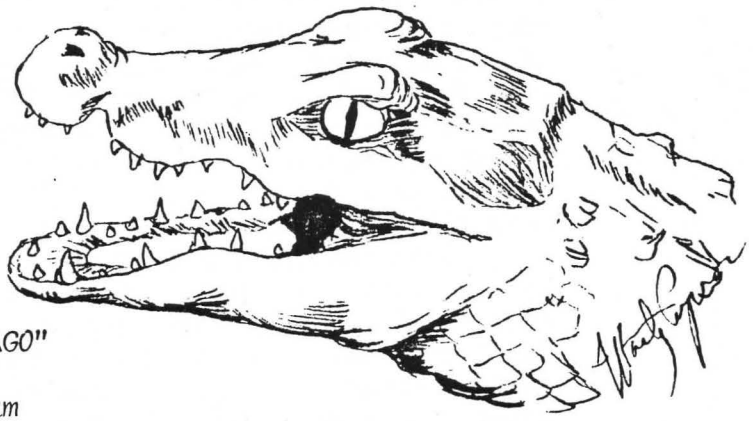
KANSAS
HERPETOLOGICAL
SOCIETY

NEWSLETTER

NUMBER 25 JUNE 1978

WINFIELD SITE FOR JULY KHS FIELD TRIP

On 14-16 July 1978, the second 1978 field trip for the Kansas Herpetological Society will be held in Winfield, Kansas. The camping site is at Tunnel Mill Park on West 19th Street in Winfield. The park is located on the beautiful Walnut River, less than one mile from downtown Winfield. There is no drinking water or electricity available at this park, but there is a primitive toilet. All members should plan to attend--please feel free to bring friends! The KHS Executive Council will meet at noon on Saturday, 15 July 1978.



"ME GO CHICAGO"

In Memoriam

Dr. Edward H. Taylor
1889-1978

On 16 June 1978, a fine, bright Kansas summer day full of its ever-present south wind coming off the prairie, I lost a friend and the world of herpetology lost one of its finest students. It was on that day that Edward Harrison Taylor, Ph.D., Curator emeritus, world traveler, government agent, teacher and much more, but lastly a very tired, very old man died quietly at his apartment in Lawrence in the manner he wanted and decreed. His body was cremated the next day and the ashes buried at the Pioneer Cemetery in Lawrence, with the spirits and ghosts of Quantrill's victims and other settlers of that era.

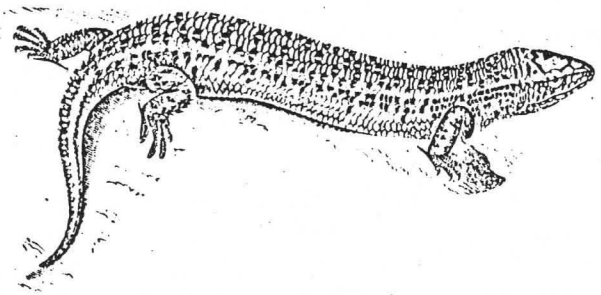
I suppose I could write the standard obituary detailing facts, dates, places, etc., and I probably would if the person were anyone but Dr. Taylor. As I said, I lost a friend and my tribute must come as a remembrance and not a recitation. So, my old friend, here are some of my memories; I am sorry that I was never able to tell you what they meant to me.

My first true meeting with Dr. Taylor came about several anxious days after figuring a ruse to meet the man I'd heard so much about. I was 15 or so at the time and suffering the normal case of rampant hormones so any decision on my part required much backpedaling and numerous doubts. Anyway, having just taken possession of a Python skin of unknown species and origin, I decided that Dr. Taylor was the one to deliver those judgments. So, with numerous palpitations and a friend in tow to bolster my flagging courage, we dutifully hiked our way to the basement of Snow Hall and then spent the better part of 30 minutes working up the nerve to tap at the door with "Taylor" hand-written on the white card. We were graciously invited in and shortly Dr. Taylor rendered the judgment that the tattered skin I had unrolled was Python molurus from Burma. After a few wide-eyed inanities on my part, we left with an invitation to return anytime.

