

KANSAS
HERPETOLOGICAL
SOCIETY



NEWSLETTER

Number 4

December 1974

FIRST KHS ANNUAL MEETING WELL ATTENDED

Over 30 persons attended the first annual meeting of the Kansas Herpetological Society held in the education room at the Topeka Zoological Park on 23 November 1974. After a brief morning session to discuss Society business and elect the 1975 KHS officers, the assembled participants were given a tour of the Topeka Zoo reptile exhibits by Mary Dawson. The afternoon session featured talks on amphibians and reptiles by out-going president Eric Rundquist, Ray E. Ashton and Joseph T. Collins. All the talks were supplemented by color slides, and interesting discussions followed each presentation.

NEW KHS OFFICERS FOR 1975

The following individuals were elected to serve as KHS officers for calendar 1975:

President -- George R. Pisani, Department of Biological Sciences, University of Kansas, Lawrence, Kansas 66045 (George served as president-elect in 1974 and automatically becomes KHS president in 1975).

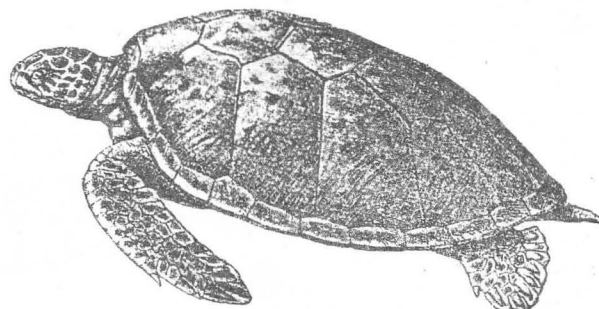
President-elect -- Jan Caldwell, State Biological Survey, 2045 Avenue -A-, Campus West, Lawrence, Kansas 66045.

Past-President -- Eric M. Rundquist, 1005 Ohio Street, Lawrence, Kansas 66044 (Eric served as KHS president in 1974 and automatically becomes KHS past-president for 1975).

Secretary -- Terry D. Schwaner, 1103 Randall Road, Lawrence, Kansas 66044.

Treasurer -- Mary E. Dawson, Topeka Zoological Park, 635 Gage Boulevard, Topeka, Kansas 66606.

The above five officers comprise the 1975 executive council of the Kansas Herpetological Society. The Society congratulates them and wishes them well during the coming year.



NEXT KHS MEETING IN JANUARY

The KHS will hold its first 1975 meeting on 25 January (Saturday) at 1:00 pm in Dyche Auditorium in the Museum of Natural History, University of Kansas, Lawrence, Kansas. Our program will be Dr. Harvey Lillywhite speaking on "The ecology of reptiles in relation to brush modification in the southwest U.S." All members are urged to attend this fine presentation. Refreshments will be served. Mary Dawson will be happy to accept 1975 dues from those not yet paid up.

OUR THANKS TO JAN

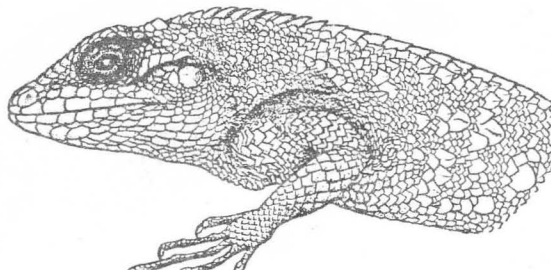
The KHS wishes to extend its sincere thanks and appreciation to Jan Perry for serving as the Society secretary during November and December of this year. Jan served the remainder of Dick Lattis' term of office. As noted in the last Newsletter, Dick accepted a position in New York. Jan willingly assumed his duties, served the KHS well, and will transfer the records and Society business to Terry Schwaner (our newly elected Secretary) on 1 January 1975.

