

KANSAS
HERPETOLOGICAL
SOCIETY
NEWSLETTER



Number 19

June 1977

KHS TO OTTAWA COUNTY IN JULY

The July field trip/meeting of the Kansas Herpetological Society will be held on Friday evening (8 July), Saturday (9 July) and Sunday (10 July) at Ottawa County State Lake (sometimes known as Goodwin Lake). The lake is approximately 7 miles east of Minneapolis, Kansas (40 mi WNW of Junction City) in the Smokey Hills physiographic province. Camping facilities are available. Ottawa County has the potential to yield over 25 county records for amphibians and reptiles. Please plan to attend the field trip--bring friends and potential new members.

The KHS Executive Council will meet on Saturday (9 July) at noon.

CLARK COUNTY VISITED BY THE SOCIETY

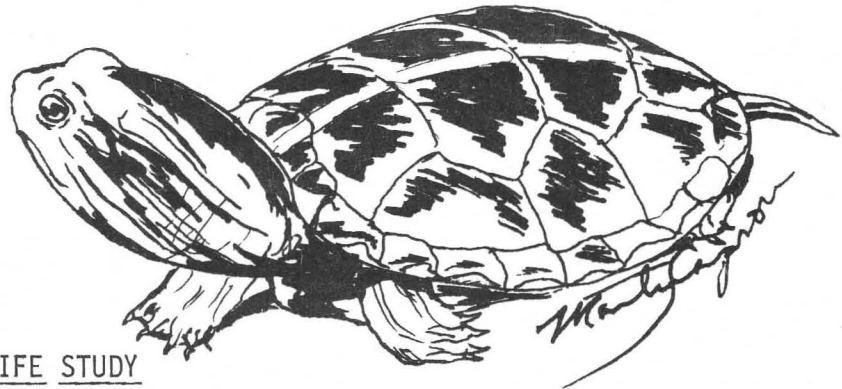
Once again the KHS takes to the field. This year's first outing was centered around Clark County State Lake. The lake is located in western south central Kansas near the northwestern edge of the Red Hills where several species reach their northernmost limit in the United States and occur nowhere else in Kansas. The twenty or so members who made it to the lake were able to collect 17 species and two county records. The two county records, according to Amphibians and Reptiles in Kansas, were the Spotted chorus frog, Pseudacris clarki, which was found in abundance in several ponds near the road from Ashland to the state lake, and the Prairie Skink, Eumeces septentrionalis. Unfortunately no one was able to turn up Bufo speciosus, the Texas toad, which has been recorded in Oklahoma 15 miles from the Kansas border. However, of the small secretive snake fauna of the region was collected. Notably the Texas night snake, Hypsiglena ochrorhyncha texana; Plains black-headed snake, Tantilla n. nigriceps; Great Plains ground snake, Sonora e. episcopa; Prairie ring-neck snake, Diadophis punctatus arnyi; and the New Mexico blind snake, Leptotyphlops dulcis dissecta. Surprisingly, fourteen blind snakes were located and eleven of these, amazingly enough, were found under one rock! One, at first glance, would assume that this was the highlight of the trip. This exciting find was eclipsed only by the continuing drama of Janice Perry's effort to spend an uneventful evening out of doors.

Most of us remember Janice's tent from past field trips. The tent's absence was quickly noticed as we were looking forward to the opportunity to witness yet another duel Upon noticing that

Janice and Marge Perry were driving a station wagon with sleeping bags spread out in the back, we were all concerned about the tent's welfare. Janice muttered something about the obvious advantages of station wagons that could not be found in tents.

Station wagons are wonderfully convenient things as there are no ropes and do not have to be set up, however, they can be locked. When the keys are locked inside the car it renders the vehicle worthless for sleeping in, not to mention driving home. Marge, a close relative of Janice's, locked the keys inside the car, which of course was a modern, pick-proof one. Janice, probably missing the challenge of the tent, volunteered to smash a window. Once again her gallery assembled around her as Janice rose to the challenge. With the chant of her own male cheerleaders resounding in the background, Janice, with a fiery blast, smashed the window. Realizing that the car's owner (Janice's father) may be somewhat reluctant to release it for another field trip, we may once again see the tent in action.

---DAVID GROW



CHIKASKIA RIVER WILDLIFE STUDY

After two months of careful planning by Larry Miller and Gene Trott, assisted by Martin Capron, the river study got under way and was a great success. It was attended by nearly one-hundred people over the four day period in April.

Elementary school students to college professors, some participated others just came to look. But all left a little wiser, with a little more knowledge of nature and the living things around us.