Needless to say, I returned. For approximately two years I spent every free Saturday or Sunday afternoon in Dr. Taylor's tiny office listening to marvelous and numerous tales of different worlds and times. In my mind, I swam Philippine straits naked, going island to island, finding new lizards and snakes. I climbed a jungle mountain trail, startled to meet a nearly naked, spear-carrying native who startled us even further with the pronouncement "Me go Chicago!". A refugee from the Chicago World's Fair as the Bornean Wild Man, it turned out. Watching fruit bats that blackened the sky at sundown from a veranda in Luzon. From Mexico to Russia to Burma and Europe, all these places were possible from that basement office. So it was that a lonely old man and a lonely young man shared instant coffee and stale graham crackers and spent a few moments forgetting their cares, laughing a little here and there. They were and are some of the finest moments I've known.

Before I get maudlin, it is time to say goodbye. I am confident that wherever your soul resides, Edward Harrison Taylor, you will know of what I've said. You were a friend, you are missed, and you were loved.

---ERIC M. RUNDQUIST, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045.



KHS CORRECTION

The species index which appeared in KHS Newsletter #24 (April 1978) was compiled by Marjorie Perry.

KHS FIELD TRIP TO GRANT COUNTY, KANSAS, 12-14 MAY 1978

After many days of rain, overcast, and cool temperatures in early May, the sun broke through and beautiful weather greeted KHS visitors to Grant Co., for their first field trip of the year. An advanced party, J.T. Collins, Terry, Lila, Amy and Jenny Schwaner, left Lawrence at 8:00 am 12 May, and arrived at Frazier Park, just south of Ulysses, Kansas, about 5:15 pm. Along the way many DOR bullsnakes were seen between Junction City, Kansas and Ulysses. Additionally, several pairs of pheasants at the roadside and vast expanses of wheat fields in various stages of cultivation characterized this southwestern portion of the state.

Around 10:00 pm the rest of the KHS group arrived: Kelly Irwin, Larry Miller, Janice Perry (with flu and genetics book in hand), Jim Pilch, Chris Stammler, Gene, Glinda, Toby and Jody Trott, John Wiley, and Rob Wincel.

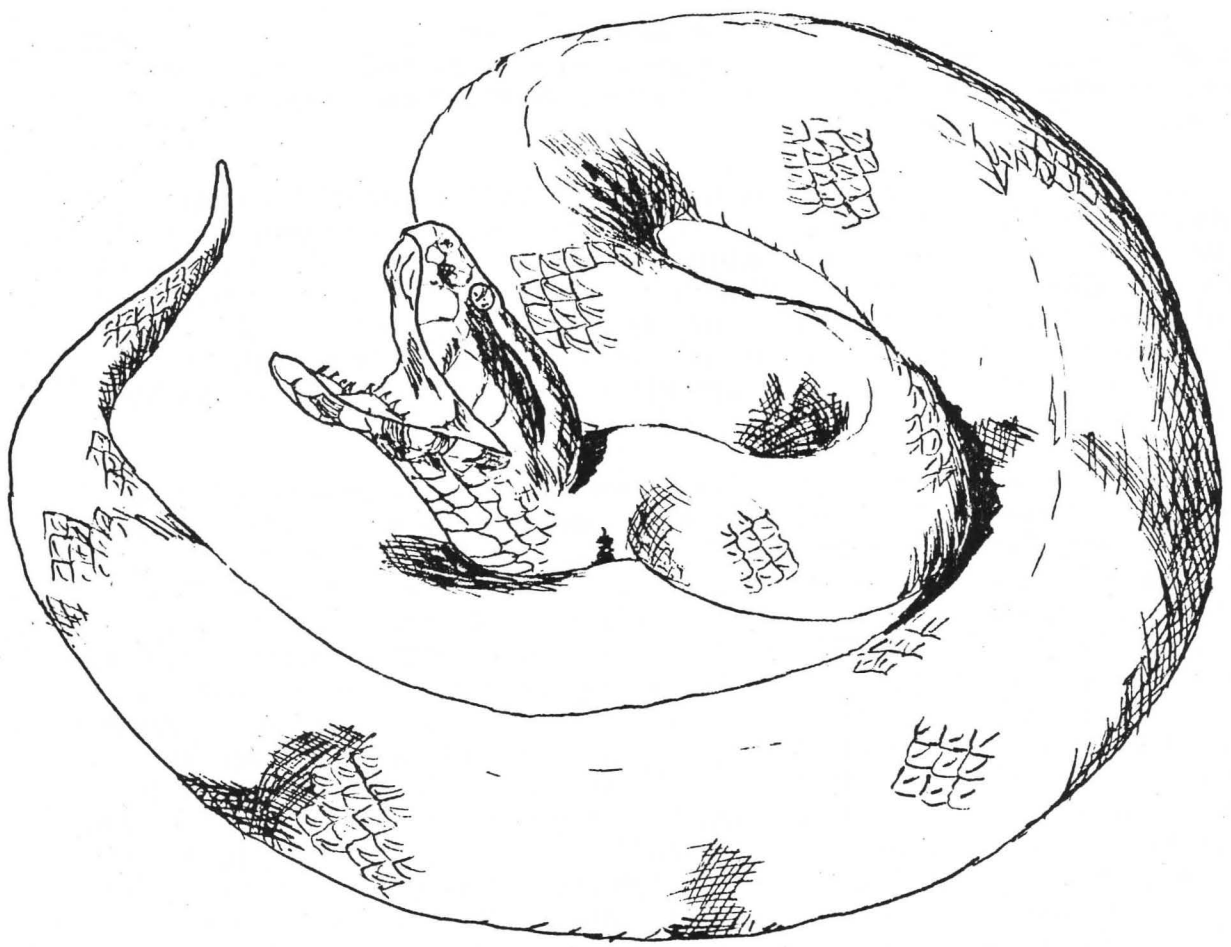
Frazier Park provided excellent camping facilities, with running (actually gushing!) water, electricity, restrooms, a playground for the younger herpers, shaded picnic tables and cooking grills, and an adjacent lake with abundant waterfowl, other birdlife, and of course, reptiles and amphibians. On the first evening of the trip, Woodhouse's toads were heard calling from wet grasses around the lake, and Chris Stammler found a beautifully patterned juvenile speckled kingsnake under a board on the camp grounds.

