, T5S, R21E, 6 June 1987, T. Taggart and K. Comcowich (KU 207229). **BROWN CO:** Sec. 6, T2S, R17E, 17 April 1987, J. T. Collins and S. L. Collins (KU 207226). **HODGEMAN CO:** Sec. 5, T21S, R22W, 25 June 1987, L. Good (KU 208089).

SPOTTED CHORUS FROG (*Pseudacris clarkii*)
HODGEMAN CO: Sec. 15, T21S, R22W, 26 June 1987, L. Good (KU 208095). **NESS CO:** Sec. 29, T20S, R22W, 24 June 1987, L. Good (KU 208096).

WESTERN CHORUS FROG (*Pseudacris triseriata triseriata*)
ATCHISON CO: Sec. 20, T5S, R21E, 6 June 1987, T. Taggart and K. Comcowich (KU 207246). **MITCHELL CO:** 1.6 km S Cawker City near Glen Elder Reservoir, 17 July 1987, S. Hillard (KU 208098). **WASHINGTON CO:** Sec. 23, T2S, R2E, 25 April 1987, J. T. Collins and S. L. Collins (KU 207244).

GRAY TREEFROG (*Hyla chrysoscelis-H. versicolor* complex)
ALLEN CO: 3.2 km E & 0.8 km S Humboldt, 16 April 1987, T. Taggart (KU 207233).

NORTHERN CRAWFISH FROG (*Rana areolata circulosa*)
LINN CO: NE of Trading Post, Sec. 32, T20S, R25E, 29 September 1987, K. Karrow (KU 208262).

PLAINS LEOPARD FROG (*Rana blairi*)
HODGEMAN CO: Sec. 35, T21S, R22W, 23 May 1987, L. Good (KU 208103).

SOUTHERN LEOPARD FROG (*Rana utricularia utricularia*)
ALLEN CO: 5.2 km NW Humboldt, Sec. 13, T25S, R17E, June 1987, T. Taggart (KU 208105).

PLAINS NARROWMOUTH TOAD (*Gastrophryne olivacea*)
FORD CO: Sec. 30, T25S, R23W, 16 May 1987, L. Good (KU 208106). **PRATT CO:** 11.2 km E and 3.2 km S Pratt, 4 July 1987, S. Hillard and T. Taggart (KU 207256).

COMMON SNAPPING TURTLE (*Chelydra serpentina serpentina*)
HARVEY CO: Sec. 1, T24S, R1W, 9 September 1987, J. Shumard (KU 208151).

STINKPOT (*Sternotherus odoratus*)
NEOSHO CO: Thayer City Lake, 3 June 1987, T. Taggart (KU 207064).

THREE-TOED BOX TURTLE (*Terrapene carolina triunguis*)
ALLEN CO: 3.2 km E Moran on U.S. Rt. 54, Sec. 32, T24S, R21E, 19 September 1987, A. Kamb (KU 208133). **RILEY CO:** SE 1/4 , Sec. 4, T8S, R6E, 9 May 1987, H. E. Klaassen.(KU 207136).

ORNATE BOX TURTLE (*Terrapene ornata ornata*)
WYANDOTTE CO: W edge Edwardsville, 0.8 km S Kansas Turnpike on 118th Street, 14 March 1987, S. L. Collins (KU 207047).

MISSISSIPPI MAP TURTLE (*Graptemys kohnii*)
LABETTE CO: Labette Creek, Sec. 21, T34S, R21E, 13 August 1987, M. Capron, K. J. Irwin, and A. Redmond.(KU 208079).

WESTERN PAINTED TURTLE (*Chrysemys picta bellii*)
GREENWOOD CO: no other data, 12 July 1912, R. L. Moodie.(MVZ 43719).

RED-EARED SLIDER (*Chrysemys scripta elegans*)
ATCHISON CO: Atchison State Fishing Lake, 9.6 km NW Atchison, 13 October 1987, R. Wolfe and K. Thompson.(KU 208817) **BUTLER CO:** Sec. 14, T25S, R7E, 13 May 1987, J. Shumard.(KU 208081) **JEFFERSON CO:** Raney Pond, Sec. 34, T9S, R18E, 18 June 1987, J. T. Collins and F. B. Cross (KU 206855).