A camp was set up April 7th at the Drury Park in Drury, Kansas as a headquarters by Larry Miller, Jody Trott, Gene Trott and Toby Trott. As the days passed they came into the park a few at a time from three states: Kansas, Oklahoma and Missouri, representing thirteen nature study organizations including: Kansas Herpetological Society, Oklahoma Herpetological Society, Society for the Study of Amphibians and Reptiles, Audubon, Sierra Club and the American Society of Ichthyologists and Herpetologists.

The first day, April 8th, was spent with 5th through 8th grade students from South Haven and Caldwell. Ten students supervised by Larry Miller covered about three miles (5 kilometers) of the river north of Highway 81 on foot, while one student with Gene Trott traveled the same distance by canoe.

Deer, deer tracks, turkey tracks, rabbits, squirrels, ducks, hawks, and other species of mammals, birds, fish, reptiles, amphibians, insects, spiders and other crustaceans all too numerous to mention were observed by these students and their sponsors. A few reptiles were captured and returned to camp for observing, photographing and later released.

A lot is to be said for these kids, for they are both trustworthy and ambitious...credited with most of the finds and observations that first day, they far out-performed the adults. Although outnumbered, the girls held their own with the boys.

With near perfect weather all four days, mid 80's during the day and upper 40's at night, wildlife, plants, scenery and people were photographed, observed, collected or discussed by this hardy group of naturalists.

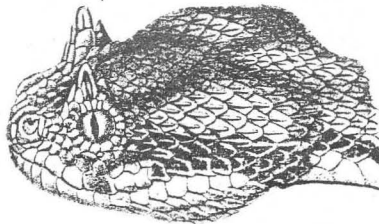
Data and specimens were collected from Drury Park, Oklahoma and from land bordering the river owned by the Marvin Schneider family and the Freeman Dillard family, both of rural Caldwell. These lands were excellent for the observation of wildlife of all kinds relevant to this part of the state. Sand dunes, underbrush, grassland, and an abundance of fresh, clean water made an ideal habitat for many plants and animals. Many of the herp-type critters seen and identified by KHS members included:

Red sided garter snake (Thamnophis sirtalis parietalis)
Black rat snake (Elaphe obsoleta obsoleta)
Prairie ringneck snake (Diadophis punctatus arnyi)
Northern Banded water snake (Nerodia sipedon sipedon)
Eastern yellow-bellied racer (Coluber constrictor flaviventris)
Plains leopard frog (Rana blairi)
Blanchards cricket frog (Acris crepitans blanchardi)
Midland softshell turtle (Trionyx muticus)
Prairie kingsnake (Lampropeltis calligaster calligaster)
Northern prairie lizard (Sceloporus undulatus garmani)
Great Plains toad (Bufo cognatus)

We wish to express our sincere appreciation to Mr. and Ms. Freeman Dillard, Mr. and Ms. Marvin Schneider and to all who helped to make this study the success it was.

Another study is in the planning for 1978 and we believe it will be interesting and educational for the local people and any others who might attend.

---GENE TROTT, RR #2, Box 58, South Haven, Kansas 67140



KAS TOMANEK AWARD FOR BULLFROG PAPER

The first Tomanek Award of \$100.00, to be given annually by the Kansas Academy of Sciences for the best student paper presented at its annual meeting, was presented to W. D. Kuhlmann, a student at Kansas State University, for his talk entitled "Intrapulmonary receptors in the bullfrog: sensitivity to CO₂." The award was made at the 109th annual meeting of the KAS held at Fort Hays Kansas State College from 14-15 April 1977. The KHS congratulates W. D. Kuhlmann for his excellent work, and extends its appreciation to Fort Hays Kansas State College and the KAS for instituting the Tomanek Award.

In addition to the above paper, KHS Past-President Jan Caldwell presented a paper entitled "Tail coloration as a defensive mechanism in cricket frog tadpoles." Other presented papers of interest to KHS members included "Cutaneous blood flow response to heating and cooling of the American Alligator" by S. L. Robertson and E. N. Smith, "Feeding frogs on a non-living food" by K. N. Smalley, and "Observations on natural history of the ornate box turtle (Terrapene o. ornata)" by R. Rose.

ELEMENTARY STUDENTS FIND LARGE TURTLE

A western spiny softshell turtle (Trionyx spiniferus hartwegi) measuring 415 mm in carapace length was collected the evening of 17 May 1977 near Caldwell, Kansas. It was found by two Caldwell Elementary School students from the Chikaskia River north of Caldwell.