Anticipating a warm weekend, many members came ill-prepared for the low evening temperatures which dropped to the high 30's during the night. However, with a clear sunrise, and help from J.T. Collin's venerable coffee pot, the chilled group emerged from their sleeping bags and tents, basked briefly in the morning sunshine, and ventured forth for a day of road cruising around Grant and Stevens counties. Few reptiles were seen on the roads; the most productive areas were along the Cimarron River where J.T. Collins and T.D. Schwaner took a northern earless lizard and a prairie-lined racerunner. In spite of the poor road collecting, the group was treated to a colony of prairie dogs and burrowing owls in southern Grant County, and many large hawks resting in the plowed wheat fields. The lark bunting, so common to this part of Kansas, was also observed. While much of Grant County is cultivated, large expanses of range land, and the nearby Cimarron Natural Grasslands National Park in Stevent County, added a touch of 1800's nostalgia to the trip. The sight (as well as the odor) of huge cattle feedlots near Dodge City, Kansas reminded the group that this area feeds much of the United States populace.

Back at Frazier Park, the group took a warm afternoon walk around the lake. A large great plains skink under a sheet of tin, another prairie-lined racerunner, an eastern yellow-belly racer, and two large bullsnakes were collected by Kelly Irwin and Jody Trott. Chris Stammler found a dead yellow mud turtle near the water. A second night of road cruising was unproductive.

The group broke camp early next morning (6:00 am), heading home. All present agreed that the trip was successful and most enjoyable.

---TERRY SCHWANER, Division of Herpetology, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045.



FOOD CONSUMPTION IN THE RED MILK SNAKE LAMPROPELTIS TRIANGULUM SYSPILA

Introduction

In 1973 I was encouraged by Joseph T. Collins of the Museum of Natural History at the University of Kansas to undertake a study of ecdysis (skin shedding) frequency in local species of snakes. Several problems arose, chiefly relating to individual specimen identification, which eventually led to selection of a single species, the Red Milk Snake. The variation in color pattern and its persistence in the discarded skins made it possible to identify individuals readily, both in the living specimen and the shed skin.

