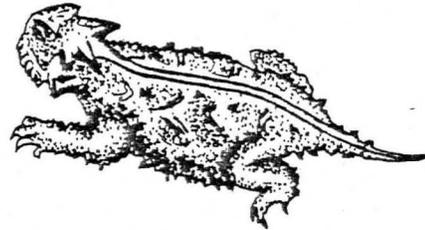




KANSAS  
HERPETOLOGICAL  
SOCIETY  
NEWSLETTER



NUMBER 26

AUGUST 1978

---

KHS TO MIAMI COUNTY IN SEPTEMBER

The final Kansas Herpetological Society field trip of 1978 will be held 8-10 September 1978 (Friday, Saturday and Sunday). The site chosen is the beautiful, secluded Miami County State Lake in southern Miami County (see the Miami County map at the end of this Newsletter). This lake is very difficult to find--signs will be posted along the route from Osawatomie marked on the county map. Briefly explained, you should travel east out of Osawatomie on the main highway. At Block Corner (which is marked as such on the highway) you should turn south. Travel one mile in the southern direction and then turn east for 1½ miles. Turn south again for another 5 miles. Next, go west for approximately 1 mile and you should have reached the county lake. It is approximately 15 miles from the outskirts of Osawatomie to the point you must make you westward turn towards the lake.

The hunting season for teal is open during the time we will be camping at the lake, so we may have to be aware of the hunters that will surely be there. At the present time, the lake is also closed to fishing. It will open for fishing 30 September 1978. The facilities available are questionable, so be prepared for the worst.

We have a chance for many interesting finds in Miami County, so let's see a big turn out of KHS Members. The KHS Executive Council will meet at noon on Saturday. Hope to see you all there--bring friends!

KHS OFFICER NOMINATIONS FOR 1979

The Kansas Herpetological Society nominating committee, composed of Kelly Irwin, James Knight, Eric Rundquist and Andrea Stammler, have selected the following nominees for 1979 KHS office:

For PRESIDENT-ELECT:

Peter Gray (Wichita)  
Shelley Skie (Lawrence)

For SECRETARY-TREASURER:

Marjorie Perry (Lawrence)

---

Kelly Irwin (Topeka) has served as President-Elect for 1978, and automatically assumes the office of KHS President for 1979. Larry Miller (Caldwell) our current KHS President will continue to serve on the KHS Executive Council for 1979 as Past-President. The KHS Newsletter Editor, Janice Perry (Lawrence), may be appointed for the coming year by the 1979 KHS Executive Council. All KHS members are urged to attend the Fifth Annual Meeting of the Kansas Herpetological Society at Caldwell, Kansas on 18 November 1978 to vote their preference.

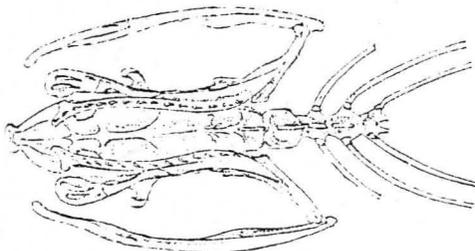
#### KHS HOLBROOK CONTEST ENDS WITH OCTOBER NEWSLETTER

The KHS has received a gratis copy of the SSAR (Society for the Study of Amphibians and Reptiles) Holbrook facsimile reprint in recognition of its financial support to the SSAR in reprinting this most important work on North American amphibians and reptiles.

Since the Society does not maintain a library, the KHS Executive Council decided at the Ottawa County meeting on 9 July 1977 to initiate a contest to award the Holbrook facsimile to the winning KHS member. The contest rules are:

- 1) All participants must be KHS members.
- 2) No elected KHS officers for 1977 or 1978 may participate.
- 3) No member of the judging committee may participate.
- 4) A winner will be selected from among those KHS members publishing the most original paper on Kansas amphibians and/or reptiles appearing in the KHS Newsletter. The contest is restricted to articles appearing in KHS Newsletters No. 22 (December 1977) through No. 27 (October 1978).
- 5) The Holbrook facsimile will be awarded to the winner at the Fifth Annual KHS meeting 18 November 1978 at Caldwell, Kansas.
- 6) A second place prize of selected Holbrook color plates will be awarded to the second place entrant.
- 7) A third place entrant will receive a free KHS membership for calendar year 1979.

The KHS Executive Council has appointed Joseph Collins, Larry Miller and Janice Perry to serve as the judging committee for this contest.



---

KHS TAKES TO THE FIELD IN JULY AT WINFIELD

On Friday, 14 July 1978, we arrived at Tunnel Mill Park in Winfield, Kansas bearing an exotic Terrapene o. ornata (Ornate box turtle)! Now you know what the trip was like! Larry Miller and Rob Wencel were already in residence at the park located one mile southwest of the thriving Winfield metropolis. The park consisted of a loop of road encircling a field with primitive relief stations (double seaters) and bounded on three sides by the "beautiful Walnut River".