WESTERN SPINY SOFTSHELL (*Trionyx spiniferus hartwegi*)
RENO CO: Sec. 24, T26S, R6W, 16 June 1987, J. Shumard (KU 208082).

EASTERN COLLARED LIZARD (*Crotaphytus collaris collaris*)
BARTON CO: ca. 18.4 km N Claflin, Sec. 4, T16S, R11W, 9 June 1987, A. Kamb and S. Kamb (KU 207149).

EASTERN FENCE LIZARD (*Sceloporus undulatus*)
PAWNEE CO: Sec. 6, T23S, R17W, 9 May 1987, L. Miller and D. Phipps (KU 207261).

TEXAS HORNED LIZARD (*Phrynosoma cornutum*)
HAMILTON CO: ca. 19.2 km SW Syracuse, Sec. 9, T25S, R42W, 4 June 1987, A. Kamb and S. Kamb (KU 207150).

GREAT PLAINS SKINK (*Eumeces obsoletus*)
KEARNY CO: ca. 17.6 km WSW Lakin, Sec. 11, T25S, R38W, 13 August 1987, A. Kamb (KU 208109). **STANTON CO:** ca. 22.4 km WSW Johnson City, Sec. 10, T29S, R43W, 6 June 1987, A. Kamb and S. Kamb (KU 207153). **STEVENS CO:** along Cimarron River, Sec. 29, T31S, R38W, 5 June 1987, J. T. Collins, S. L. Collins, L. Miller, and S. Kamb (KU 207092).

PRAIRIE-LINED RACERUNNER (*Cnemidophorus sexlineatus viridis*)
ALLEN CO: Sec. 36, T23S, R18E, 18 August 1987, W. Voorhees, Jr. (KU 208110). **WABAUNSEE CO:** Sec. 27, T11S, R13E, 14 July 1987, J. Gubanyi (KU 207327).

WESTERN SLENDER GLASS LIZARD (*Ophisaurus attenuatus attenuatus*)
SHAWNEE CO: Sec. 10, T12S, R14E, Ocrtober 1985, J. Gubanyi (KU 207328). Please note that this voucher replaces the previously published record for this species from Shawnee County (Collins, 1986). That specimen (KU 206487) was actually taken in Jefferson County, Kansas, not Shawnee County.

NEW MEXICO BLIND SNAKE (*Leptotyphlops dulcis dissectus*)
MORTON CO: Cimarron National Grasslands, Sec. 21, T34S, R43W, 31 May 1987, K. J. Irwin and E. Hooper, Jr. (KU 207095).

EASTERN YELLOWBELLY RACER (*Coluber constrictor flaviventris*)
BROWN CO: Sec. 8, T1S, R16E, 18 April 1987, J. T. Collins and S. L. Collins (KU 207282). **NEMAHA CO**: ca. 16 km N Seneca, Sec. 3, T1S, R12E, 25 April 1987, A. Kamb (KU 207159).

GREAT PLAINS RAT SNAKE (*Elaphe guttata emoryi*)
SHAWNEE CO: Sec. 10, T12S, R14E, September 1983, J. Gubanyi (KU 207289).

BLACK RAT SNAKE (*Elaphe obsoleta obsoleta*)
BROWN CO: Sec. 13, T1S, R15E, 18 April 1987, J. T. Collins and S. L. Collins (KU 207293). **ELLSWORTH CO**: S end Kanopolis Lake Dam, Sec. 3, T17S, R6W, 2 August 1987, A. Kamb (KU 208113).

MILK SNAKE (*Lampropeltis triangulum*)
DICKINSON CO: Sec. 20, T14S, R5E, 26 April 1987, L. Miller and D. Phipps (KU 207300). **MCPHERSON CO**: Mound Ridge, 3 May 1942, C. E. Burt (MVZ 45719).

WESTERN RIBBON SNAKE (*Thamnophis proximus proximus*)
ALLEN CO: 6.4 km SW Humboldt, Sec. 23, T26S, R17E, 31 August 1987, T. Taggart (KU 209145).