S.O.I.L. -- OF INTEREST TO KHS MEMBERS

S.O.I.L. means Save our invaluable land. It is a newly formed group dedicated to preventing the Army Corps of Engineers from completing construction of the proposed Hillsdale Reservoir in the upper reaches of the Marais des Cygnes River system in eastern Kansas. Quite a few mammals, amphibians, reptiles and fish that are designated as rare or endangered by the Kansas Academy of Science are known to occur in the general area where the proposed reservoir is to be constructed. Dues in SOIL are only \$1.00. Anyone interested in joining or helping SOIL can write to: Ms. Mary Sherwood, R. R. 3, Paola, Kansas 66071.

AN UNUSUAL FROG IN KANSAS

Stan Roth, biology teacher at Lawrence High School and a charter KHS member, recently visited the Kaw Valley Fish Farms just northeast of Lawrence to collect frogs. While searching for the more common species found in our region, he caught a green treefrog (Hyla cinerea), a species that normally occurs only in the warmer climate of the southeastern U.S. Only an enthusiastic herpetologist like Stan could have spotted this bright green little beastie, which blends so well with green vegetation. The nearest



valid records of this species are from the "bootheel" in southeastern Missouri.

The specimen has been donated to the herpetology division of the Museum of Natural History at the University of Kansas where it will be added to the preserved collection. Its discovery here in Douglas County is most certainly due to the fact that fish farms import their stock fish from other areas of the country, and sometimes a few tadpoles come along for the ride. The frog Stan caught would probably have perished during our cold Kansas winter, and it should not be considered a natural part of our herpetofauna. This is another example of "animal pollution" of the Kansas environment.

-- Jan Perry

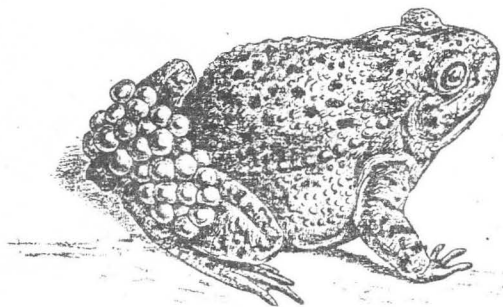
HERPETOLOGY IN THE KU DIVISION OF BIOLOGICAL SCIENCES

The great majority of people who think of herpetology at the University of Kansas think only in terms of the work done at the campus' Museum of Natural History. This is not at all unexpected, as the Museum staff, associates and students have certainly earned a prominent place in herpetology. Never-the-less, much high quality herpetological work at KU is done within other University departments.

Pedro Alberch, an undergraduate from Barcelona, Spain, is working on salamander orientation using the slimy salamander (Plethodon glutinosus) and the spotted salamander (Ambystoma maculatum). Pedro is questioning recent work indicating that salamanders can orient to polarized light by means of light receptors in the pineal gland of the head. He feels the light may be greatly altered by refractive tissues of the head. Pedro is sponsored by Dr. Karl Stockhammer in the department of physiology and cell biology.

Marshall Anderson, a graduate student in comparative anatomy working with Dr. Theodore H. Eaton, is studying primitive features of the skeleton and musculature of the New Zealand frog Leiopelma liochstetteri. He will compare this information with similar data for the tailed frog (Ascaphus truei) of the northwestern U.S. Marshall then plans a comparative review of both more and less specialized families of frogs.

Dr. Henry Fitch (KU Natural History Reservation and department of systematics and ecology) is carrying on several investigations. His 15 year ecological study of ringneck snakes (Diadophis punctatus) in northeast Kansas