After a tent pitching session, it was decided to take to the water. The dead fish should have tipped us off, but we went ahead and braved the scum. Later, Monty Hendricks, Stephen Sandus, Brenda Lewis, Kelly Irwin and Marty Capron arrived. A reporter from the Arkansas City Traveler soon followed to give us some publicity, but unfortunately two of our eager publicity hounds had departed for free beer.

When Marty and Kelly returned, a party set out in search of copperheads on a hillside across the river to the south. Rotten luck and worse weather forced the herpers to console themselves at a nearby Winfield Taco Tico.

Returning to camp after the rain, the group awaited the latecomers. Larry Andrews showed up in his camper and soon thereafter Janice Perry and party arrived (Greg Goff, Andrea Stammler, Chris Stammler and John Tollefson). After Janice consumed her promised bottle of Lowenbrau, the KHS'ers gathered to watch the infamous Perry vs. Tent. The rest of the evening was reserved for socializing.

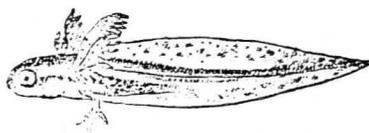
Saturday morning most of the crew left to go herp-hunting. Our luck remaining the same only a Diadophis punctatus arnyi (Prairie Ringneck snake) was collected. Several Crotaphytus c. collaris (Eastern Collared lizard) were observed. When members returned to camp, the KHS Executive Council meeting was held, which was when we (Martha and Shelley) were conned into writing this article--let it be a warning don't go to KHS Executive Council Meetings! After the Executive meeting, the Trotts arrived swelling our troupes to twenty.

The mid-afternoon heat drove the herps under cover and once again the herpetologists into the water (except for the smart ones). Some stalwart types played Tarzan while others were content with rafting. Soon it became time for Marty's Story Hour. While lounging on the cars, we were told of the menstruational habits of primitive tribes and their place in the KHS. The remainder of the afternoon was spent playing frisbee or taking photos.

After a minor Bolshevik uprising on Saturday evening, most of the group headed for Cowley County State Lake. The only snakes seen were quite dead. Later, part of the group visited an old mining shaft. No herps were seen there either.

Sunday morning KHS members packed and left. The complete collection count was: six Nerodia s. sipedon (Northern watersnake), one Diadophis punctatus arnyi (Prairie ringneck snake), one Ophisaurus a. attenuatus (Western slender glass lizard), one Eumeces obsoletus (Great Plains skink), several Crotaphytus c. collaris (Eastern collared lizard), one Pseudacris t. triseriata (Western chorus frog), one Rana pipiens (Leopard Frog) and one Bufo americanus (American toad).

---SHELLEY SKIE, 1201 West Campus Road, Lawrence, KS 66044 and  
MARTHA BICKFORD, 2420 Orchard Lane, Lawrence, KS 66044



#### NOTES ON THE POSSIBLE OCCURANCE OF BROAD-BANDED COPPERHEADS IN KANSAS

It has long been suggested (Conant, 1975; Smith, 1956) that the Broad-banded copperhead, Agkistrodon c. laticinctus, occurs in extreme southern Kansas. Copperheads are well known in Cowley County and at least one snake bite has occurred within the last two years. In some areas they may be the most abundant serpent!

Cowley county lies in south-central Kansas on the Oklahoma border in the physiographic province of the Flint Hills. A large part of this county is made up of prairie habitat. The county is drained by the Walnut River, a tributary of the Arkansas River system and the two rivers meet in Cowley county just south of Arkansas City. The Walnut river valley is characterized by steep rocky bluffs in a primarily oak forest. Even in the very extreme southern part of the county, well away from the river, the habitat still consists greatly of oak covered, rocky hillsides. It is along these river valleys and in these rocky, oak forest hillsides that the copperheads reach their peak abundance. The snake is frequently encountered by fishermen along the Walnut River and other streams of the area, particularly at night. Frequently it is found on gravel shoals and rocky banks no more than a few feet from the water itself.

In the fall of 1975, Steve Starlin and I found these snakes high on the "rim-rocks" (limestone out crops that ring the tops of the Flint Hill river bluffs). Vegetation in the form of actual trees is scarce, but there is considerable secondary growth. The snakes in this area were found sunning near deep holes and ledges in the rim-rock. The only instances in which we found them this high up in the hills was in autumn and spring. Two of the snakes encountered in September 1975 were only thirty yards apart, yet they showed marked differences of pattern. One specimen showed cross-bands that were much narrower on

the back than on the sides, while the other had bands that were more uniform in width on both the back and sides. In both, the crossbands were a light grey-tan on a ground color or soft brown. I noted their color for the fact that as my interest in Cowley county copperheads grew, I began to notice some variations not only in their patterns but in their color as well.