LINED SNAKE (*Tropidoclonion lineatum*)
ALLEN CO: 4 km W Humboldt, Sec. 1, T26S, R17E, 31 August 1987, T. Taggart (KU 209146). **WASHINGTON CO**: Sec. 10, T3S, R5E, 25 April 1987, J. T. Collins and S. L. Collins (KU 207322).

TEXAS BROWN SNAKE (*Storeria dekayi texana*)
BROWN CO: Sec. 26, T3S, R17E, 18 April 1987, J. T. Collins and S. L. Collins (KU 207309). **JACKSON CO**: Sec. 10, T7S, R16E, 18 April 1987, J. T. Collins and S. L. Collins (KU 207310). **WASHINGTON CO**: Sec. 35, T2S, R2E, 25 April 1987, J. T. Collins and S. L. Collins (KU 207311).

DIAMONDBACK WATER SNAKE (*Nerodia rhombifera rhombifera*)
KINGMAN CO: ca. 9.6 km W Kingman, Sec. 6, T28S, R8W, 27 September 1987, A. Kamb and S. Kamb (KU 208416).

NEW MAXIMUM SIZE RECORDS

PLAINS NARROWMOUTH TOAD (*Gastrophryne olivacea*)
FORD CO: Sec. 30, T25S, R23W, 16 May 1987, Lance Good (KU 208106). Snout-vent length = 39 mm (1 9/16 inches). Female.

WESTERN SLENDER GLASS LIZARD (*Ophisaurus attenuatus attenuatus*)
DOUGLAS CO: Secs. 3 and 4, T12S, R18E, 13 May 1987, Lance Good and John Kitterman.(KU 207280). Snout-vent = 240 mm (9 1/2 inches); total length = 762 mm (30 inches). Male.

NORTHERN WATER SNAKE (*Nerodia sipedon sipedon*)
MIAMI CO: S of Somerset, May 1987, George Jackson (KU 207306). Total length = 1148 mm (45 inches). Female.

LINED SNAKE (*Tropidoclonion lineatum*)
SEDGWICK CO: Sec. 25, T27S, R1E, 15 June 1987, Jack Shumard (KU 208123). Total length = 446 mm (17 1/2 inches). Female.

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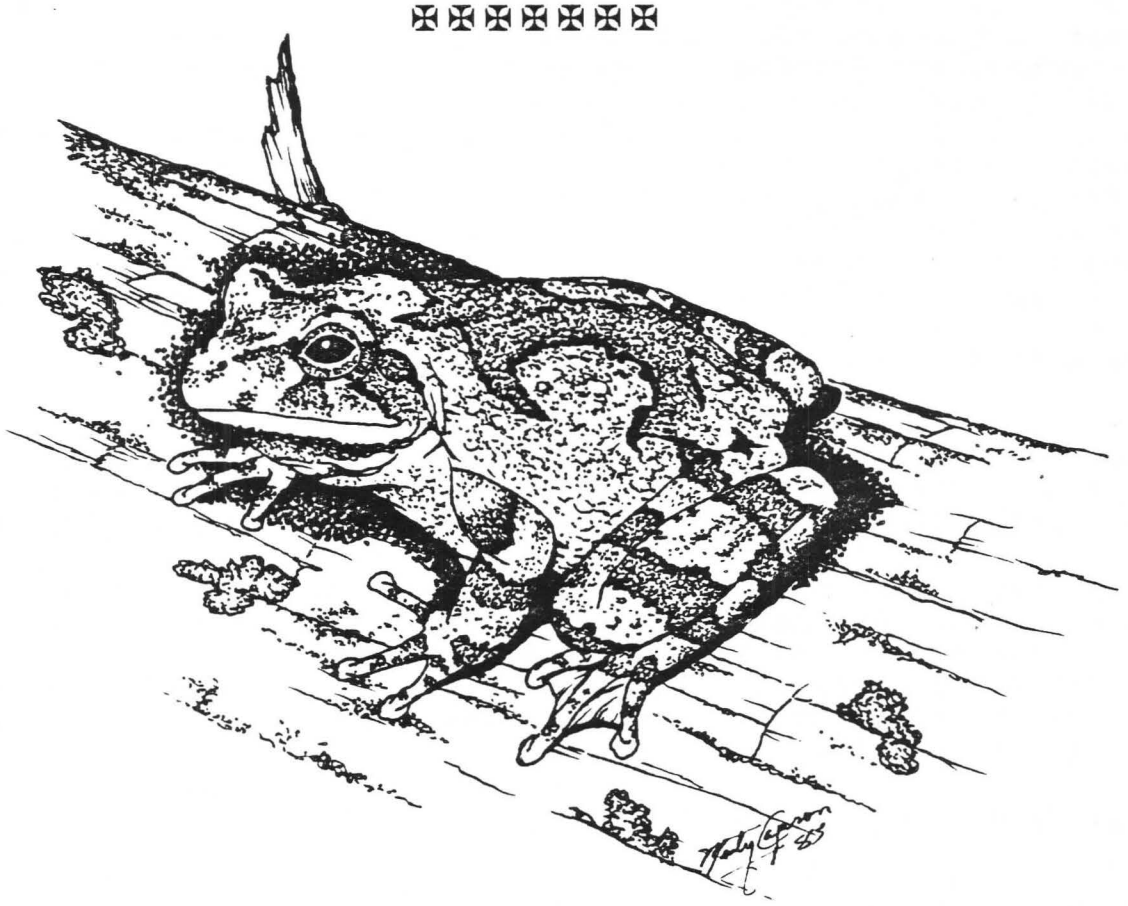