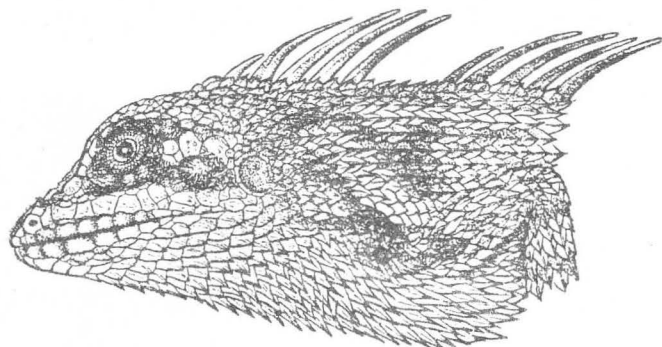


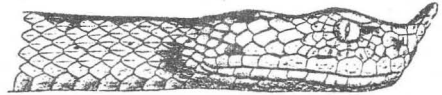
has been completed and the manuscript covering this work has been submitted for publication. Nearing completion is a 12 year study of the glass lizard (Ophisaurus attenuatus) in northeast Kansas. The last 3 seasons included home range work done by geiger-counter tracking of animals tagged with radioactive wire. Fitch's studies on the evolution and ecology of mainland Central American lizards of the genus Anolis continue and two newer projects have been initiated. These latter are a comparative study of seasonal changes in activity and feeding in the five-lined skink (Eumeces fasciatus) and the ground skink (Leiolopisma laterale) (done with Penny vonAchen) and an investigation of responses to food stimuli in new-born (or hatched) snakes and lizards.

Dr. Harvey Lillywhite (department of physiology and cell biology) is conducting a diverse group of experiments on amphibians and reptiles. These include a behavioral study of perching in the western fence lizard (Sceloporus occidentalis), behavioral tests of the abilities of frogs and toads to discriminate gradients of atmospheric humidity, and a study of environmental physiology of the granite rock lizard (Klauberina riversiana). Lillywhite is continuing his investigations of the factors determining evaporative water loss from the skin of frogs and the many ways this affects the animals. He is also interested in comparative investigations of growth rates and energetic efficiencies in amphibians.

George R. Pisani (KU biology department) continues his investigation of geographic variation in morphology of the earth snakes (genus Virginia) and should be able to wrap it up within a year. Pisani and Joseph T. Collins (KU Museum of Natural History) are concluding their study of variation of cranial structure in worm snakes (Carphophis amoenus) from Kentucky and the adaptive value of this variation. Pisani has just had a paper on functional morphology of gartersnake reproductive structures accepted for publication, and is preparing a manuscript on sexual dimorphism in head shape among rough earth snakes (Virginia striatula) and the probable ecological significance of this. A project involving image analysis as a tool for evaluating geographic variation in snake color patterns is just getting off the ground, and a large pile of data on reproductive potential of various colubrid snakes awaits Pisani and Collins' "attack."

-- George R. Pisani





CORRECTIONS -- AND AN APOLOGY

The editors wish to apologize for two errors in the KHS membership list which appeared in the last KHS Newsletter. Nancy Cherry, editor for the Topeka Zoological Park was inadvertently left off the list and Ron Beuchat's name was mistakenly spelled Beuchot. We thank these KHS members for bringing the errors to our attention, and promise to be more diligent in our future proof-reading.
-- JTC & JP

A NOTE OF SADNESS

William Milstead, professor of biology at the University of Missouri at Kansas City and a well-known herpetologist, passed away on Friday, 29 November 1974. Bill Milstead was a broad-based biologist with diverse interests in herpetology, from fossil box turtles to geographic variation in snakes, to lizard ecology. He is best known for his editorship of the widely used "Lizard Ecology: A Symposium," published by the University of Missouri. We will miss him and express here our deepest sympathy to his family and many friends.

WALLY BOLES IN THE "OUTBACK"

Walter Boles, a charter member of the KHS, has left the Great Plains of Kansas and now wanders the Australian "outback." Upon arriving in Australia, Wally did a short stint as a school teacher, but resigned that job and became a reptile keeper at Australia's Taronga Zoo. A lack of experience in handling venomous elapid snakes proved to be a serious obstacle to doing this job properly, so he soon left that job and is wandering at large.