I examined preserved specimens in the Biology Department of Southwestern College in Winfield, Kansas and talked to Dr. Robert Wimmer. He told me that in some areas of Cowley county copperheads were the most abundant snake species, except perhaps for small species such as Tantilla, etc. I was determined to find out more about the copperheads' status after a boy was bitten by a copperhead at the Camp Horizon church camp east of Arkansas City. This was in 1976 and happened as the boy attempted to catch the snake. He recovered, as did the victim of another snake bite in Cowley county, back in the early 1960's. The earlier bite happened near the Sumner county line in western Cowley county, in a quite different habitat from the first bite. Amidst wheat fields, ten miles from the nearest rocky hillsides, the victim was bitten as she walked to the mail box of her rural home. The snake was not identified, but she did develop classical symptoms of the copperhead bite and suffered for some months afterwards.

In the summer of 1977, I did most of my field work concerning copperheads. On one hillside bluff over-looking the Walnut River, I caught five copperheads. This was in July between 7:30 PM and 10:00 PM. The snakes were found crawling about with the aid of a head-lamp. All were taken within an area of two acres that was heavily traversed by fishermen. In my company was William B. Love of Jensen Beach, Florida. The snakes we caught that night were deposited in the collection at Max Allen's Reptile Gardens in Eldon, Missouri. Three days later, Mr. Love and I, once again visited the same area. I found a large specimen practically under my feet. It was a female, one that William wanted to breed with his Texas Broad-banded copperhead. This snake was indeed very different from the five we'd caught three days earlier and also from the two Starlin and I found in 1975. It was a rich reddish brown in color, the cross-bands were nearly the same width all the way around and were light tan in color. The other five collected at the locality were soft brown with light grey cross-bands and sported a variety of band patterns, no two looking very much alike. However, none were as typically "broad-banded" as the female Mr. Love took. He and I then drove five miles south of Winfield where we found one more specimen, but it was like the first five, brown and grey with an unusual but not exceptional pattern.

In August, Brad Anderson and I, went to these two locations again. At the first location I turned a large rock. A large, beautiful copperhead was found. It too, was reddish with tan cross-bands. The bands were broad also, but not nearly so as the one Love and I had caught there a month earlier. Brad and I hunted the second locality in September and also the Camp Horizon church camp east of Arkansas City. Here I

found three specimens under two different rocks. These were typical of the ones we usually found. However, the one we found at Camp Horizon beneath a sheet of tin showed a more reddish color and broader bands but it was not like the few exceptional specimens we'd found earlier. That brings me to where I am today, still wondering about Cowley County copperheads!

In conclusion, while only three or four specimens I have examined from this area of Kansas could be called "broad-banded" copperheads, none of the others are similar to true Osage copperheads, Agkistrodon contortrix phaeogaster, that are to be found in eastern Kansas or central Missouri. The copperheads here in Cowley county appear to represent intergrades between broad-banded copperheads, just as Collins (1974) has suggested. But from my findings, copperheads do in fact occur here more often than do osage copperheads. Perhaps, the osage copperheads are slowly intergrading with the original populations of broad-banded copperheads, thus creating these strange looking specimens and leaving a few real broad-bands as they progress more and more toward real osages. What this all probably amounts to is a mass confusion similar to that of the Rana pipiens complex! Broad-banded copperheads do occur in Kansas in an area of intergration with the osage sub-species...with a ratio of perhaps one in every five being identifiable as a real broad-banded copperhead.

#### Literature Cited

- Collins, J. T. 1974. Amphibians and reptiles in Kansas. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser., 1:1-283.
- Conant, R. 1975. A field guide to reptiles and amphibians of eastern and central North America. Houghton Mifflin Co. Boston, xviii-429.
- Smith, H. M. 1956. Handbook of amphibians and reptiles in Kansas. Scd. ed. Ibid., 9:1-356.

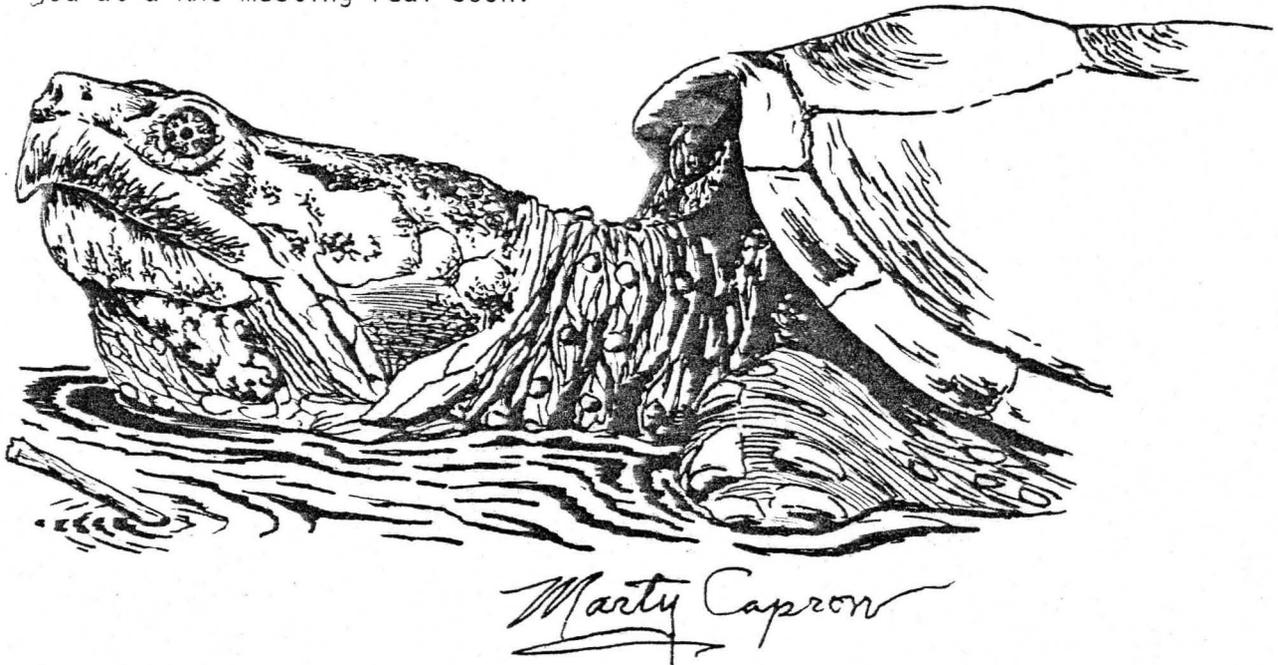
---MARTIN B. CAPRON, Box 542, Oxford, Kansas 67119