Mike L. Schmidt and Ricky Ginn, both fourth grade students, found the large turtle while collecting herps along the river after school. They brought the turtle to school on 18 May 1977 to show their classmates and teachers.

The turtle was measured alive, so the 415 mm measurement may not be exact, but there is little doubt that it is one of the largest specimens of Trionyx spiniferus hartwegi ever collected in Kansas.

---LARRY MILLER, 524 North Osage Street, Caldwell, Kansas 67022



CURRENT LITERATURE

This current literature section has been compiled by Joseph T. Collins, and contains titles of books and articles on amphibians and reptiles of possible interest to KHS members. Generally, titles listed here are those written by KHS members or those which contain direct reference to the herpetofauna of Kansas.

Babcock, J. V.

1977. Endangered plants and animals of Kentucky. Publ. Univ. Kentucky Office Res. Eng. Serv., vii + 128 pp.

Bearse, G. A., et al.

1977. Lower vertebrates: Fishes, amphibia and reptiles on stamps of the world. Amer. Topical Assoc. Handbook, 91: 1-118. Price: \$8.00 (softcover) from ATA, 3306 N. 50th Street, Milwaukee, Wisconsin 53216.

Blaney, R. M.

1977. Systematics of the common kingsnake, Lampropeltis getulus (Linnaeus). Tulane Stud. Zool. Bot., 19(3-4): 47-103. (Blaney reduces by seven the number of subspecies of Lampropeltis getulus).

Caldwell, J. and J. T. Collins.

1977. New records of fishes, amphibians and reptiles in Kansas. in New records of the fauna and flora of Kansas for 1976. Tech. Pub. St. Biol. Surv. Kansas, 4: 63-78. Available free from State Biological Survey of Kansas, 2045 Avenue A, Campus West, Lawrence, Kansas 66044.

Collins, J. T.

1977. Kansas frogs and toads. Kansas Fish and Game, 34(3): 12-16. Available from Kansas Fish & Game Commission, P.O. Box 1028, Pratt, Kansas 67124 for 50 cents.

Collins, J. T. and J. Caldwell.

1977. A bibliography of the amphibians and reptiles of Kansas (1854-1976). Report St. Biol. Surv. Kansas, 12: 1-56. Available free from State Biological Survey of Kansas, 2045 Avenue A, Campus West, Lawrence, Kansas 66044.

Murphy, J.

1976. The natural history of the box turtle. Bull. Chicago Herp. Soc., 11(1-4): 2-45. Reprints available from John Murphy, 806 Bartlett, Plainfield, Illinois 60544.

Rossman, D. A. and W. G. Everle.

1977. Partition of the genus Natrix, with preliminary observations on evolutionary trends in natricine snakes. *Herpetologica*, 33(1): 34-43. (the genus Natrix is changed to Nerodia for all U.S. species--based on good evidence).

Sprackland, R. G., Jr.

1977. All about lizards. TFH Publications, Inc. 128pp. Available at your local bookstore. (Congratulations to KHS member Bob Sprackland).

A CAPTIVE REPRODUCTION OF CHONDROPYTHON AT THE SCZ

The Green Tree Python, Chondropython viridis, occurs throughout New Guinea, northwest Australia, and a few nearby islands from sea level to around 2,000 meters. The coloration is basically a vivid green, although on occasion the ground color is a beautiful sky-blue. Our male, which is just over three feet long, has a sky-blue line down the middle of his back while his ventral surface is brilliant yellow. The female, which is just over four feet long, has blue flecking which is evident on her sides as well as an occasional white scale. The coloration of the young is no less than spectacular and will be described later.

In our experience, Chondropython is a relatively hardy animal in captivity. Our specimens, which have been in our Sedgwick County Zoo collection for over two years, rarely refuse their mouse diet. Our female is an aggressive feeder while our male is somewhat finicky. Internal parasites occasionally crop up but are treated and have never posed a serious health problem. This species is on exhibit in a one-piece fiberglass unit 22 inches square by 36 inches high, with a plastic-coated screen top. Illumination is provided by a double 40-watt VitaLite flourescent fixture. Living plants are used in the exhibit but do not provide a hiding place for the snakes, nor do they attempt to hide in them.

In May and June of 1976, we began drenching the pythons and their exhibit with water in the evening before we left for home. We would then place a piece of plastic over the top of the exhibit after the "rain" to maintain the high humidity during the night. This procedure created a night relative humidity of nearly 100% and a daytime relative humidity, with the plastic removed of about 70%. The daytime temperature was 83-86° F, while after the evening "showers" the exhibit cooled to 77-80° F.