FILM REVIEW

Cane Toads: An Unnatural History, directed and written by Mark Lewis; Film Australia. Running time: 46 minutes.

Pet or pest? This is the question posed by "Cane Toads: An Unnatural History," a short Australian documentary that's an absolute delight. It supplies the answers to every conceivable question the viewer may have about the species in question, and a few extras: What can the toad do for tourism? What sort of person goes out of his way to squash cane toads while driving? Who feeds his favorite toads cat food, or thinks they look nice in baby clothes?

Ugly even by toad standards, the cane toad [Bufo marinus] is revealed to be an amazingly resourceful creature. It was imported to Australia from Hawaii in 1935--to illustrate this, the director, Mark Lewis, shows glimpses of a train trip across Australia, from a toad's-eye view--in hopes that it would destroy a grub that threatened the sugar cane crop. However, the toad's lack of interest in eating grubs was matched only by their eagerness to multiply. There are now millions of cane toads in Queensland, descended from an original group of only 101. And as one of the film's interviewees puts it, "the total conquest of northern Australia is but a hop, skip and jump."

Mr. Lewis can hardly be blamed for having some fun at these creature's expense. He displays a large statue of a toad on a pedestal as one Queensland resident explains why this would be a good tourist attraction, then makes the monument disappear as we learn that the measure was voted down. The bookbinder who sent the Prince and Princess of Wales a volume bound in toadskin for a wedding gift is allowed a chance to show off his wares. Mr. Lewis illustrates the toads' voracious and indiscriminate eating habits by filming one as it hungrily stalks a Ping-Pong ball. He underscores their unusual tenacity by depicting the mating ritual whereby the male attaches himself to the back of a female for a long period of time. "Strange that the male should be so intent as to fail to notice the female's condition," marvels one scientist, since the female lies squashed in the middle of a road and has been dead for hours.

"Cane Toads" is funny, but it's also well balanced; it captures the real danger that the toads pose to their new environment. Their skin secretes a deadly poison (which also doubles as a hallucinogenic drug for some Australians, the film reveals), and as a result they have caused great damage to other species. They have also multiplied at a frightening rate, which is why some of the Australians whom Mr. Lewis interviews have such enterprising ways of killing them. Staunchly on the toad's side, on the other hand, is one sweet-faced elderly woman who says, "If anyone tried to hurt one of my toads, there'd be a lot of noise and they'd realize I wasn't a lady."

--by Janet Maslin, from The New York Times, 21 March 1988