#### KHS CORRECTION

In the article entitled "KHS Field Trip to Grant County, Kansas, 12-14 May 1978" appearing in KHS Newsletter Number 25 (June 1978), it was inaccurately stated that Kelly Irwin and Jody Trott caught a prairie-lined racerunner, an eastern yellowbelly racer, and two large bullsnakes. It was really Toby Trott and Kelly Irwin who caught these animals. The editor gives her sincerest apologies to Toby.

KHS MEMBER IS HOSPITALIZED

George Toland, KHS Member from Salina has become ill and is presently hospitalized. George taught Biology classes at Salina High School and has just recently retired. Many of us remember the very enjoyable slide presentation he gave the KHS under the unassuming title of "Collectservation of the Vicious Little Bells" at the March 1977 KHS meeting in Salina. KHS members may also remember the weekend downpour at Moline City Lake, when most dedicated KHS'ers were playing cards under a shelter house. George walked around the lake and brought back critter bags full of Crotaphytus c. collaris (Eastern collared lizards)---much to the surprise and delight of the card sharks. Persons who desire to send George their wishes for a speedy recovery may send letters, cards, etc. to: George Toland, 249 Asberry St., Salina, Kansas 67401. On behalf of the KHS, George, we wish you a speedy recovery and hope to see you at a KHS meeting real soon!

CURRENT LITERATURE

This current literature section has been compiled by J. 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, those which contain direct reference to Kansas herpetofauna, or those of significance regarding North American amphibians and reptiles.

- Collins, J. T. and J. Caldwell.  
1978. New records of fishes, amphibians and reptiles in Kansas for 1977. St. Biol. Surv. Kansas Tech. Publ., 6: 70-88. Available free from: State Biological Survey of Kansas, 2045 Avenue A, Campus West, Lawrence, Kansas 66044.
- Frank, W.  
1978. Schlangen im Terrarium. (text in German). 64 pages + many color photographs. Available for DM 8.80 from: Franckh-Kosmos, Stuttgart, Germany.
- Johnson, T. R.  
1978. Missouri's Mountain Boomer. Missouri Conservationist, 39(6): 6-7.
- Johnson, T. R.  
1978. Listen to the wee ones. Missouri Life, 6(3): 58-61. Available for \$3.20 postpaid from: Missouri Life, 1209 Elmerine Avenue, Jefferson City, Missouri 65101.
- Lynch, J. D.  
1978. The distribution of leopard frogs (Rana blairi and Rana pipiens) (Amphibia, Anura, Ranidae) in Nebraska. Journ. Herp., 12(2): 157-162.
- Miller, L.  
1978. Our cold-blooded friends. Kansas (Magazine), 2nd issue, pp. 17-18. This article was written by our KHS President and tells about the KHS.
- Murphy, J. B. and B. L. Armstrong.  
1978. Maintenance of rattlesnakes in captivity. Univ. Kansas Mus. Nat. Hist. Special Publ. No. 3: in press. Available for: \$3.50 postpaid + 3.5% sales tax (Kansas residents only) from: Publications Secretary, Museum of Natural History, University of Kansas, Lawrence, KS 66045
- Swain, T. A. and H. M. Smith.  
1978. Communal nesting in Coluber constrictor in Colorado (Reptilia: Serpentes). Herpetologica, 34(2): 175-177.
- Wiley, E. O.  
1978. The evolutionary species concept reconsidered. Syst. Zool., 27(1): 17-26.