Although advised against using this species for the study because of temperament and feeding difficulties, I decided to proceed on a tentative basis. The problem of locating specimens to study seemed insurmountable at first, but with field experience it became surprisingly easy to identify favorable habitats and to locate specimens. It was determined to feed the snakes mice, if possible, because of a constant and abundant supply available at the University of Kansas. When the first specimens were collected in 1974, they were offered mice, which they ate with little or no hesitation and which seemed to adequately supply their nutritional needs.

An intensive field program began in 1976 to collect a minimum of fifty specimens for study, and is continuing at the present. The original ecdysis study, although still continuing, has become a very small part of what has developed into a much broader study of this species. Currently, observations are being made on feeding, growth rates, mating, longevity and behavior. No comprehensive report can be made at this time. Sufficient data are available, however, to provide information regarding food intake and specimen weight variation for nearly a full year, and are presented here as a preliminary report. It is hoped that this information will induce others to undertake similar studies of other Kansas species.

Materials and Method

Specimens were collected from the northeastern quarter of Kansas and were housed chiefly in metal framed aquaria with wooden tops. Hatchlings and small juveniles were kept in plastic shoe boxes. Wooden tops were fitted with air vents of between 24 and 80 square inches, covered with fiberglass screening. Plastic shoe box lids were drilled with several 1/8" diameter holes for ventilation; all sharp edges caused by drilling were removed. Some aquaria were fitted with a 1/8" masonite panel, replacing one of the glass sides, to which an inexpensive porcelain light socket was bolted. Cage bottoms were lined with brown wrapping paper or newspaper. Several rocks of suitable size were placed in each cage with one or two thin limestone slabs elevated an inch or two above the bottom to provide a retreat. Each cage was supplied

with a water dish, and each cage was cleaned at least once a week.

Upon capture, each specimen was placed in a cloth drawstring bag with a label indicating the geographic locality, date, time, and weather conditions, as well as any outstanding color or pattern features of the specimen. Within 12 hours of capture, the specimens were returned to Lawrence, weighed, a detailed description written, data sheets prepared, and the specimens placed in a cage. Food was offered immediately. From one to three specimens were kept in each plastic shoe box, while four to eight specimens were kept in each aquarium. To discourage possible cannibalism, only specimens of similar size were placed in the same cage.

Food consisted entirely of mice, offered at intervals varying with season. During the months of March through June, food was offered every 1-2 days, July through October every 3-5 days, and November through February every 5-8 days. Except when the general health of a specimen seemed endangered, all specimens were given equal opportunity to feed and in nearly every case feeding continued until no more was accepted. In most cases the entire population was offered either live or dead food, rarely both. Live mice were offered approximately 40% of the time and dead mice in approximately 60% feedings. Dead mice(frozen) were thawed to room temperature before being offered.

Mice were handled generally with forceps to eliminate contamination by human scent, especially when being offered to newly or recently captured specimens. Each mouse was weighed before being placed in a cage and when eaten, the snake eating it was identified and appropriate records made. During feeding a close watch was kept on the snakes to guard against cannibalism.

During the first 5 days of every month, each specimen was weighed and the weight recorded. All feeding was suspended for 3 or 4 days prior to weighing to provide, as nearly as practical, a true body weight.

Specimens were handled or unduly disturbed only during capture and initial weighing and examination and subsequent weekly cage cleaning except on rare occasions. When unusual handling or disturbance occurred, it was confined to specimens in good condition which were feeding regularly and eagerly.

All specimens were kept in the same room. The room was farthest from the central heating/cooling plant and ambient air temperature fluctuated seasonally, but not to any extreme. Translucent shades covered the windows at all times, permitting only filtered west sunlight into the room. Those cages with light fixtures were constantly illuminated with 15 to 40 watt bulbs. Fifteen watt bulbs were used during late spring, summer and early fall, with twenty-five or forty watt bulbs used during colder months for heat as well as light.

Discussion

A population of thirty-nine milk snakes, captured between 12 May 1974 and 7 May 1977, was used in this study. Twenty-nine specimens were collected from Douglas County, six from Wabaunsee County, and one each from Atchison, Doniphan, Geary, and Jefferson

Counties. The specimens collected during the first week in May, 1977 were included in the sample population because they were collected early in the month and began feeding immediately, providing similar data to specimens collected earlier. Specimens in the sample population include a range from very young juveniles to mature adults, with no age or size group predominant. During the period upon which this report is based, 1 May 1977 to 30 April 1978, one specimen died. Death occurred on 24 April 1978, following a sudden refusal to eat and unusually rapid physical deterioration. All other specimens maintained good health and normal seasonal physical condition throughout the period.