In a letter to Eric Rundquist, Wally describes some of the new and interesting reptiles he has encountered. These observations are presented here in an abbreviated version. Wally reports that of the herpetofauna of New South Wales (a state of Australia), the most common lizard is the blue-tongued skink (Tiliqua scincoides). These critturs are easy to handle and make fascinating docile pets, although they are capable of inflicting a nasty bite. When approached in the wild they open their mouth and make, according to Wally, "rude and suggestive" noises with the manipulation of their blue tongue. Their diet is primarily snails. Other skinks which Wally has observed include the common grass skink (Lampropholis guichenoti), the striped skink (Ctenotus lesueurii), the three-toed skink (Siaphos aqualis), and the water skink (Sphenomorphus quoyii). While traveling about the country, Wally saw other types of lizards such as the common bearded dragon (Amphibolurus barbatus) and a pet called dragon (Chlamydosaurus kingii). The latter put

on a magnificent display. It has a pair of "fangs" in both the upper and lower jaws.

While Wally was relaxing in the bush one day, a pair of monitor lizards (Varanus sp) dashed into the thorny undergrowth. Wally gave active pursuit, but his determination to capture one or both of the beasts weakened rather quickly since he was wearing only shorts and tennis shoes. He estimates they were 3-4 feet in length.

Wally had an interesting experience during his short teaching stint after his arrival in Australia. A student captured and brought to school a 3 foot red-bellied black snake (a venomous species) and requested a demonstration of preserving technique. The snake was not cooperative during the demonstration and made several unsuccessful attempts to escape across the floor. As Wally patiently guided the snake to its demise, the class divided into three cheering sections: 1) those wishing to see the snake "get it" with the needle, 2) those wishing to see the snake escape out the door into the next classroom (and cause chaos amongst their fellow students), and 3) those wishing to see effects of a venomous snake-bite on Wally. Fortunately (for Wally) the snake's new home is in the preserved collection of the school.

The remaining reptiles seen by Wally during his travels consisted of side-neck turtles, and a few sea turtles at Cape York. Reptiles as a study interest seem to be favored by most of the herpetologists that Wally has met in Australia. As for New South Wales amphibians -- he has seen only a few small treefrogs of the genus Litoria.
-- Jan Perry

CURRENT AND INTERESTING LITERATURE

This section is compiled by Mary Dawson from various sources. Anyone aware of books or articles which might be of interest to KHS members should send their titles to Ms. Dawson (see address on front page of this issue).

AAZPA

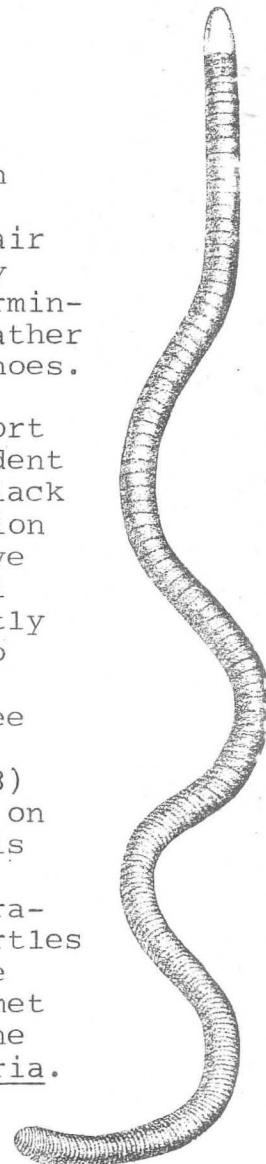
1974. Zoo and aquarium careers. Available for 10¢ from: AAZPA, Oglebay Park, Wheeling, West Virginia 26003.

Kauffeld, Carl.

1969. Snakes: The keeper and the kept. 248 pp. Published by Doubleday & Company, Garden City, New York.

Nace, George et al.

1974. Amphibians: Guidelines for the breeding, care, and management of laboratory animals. 153 pp. Available from: Printing & Publishing Office, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.