---

FOUR COUNTY COLLECTING RAID--A SOUTH CENTRAL KANSAS HERPING SAGA

Friday, 31 March 1978, dawned earlier than usual for me. I wanted to get in a good day of herping. I managed to rendezvous with Larry Miller, in Caldwell by 9:00 AM, despite my lethargic tendencies. We scarfed down a hearty breakfast---I drank two bottles of Dr. Pepper instead of the usual one! I figured I'd need the extra liquid since we were heading west, into the vast expanses of Barber County.

We had the intention to collect the first authentic specimen(s) of the mighty Crotalus atrox (Western diamondback rattlesnake), ever taken in Kansas! Previous scouting trips had confirmed that suitable habitat existed in Barber county for this animal. The western diamondback rattlers are quite common in the gypsum hills just across the state line in Woods county, Oklahoma. We saw no reason why they wouldn't be in those very same hills on the Kansas side of the line. It was a dubious thought that this same weekend, a few short miles to the south of us at Waynoka, Oklahoma, the annual rattlesnake round-up was beginning.

By 10:30 AM the radio station in Wichita claimed it was 68<sup>0</sup>F, but I knew where we were it was much warmer. But, where were we? A very good question! Taking country roads can get you into some neat places but it can also get you lost! After a short time, Larry recognized some land marks as being a place where he had been lost once before. Continuing on, we finally sighted the grain elevator of Kiowa looming up in the distance. It was at Kiowa we sighted our first herp, a DOR Heterodon nasicus (Western hognose snake).

The next (and last) town down the road was Hardtner. A short distance west of town the pavement ended at the foot of a "road closed" sign. Ignoring it, we went on and soon came upon a sign informing us that the bridge was out. Bridge? Here? There wasn't enough water to fill a fish bowl. But soon we came to a rickety old bridge over about six inches of water. We crossed it and found ourselves in the rugged red hills of Kansas. The eroded landscape was totally unlike anything you'd expect to find in Kansas. White capped rocks of gypsum rimmed the steep hills, with some pieces of the rocks making the whole gypsum hill slopes glitter in the sun.

It was hot and the strong wind failed to cool us. A vulture was seen soaring effortlessly in the cloudless sky. The road crossed numerous cattle guards, threaded through pastures of huge bulls, and approached many deep, rugged canyons. It took us half an hour to find signs of human life to ask permission to hunt for herps, and then another half an hour to find the head-quarters of the Z-bar Ranch to look up the "boss" for final permission. The boss informed us that his ranch covered 50,000 acres, give or take a few hundred (he wasn't sure how many)! It was all ours to hunt on; for both prairie and "coon-tail" rattlers, were there and well known by the locals. It was good to learn that they knew their snakes well enough to assure us that

"coon-tails" (western diamondback rattlesnakes as they are often called) were infact there.

In the long, hot hours that ensued, Larry and I covered many miles on foot and by truck, searching a great many perfect places, but to no avail. I'm sure our coon-tails were there, we just didn't hit it right. Of course, we latter learned that where we were searching the temperature reached 90<sup>0</sup>F, not the usual 75<sup>0</sup>F, that brings the animals out for basking in the sun. The only reptilian finds here were: three Sonora episcopa (Ground snake), and two Diadophis punctatus arnyi (Prairie ringneck snake). A few Pseudacris t. triseriata (Western chorus frog) called from a rare water-filled pond.

The rewards of a day afield in this beautiful country reached far beyond mere herps. We felt outdone when we spotted a pair of prairie falcons carrying off a snake that appeared to be some sort of garter snake, probably a checkered garter snake! Larry snapped a few shots of them as they flew away, echoing shrill cries of triumph. Feeling lucky for seeing these rare birds we also felt disgusted as they flew off with the only large snake we'd seen in all of our waling.

Next, we inspected a large prairie dog town, finding many dogs, along with a couple of burrowing owls, but no prairie rattlesnakes (Crotalus v. viridis) that are well known for their abundance in such places. We'd walked miles, turned countless rocks, and gained severe sun-burns, but no large (or even small) herps rewarded us, just the ground snakes and ringneck snakes previously mentioned.

We began the seventy-five mile return trip home after stopping for liquid refreshment in Hardtner. The sun was setting and we were expecting something from road-cruising, even if it was late March. Nothing showed up at first, but then we saw something--not a herp but a mammal! A kangaroo rat bounced across the road. These neat little creatures were all over! Finally we elected to try and catch the next one we saw. Not really expecting to catch the animal, we just needed something to break the boredom. We spotted three in the road ahead and Larry slid to a stop. I grabbed my Australian bush hat and jumped out. The rodents scattered and one headed straight down the road with me in hot pursuit. It was like trying to catch a super-charged ping-pong ball, but I finally caught up with it. Using my bush hat as a catcher's mit, I grabbed the mammal. He escaped three times while Larry and I tried to get him in a jar amid a couple of other bouncing rats. We had then discovered a new sport, catching kangaroo rats!

Herps began showing up as we continued towards Caldwell. Numerous Scaphiopus bombifrons (Plains spadefoot toad) along with a lone Rana pipiens something-or-other (Leopard frog). Then, just as we were about to leave Harper county, a snake showed up in the truck lights--too late for us to dodge him. We backed up with sunked hearts to find a Lampropeltis getulus holbrooki (Speckled kingsnake) coiled on the center line. The only mark on his body was a scratch on the top of its head.