Normally the snake examines a mouse carefully, flicking its tongue rapidly over the mouse's entire body. This examination usually proceeds from head to tail, with considerable attention given to the hindquarters. If the mouse is alive, the snake usually strikes at the mouse, fixing it securely in its mouth, and wraps its body around the mouse once or twice quickly, constricting tightly. The snake frequently fails to obtain a secure hold on its prey or its strike misses entirely on the first attempt. In such instances the snake will normally pursue its prey rapidly, with singular purpose, striking repeatedly until a secure hold is obtained, often on a leg or even the tail. Constriction follows in the normal manner, with the prey being suffocated within a minute or two. If the offered mouse is dead, the snake will normally examine it thoroughly in the manner described above but will also press its snout into the mouse's body, usually in the abdominal region, and move the body about by inserting its head beneath the mouse and lifting. After a sufficient interval of examination, usually from 2-5 minutes, the mouse is eaten. In most cases eating proceeds from head to tail and requires from two to five minutes, but has been observed to take more than 1½ hours when the prey is particularly large.

Many instances have been observed and recorded in which the prey was not suffocated, but eaten alive. Juveniles up to about two years rarely suffocate live mice but when the prey is another snake, constriction is generally employed. Adult milk snakes rarely eat their prey alive. Furthermore, both live and dead mice have been observed being eaten tail first. In rare cases a snake will constrict about a dead mouse, particularly if the mouse is moved.

The supposition that snakes must have, or at least prefer, live food has proven to be erroneous in the red milk snake. In the sample population, most specimens showed an equal willingness to accept dead or live food. Fourteen specimens, in fact, consumed 80% or more dead mice during the period and seven ate 90% or more, while only one fed on 80% or more(93%) live prey(See Table I). The evidence seems to indicate that among specimens of this species there is a definite preference for dead food in a significant number of individuals. Whether this tendency persists when skinks are used for food has not been tested.

TABLE I INDIVIDUAL SPECIMEN DATA

SPECIMEN NO.	COUNTY	DATE COLLECTED	NO. MICE EATEN	% LIVE (BY NO.)	% DEAD (BY NO.)	AVE. SPECIMEN WT. IN GMS.	INTAKE/WT. RATIO
1	Douglas	5/77	66	30%	70%	48.09	3.81
2	Douglas	5/74	35	46%	54%	63.69	2.45
3	Douglas	7/76	34	18%	82%	20.91	3.20
4	Douglas	7/77	51	53%	47%	37.95	3.79
5	Wabaunsee	5/76	19	16%	84%	87.34	1.35
6	Douglas	5/77	47	21%	79%	41.45	2.96
7	Douglas	4/77	42	40%	60%	78.45	2.77
8	Douglas	3/76	27	93%	7%	38.24	2.24
9	Wabaunsee	5/76	23	48%	52%	60.03	1.41
10	Douglas	5/76	45	13%	87%	118.38	2.45
11	Douglas	4/77	26	4%	96%	15.67	2.77
12	Douglas	4/76	34	65%	35%	105.55	1.67
13	Douglas	4/77	37	5%	95%	69.18	2.80
14	Douglas	4/77	50	32%	68%	10.99	5.70
15	Douglas	6/75	25	4%	96%	80.39	1.34
16	Douglas	5/77	22	32%	68%	45.51	1.23
17	Wabaunsee	6/76	28	31%	69%	34.35	1.76
18*	Douglas	7/77	17	18%	82%	22.13	1.89
19	Atchison	6/76	22	50%	50%	29.41	2.06
20	Douglas	5/76	28	64%	36%	94.83	1.27
21	Jefferson	4/77	35	17%	83%	32.55	2.28
22	Douglas	4/76	27	7%	93%	68.36	1.77
23	Douglas	5/76	30	53%	47%	47.39	2.17
24	Douglas	6/76	32	22%	78%	59.69	1.27