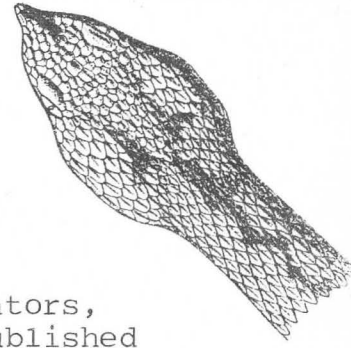
CURRENT AND INTERESTING LITERATURE (CONTINUED)

Neill, Wilfred T.

1971. The last of the ruling reptiles: Alligators, crocodiles, and their kin. 486 pp. Published by Columbia University Press, New York.

Neill, Wilfred T.

1974. Reptiles and amphibians in the service of man. 248 pp. Published by Pegasus Press, Indianapolis, Indiana. (not seen by the editor).



NEW ZOO PUBLICATION

Animal Keepers' Forum is a new monthly newsletter dedicated to publishing information on professional animal care. AKF is the cooperative project of the keeper staffs of the Topeka and St. Paul (Minnesota) Zoos. It is a high quality newsletter which will undoubtedly contain articles on the captive care of amphibians and reptiles in zoos. Anyone wishing to subscribe to AKF should send \$5.00 to: Animal Keepers' Forum, 8415 Bacardi Avenue West, Inver Grove Heights, Minnesota 55075.

KHS TREASURER REPORTS

Although 1974 still has a few days left, Mary Dawson reports that the KHS treasury is in healthy shape and will end the year in the black. The KHS signed up 70 dues paying members during the eight months of its existence in 1974. Already we have many more new members for 1975, so our membership will be larger in 1975. Ms. Dawson will write a detailed KHS treasurer's report for 1974 to be printed in the February issue of the KHS Newsletter.

A NEW HERPETARIUM AT THE SEDGWICK COUNTY ZOO

In late November the construction crews turned over to the Sedgwick County Zoo the new herpetarium. Immediately after the contractors cleared out, the zoo staff went to work creating many amphibian and reptile exhibits. Each exhibit has been carefully planned, since every animal in the herpetarium has a definite reason for being there besides simple display. If all goes well, the zoo hopes to open its herpetarium to the public sometime in early January.

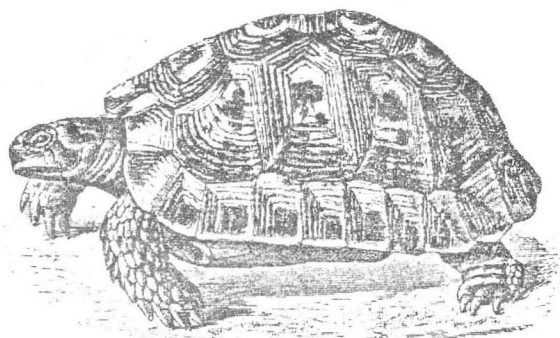
The herpetarium combines traditional concepts with many interesting innovations. The building is buried in a hill to minimize the public's view of the structure. Constructed primarily of poured concrete (reinforced), the exterior in public view is rough-board formed to conform with the other zoo structures. The spacious interior

public areas will be primarily dark, with the exhibits being back-lit or spot-lit whenever possible. The well-planned graphics system will also be back-lit. As in most herpetariums, some of the exhibits will be set into the wall. These exhibits will be of molded fiberglass, completely modular and interchangeable. Unlike the usual herpetarium, the wall panels into which these units fit will also be interchangeable, allowing the exhibit configuration to be changed from time to time. The unusual alibaba tortoise exhibit will have no vertical barriers. Tree boas will be viewed at eye-level, with only a 3½ foot glass restraining wall between the ceiling-hung exhibit and the viewer. A thirty-foot cutaway view of a riverbank full of turtles, snakes and fish will be one of the larger exhibits. The Nocturnal Room will be complete with moonlight and amphibian night sounds, and will feature an alligator exhibit which will allow underwater viewing of a 'gator only inches away. The specially-designed and engineered water system makes it impossible to expose any amphibian or reptile to cold water.