Thinking the snake was quite dead we sorrowfully bagged it to be preserved later. We were more careful thereafter, but no more specimens presented themselves. The kingsnake appeared in good shape upon our arrival at Larry's house. It was held for observation, as was the kangaroo rat, the spadefoot toads and the small snakes. We then washed off our dust and sweat in the tub, washed down the dust in our throats, and inspected the blisters on our feet before hitting the sack..exhausted.

Duantlessly, we arose the next morning, 1 April 1978, and headed east into the flint hills. I knew good herps were assured here. A DOR Lampropeltis c. calligaster (Prairie kingsnake) showed us the herps were out. The temperature was slightly cooler on this morning that it had been the day before. It was April Fool's Day, but the herps didn't fool us this time. Crossing a bridge over the Walnut River we found a DOR Eumeces o. obsoletus (Black ratsnake), a Cowley county record. Soon after that a DOR Thamnophis sirtalis parietalis (Red-sided garter snake) was found. Larry found another red-sided garter snake on a hillside above the road, but it skillfully evaded our capture.

We drove on down the road to a road cut that had yielded many species in previous years. A young Masticophis flagellum (Coachwhip) was captured. Within a few minutes, Larry observed a pair of adult coachwhips protruding from a crack. I was on top of the cut and quickly stumbled upon an entirely black adult about four feet long that glided gracefully down a fissure in the rock. About ten feet further, I happened upon yet another adult coachwhip some five feet long that was pinkish in color! It was fantastic to see five of these really magnificent creatures within an area of thirty yards. This is the locality that Steve Starlin and I captured the state length record for this species back in 1975 (see KHS Newsletter No. 17 (February 1977)). The pace was now set for the day. Refilling our water jug in Winfield we headed north to an area that had yielded such diverse species, in one day, as Ambystoma tigrinum (Tiger salamander), Sistrurus catenatus (Massasauga), Phrynosoma cornutum (Texas horned lizard) and Crotaphytus c. collaris (Eastern collared lizard). Pseudacris clarki (Spotted chorus frog) and Rana pipiens (Leopard frog) serenaded us as we approached a hillside of rocky ledges. The first rock was something of the dimensions that Kelly Irwin would normally tackle but we made do with only myself lifting it. A huge Eumeces obsoletus (Great Plains skink) sat only inches from a thirty inch Elaphe guttata emoryi (Great Plains rat snake)! We caught the snake but the lizard escaped. And this was the first rock! Beneath the next ten rocks turned, we found both Eumeces obsoletus and Crotaphytus c. collaris. After that it slacked off to every third rock yielding a lizard.

Working our way along the hillside, we ignored the scores of great plains skinks and prairie ringneck snakes. Under a large rock a four foot Pituophis melanolucus sayi (Bullsnake) was retiring in an old rat nest. Soon, a coyote burst from the shade of a small shrub and loped away, eyeing us suspiciously. Several Tantilla gracilis (Flat-headed snakes) were added to our tally before we started ignoring

them also. Along an old stone wall, Larry chose six flat rocks in a row to turn, five of them yielding two more collared lizards and three more great plains skinks. It was really fantastic! On this one hill we had seen more than thirty Eumeces obsoletus, twenty Crotaphytus c. collaris, and fifteen Tantilla gracilis and Diadophis punctatus arnyi.

Quenching our thirst at Larry's truck, we headed in another direction. There was nothing new...only a hatchling great plains rat snake, more ringneck snakes, flat-headed snakes, great plains skinks and collared lizards. An approaching thunderstorm plus being totally exhausted, we decided to call it quits for the weekend, greatly satisfied with our catches.

In the two days, of much walking, driving and work, we'd seen more than 65 herps of some 17 species counting a solitary Chrysemys scripta elegans (Red-eared turtle) in a ditch out west. In addition, we'd seen pheasants, kingfishers, burrowing owls, hawks, prairie falcons, vultures, prairie dogs, kangaroo rats, coyotes and even an opossum! To say the least, the four counties of southern Kansas we collected in (Barber, Harper, Sumner and Cowley) had shown us a variety of wildlife and habitats. And yes, in over 350 miles of driving, never once did the truck break-down!!! It had been a most rewarding excursion through the southern part of our beautiful state of Kansas, even if we didn't find the anticipated Crotalus atrox.