SPECIMEN NO.	COUNTY	DATE COLLECTED	NO MICE EATEN	% LIVE (BY NO.)	% DEAD (BY NO.)	AVE. SPECIMEN WT. IN GMS.	INTAKE/WT. RATIO
28	Douglas	5/77	44	45%	55%	10.58	6.11
29	Douglas	5/77	44	41%	59%	9.80	5.61
30	Geary	5/77	41	39%	61%	24.85	3.78
31	Doniphan	6/76	39	21%	79%	76.06	2.47
32	Douglas	4/75	46	7%	93%	97.21	2.58
33	Wabaunsee	4/77	38	3%	97%	60.25	1.70
34	Wabaunsee	5/76	44	25%	75%	26.81	2.60
35	Douglas	5/76	24	17%	83%	91.58	1.60
36	Douglas	5/77	43	28%	72%	59.25	2.32
37	Douglas	5/74	52	17%	83%	89.05	2.82
38	Douglas	5/75	26	73%	27%	91.05	1.48
39	Douglas	3/76	22	41%	59%	84.81	1.24

*Specimen died 24 April 1977. Cause of death unknown but presumed to be pathogenic.

Frequency of feeding seems to be as variable as virtually all other aspects of the red milk snake. The majority of specimens feed in moderate amounts three to six times a month during the season of normal activity, with the greatest amount and frequency in spring and early summer. Juveniles two years old or younger tend to follow normal seasonal patterns, but continue to feed throughout the year, as do some older juveniles and subadults. A small number of specimens of all ages are prone to feed in enormous quantities at infrequent and irregular intervals.

Although both food intake and specimen weight data are not available for an entire year, the food intake/mean specimen weight has been calculated for an eleven month period. (Table I) For each specimen, food intake for June, 1977 through April 1978 was totalled. Since specimen weights were taken at the end of each month's feeding and reflect intake of the previous month, mean specimen weights were based on data from July, 1977 through May 1978. Total food intake was divided by mean specimen weight to obtain the intake/weight ratio. It was expected that this ratio would correlate with either physical condition, age, or growth rate. No such correlations could be made except in the most general of terms and with considerable individual variation. Generally, the smallest juveniles had the higher ratios and the lower ratios appeared in adult specimens. Some juvenile speci-

mens with high intake/weight ratios maintained fair to poor physical condition during a substantial part of the eleventh month period, while some adults remained in good to excellent physical condition throughout the period despite low ratios. The high degree of variability (Table 2) suggests that individual metabolic rates may be very different and may play a significant role in feeding habits.