In late May, the female began turning opaque preparatory to shedding, at which time she was removed but maintained under similar conditions. Interestingly, the eyes of these animals do not cloud during a shed but remain clear. In early June, she shed and was reintroduced, at which time the male immediately uncoiled and intently followed the movements of the female about the exhibit, flicking her sides with his tongue. Respiration in both animals was rapid. This activity lasted for several minutes and then the male coiled with the female. It was the first time either animal was observed to coil with the other. We were somewhat disappointed when the activity ceased, but we really didn't have our hopes too high.

We were quite pleased when, on 15 August 1976, we discovered 26 eggs strewn about the floor of the exhibit. In the wild, the female lays her eggs on the forest floor, coils about her clutch and incubates them by rhythmic muscular contractions very much like shivering. Through this muscular activity, an incubating female can raise her body temperature several degrees above the environmental temperature, and thus provide her eggs with additional heat. Our female ignored the eggs once they were laid; however, she could be observed "shivering" for about two weeks. Upon their discovery, the eggs were removed and placed in a ten-gallon aquarium with moist vermiculite as a substrate. The aquarium was covered and placed in our incubator where the temperature was maintained in the high 80's. The aquarium soon proved unsatisfactory as many of the eggs spoiled. Each spoiled egg was examined and all but two were found to be fertile. The remaining eggs were removed to several one-gallon jars containing vermiculite and varying amounts of moisture. The eggs in the dryer environments hatched, whereas the ones in the jars with more moisture continued to spoil.

On the 50th day after laying, the first juvenile Chondropython viridis hatched. In three days, all but one of the remaining eggs hatched. Their coloration is very different from the adults. Four were velvety brick red with white markings outlined in black. The eyes were orange and the red tongue was tipped with white. One of the five hatchlings was a spectacular lemon yellow with vivid red markings. One hatchling subsequently died; however the remaining four appear very healthy and are growing.

To our knowledge, this is the first time Chondropython viridis has been bred and hatched in captivity. We realize that this report is a bit general, but we intend to publish a more detailed paper shortly. We are also interested in exchange of information on Chondropython. Interested parties should write: David Grow, Supervisory Keeper, Sedgwick County Zoo, 5555 Zoo Boulevard, Wichita, Kansas 67212.

---DAVID GROW



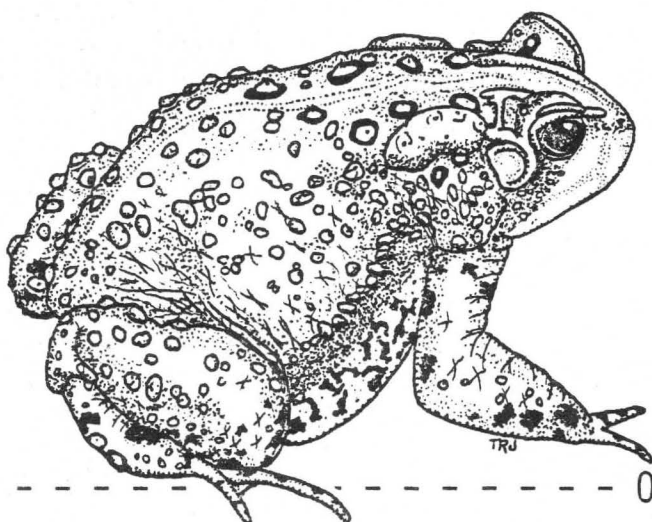
---The Kansas Herpetological Society Newsletter is issued every other month by the Kansas Herpetological Society. All interested individuals are invited to become members. Membership dues per calendar year are \$3.00 (Regular) or \$15.00 (Contributing) payable to: Marjorie Perry, Secretary-Treasurer, 812 Murrow Court, Lawrence, Kansas 66044. All manuscripts, notes and drawings should be sent to the Editor. EDITOR: Janice Perry, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045. ASSOCIATE EDITOR: David Grow, Sedgwick County Zoo, 5555 Zoo Boulevard, Wichita, Kansas 67212.

No. 6 AMPHIBIANS OF MISSOURI

BY TOM R. JOHNSON

Number 6 is fifth in this series of illustrated, readable guides to the vertebrate animals of Kansas and neighboring states. This book contains accounts of the 41 kinds of amphibians in Missouri with descriptions of habitats and habits, keys, food preferences, reproductive modes, plus maps, photographs, and illustrations. Also included is a comprehensive list of other publications on Missouri amphibians.

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