---MARTIN B. CAPRON, Box 542, Oxford, Kansas 67119



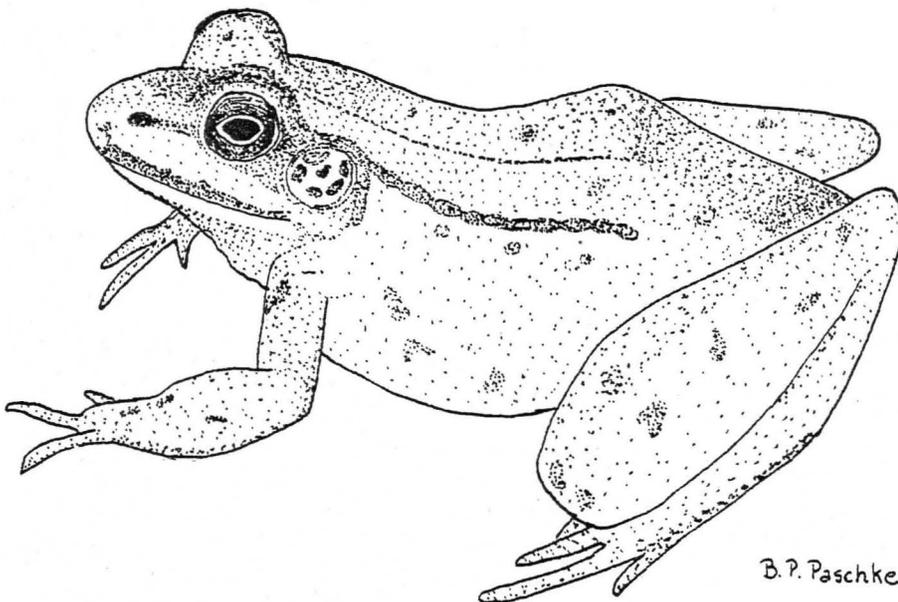
#### SCIENTIFIC NAMES

The scientific name of any plant or animal is made up of three terms: the generic, specific and subspecific. Most of the names are based on words derived from classical Latin or Greek and usually provide accurate descriptions of the plant or animal's color, pattern, habitat, temperament, feeding habits, etc. By becoming familiar with the usage of such terms, one can learn a bit of natural history merely by glancing at a taxonomic list.

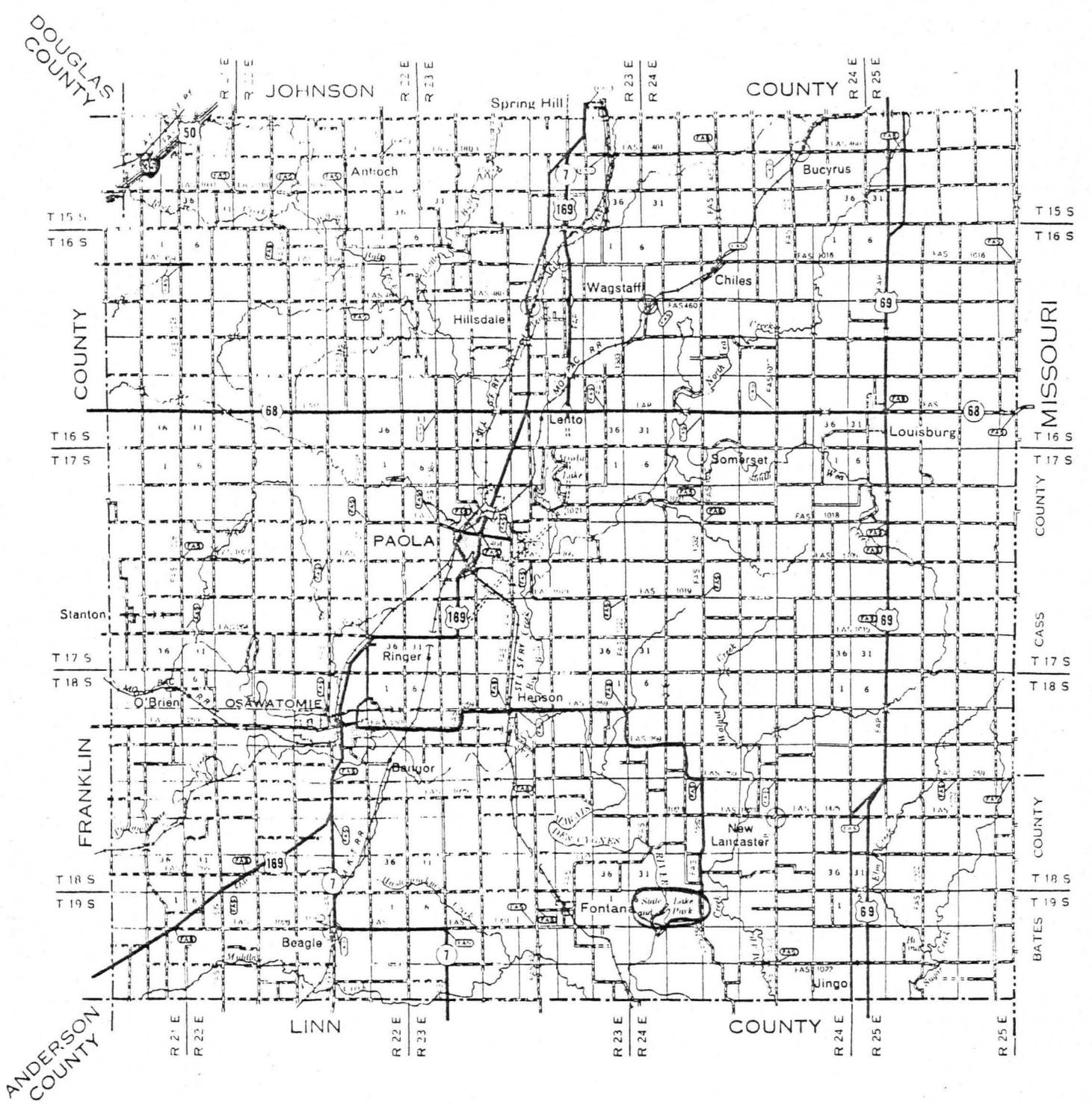
In the following list the first entry is the scientific name applied to a particular species of snake. If it is followed by a word in parentheses, the enclosed word is the original Latin or Greek form from which the scientific name is derived. Following this is the translation of the name in its original language. Try to relate the characteristic referred to in the scientific name to the animal to which it is applied.