Sky lights, spot lights and Vita-lites will simulate the desert sun for the animals and a variety of plants in the unique walk-through Desert Room. Lizards, snakes and tortoises will be free to roam at large while the public will be confined to a winding path. Observation from behind the security of a glass wall will be available for those visitors who do not wish to rub elbows with a chuckwalla.

These are only a few highlights of the new herpetarium. We at the Sedgwick County Zoo, especially the herp people and KHS members here, would be very happy if the KHS would meet here at the zoo after the herpetarium is open. We have meeting facilities and would be happy to provide any incidental support for the meeting that would be required. At such a meeting, I would expect a substantial turnout of new members, since Wichita is a big town in which the KHS is not well known yet. Needless to say, a major part of the program at this meeting could be a detailed tour of the herpetarium, with special consideration given to our facilities, animals and procedures for maintaining them.

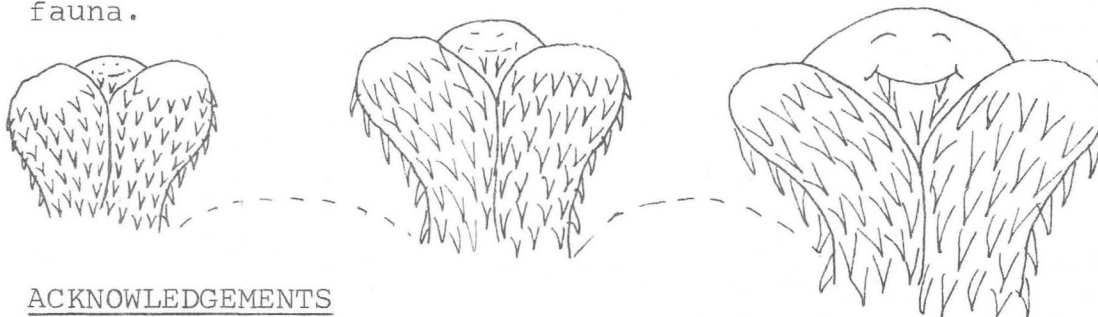
-- David Grow, Keeper, Sedgwick County Zoo



THE KHS TRIPLE -H- AWARD FOR 1974

Recent studies by William S. Parker and William S. Brown (published in Herpetologica 30(3): 234-239) have shown that rattlesnake populations are drastically reduced or become extinct if they have more than minimal contact with man. This is due to the fact that 1) female rattlesnakes mature slower than many other species of snakes, 2) female rattlesnakes may produce a litter of young only every other year, 3) winter aggregation of an entire population at a den site leaves them concentrated and vulnerable to destruction by man, and 4) their conspicuous rattling behavior frequently draws attention to their presence, thus increasing their mortality from man.

On the basis of this evidence, the KHS editors take great pride in creating and awarding the HOPPING HEMIPENIS OF HORROR for 1974 to all those people (?) taking part in the "rattlesnake round-ups" held in Oklahoma, Texas, and other backward states which permit this insane and stupid exploitation of wildlife to continue. Congratulations to all you machos whose ego is satisfied by participating in this destruction of an integral part of our fauna.



ACKNOWLEDGEMENTS

The editors wish to take this opportunity to sincerely thank Charlotte Leviton, Linda Manning, Valerie Murphy, Rebecca Prosser, Shelley Skie, and Robert Sprackland for their assistance in helping us put together these first four issues of the KHS Newsletter. Your help has been deeply appreciated.

-- The KHS Newsletter is issued every other month by the Kansas Herpetological Society. EDITOR: Joseph T. Collins, Museum of Natural History, University of Kansas, Lawrence 66045, and ASSOCIATE EDITOR: Jan Perry, Museum of Natural History, University of Kansas, Lawrence 66045.