adamanteus - hard steel	lugubris - mourning, grieving
aestivus - of or like summer	meridionalis (meridio) - to take a nap at noon
affinis - adjoining	miliarius - milestone
albicans (albico) - to whiten	minor - lesser, smaller
amabilis - attractive	natrix - whip
angusticeps (angus) - narrow and (capio) - head	nivea - snowy white
aquilus - north	nuntius - messenger, announcer
arietans - to strike violently	obsoleta - common
atrox - savage	ornatus - decoration
boa - large serpent	oxy - sharp
caliginis - fog, mist	pallidus - pale
catenatus - chained	piscator - fisherman
cerberus - dog with 3 heads who guarded the entrance to Hades	piscivorous - fish eating
coluber - snake	pulverulentus - dusty
confluentis - flowing together	pusillus - tiny
crotalus - rattle	pyrrhus - son of Achilles
culminatus (culminis) - peak, summit	python - monstrous dragon killed by Apollo
elegans - luxurious, tasteful	ravus - grayish, tawny
exsul - wanderer	rhombifer - bearing a magic circle
furbus - dark	reticulatus - meshed
fuscus - dirtied	scutulatus - diamond-shaped
guttata (gutta) - spot, marking	silus - pugnosed
horridus - wild	sistrurus (sistrum) - metal rattle
inornatus - plain, unmarked	tesselatus - checkered
lachesis - one of the 3 Fates, the one that determined the length of the thread of life	textilis - braided
lautus - splendid	tigris - tiger
lepidus - elegant, fancy	transversus - oblique
	vegrandis - puny, small
	vernalis - of of like spring
	vipera - snake, adder
	viridis - green

---JIM RUMPF, reprinted from NOAH, Vol. V, No. 10, July 19, 1978.  
Originally appeared in the Tri-State Herpetological Society News,  
July 1978.



---The KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER is issued every other month by the Kansas Herpetological Society. All interested persons are invited to become members. Membership dues per calendar year are: \$3.00 (regular) and \$15.00 (contributing) payable to: Marjorie Perry, KHS Secretary-Treasurer, 812 Murrow Court, Lawrence, Kansas 66044. All manuscripts and notes should be sent to the Editor. EDITOR: Janice Perry, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045. ASSOCIATE EDITOR: Rose Etta Kurtz, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045.



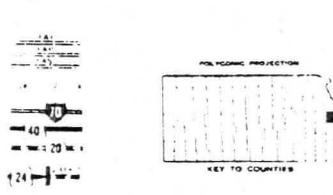
**LEGEND**

**ROADS AND ROADWAY FEATURES**

- PRIMITIVE ROAD
- UNIMPROVED ROAD
- GRADED AND UNPAVED ROAD
- SOIL SURFACED ROAD
- GRAVEL OR STONE ROAD
- GRAVEL OR STONE ROAD - NOT GRADED OR DRAINED
- GRAVEL OR STONE ROAD - GRADED AND DRAINED
- GRAVEL OR STONE ROAD WITH STABILIZED SURFACE
- BITUMINOUS ROAD - LOW TYPE PAVED ROAD
- PAVED HIGHWAY
- ROADWAY WITH FULL CONTINUOUS SURFACE AND GREEN PAINT

**ROAD SYSTEM DESIGNATION**

- FEDERAL AID INTERSTATE HIGHWAY SYSTEM
- FEDERAL AID PRIMARY HIGHWAY SYSTEM
- FEDERAL AID SECONDARY HIGHWAY SYSTEM
- POINTS BETWEEN WHICH DISTANCES ARE MEASURED INDICATED THUS
- INTERSTATE NUMBERED HIGHWAY
- U.S. NUMBERED HIGHWAY
- STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY
- UNDESIGNATED SYSTEM OR MARKED ROUTE



**GENERAL HIGHWAY MAP  
MIAMI COUNTY  
KANSAS**

PREPARED BY THE  
STATE HIGHWAY COMMISSION OF KANSAS  
DEPARTMENT OF PLANNING AND DEVELOPMENT  
IN COOPERATION WITH THE  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

SCALE  
1970