TABLE II FOOD CONSUMPTION IN PERCENT OF AVERAGE SPECIMEN WEIGHT

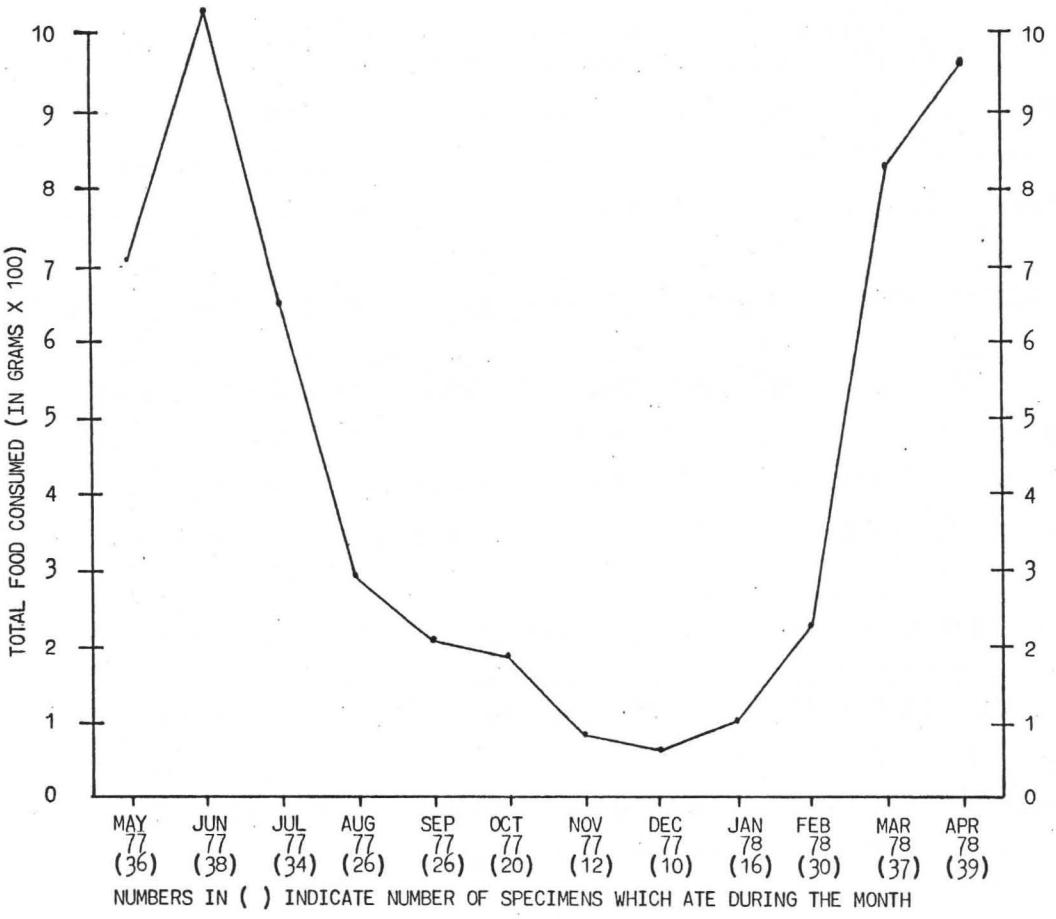
	May 1977	June 1977	July 1977	Aug. 1977	Sept. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
Average	36	55	41	21	17	10	4	3	5	13	38	47
Maximum	101	138	116	128	93	54	33	27	27	63	95	111
Minimum	0	0	0	0	0	0	0	0	0	0	0	8

Total food consumption for the entire population showed a remarkable seasonal variation. (Fig. 1). Although completely isolated from natural factors, the population generally observed seasonal trends in feeding. Exceptional instances, those specimens which continued to feed more or less regularly throughout the period, were not confined to any particular age group and included specimens in both heated and unheated cages. The amount of food consumed, however, did follow the general seasonal pattern.

Surprisingly, there was no evidence of increased feeding in late summer or early fall, prior to hibernation. Those specimens which did show an increase in food consumption during August through October seemed to be following normal individual traits or responding to hunger rather than preparing for any seasonal fasting. This general pattern suggests that the red milk snake may go directly from summer aestivation into hibernation. If this is true, it would explain why it is virtually impossible to find a specimen in the field after middle or late June, even when weather conditions are ideal for normal activity. This would also explain the relative abundance of specimens in the field from early April to middle or late June. A further implication is that delayed warm weather in spring and/or very early high temperatures could severely affect an individual's ability to survive until the following spring. At present, however, there is not sufficient data to establish this feeding pattern as a consistent one.

Specimen weight variation generally followed food consumption trends. A majority of specimens (75%) lost weight with similar rates and degrees as reflected in food consumption trends, and their body weights fell below the 1 July 1977 level. The remaining 10 specimens, all young specimens, also followed the general

FIGURE I



trends, but to a lesser degree and their body weights did not decline to that measured on 1 July. These two groups were summarized separately(Tables III, IIIA) because of the marked difference in weight gain/loss characteristics during the period.

The rate of weight variation, the percent of gain or loss from the previous month, was also found to follow the other seasonal trends as one would expect. It is interesting to note that those specimens which maintained the 1 July body weight displayed a greater variation in rate of weight change than the majority of the population during the summer and early fall, but lesser variation in winter and spring (Tables IV, IVA). Whether this is generally true or has any significance is unknown at this time and more data is needed.

TABLE III PERCENT WEIGHT CHANGE FROM 1 JULY 1977(75% of Population)

	July 1977	Aug. 1977	Sept. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
Average	0	0	-6	-11	-15	-16	-16	-15	-13	- 7	+ 6
Max. Gain	0	+24	+24	+ 7	+ 2	+ 2	+ 1	+ 2	+ 7	+29	+42
Max. Loss	0	- 8	-17	-21	-31	-31	-29	-35	-34	-34	-16

TABLE IIIA PERCENT WEIGHT CHANGE FROM 1 JULY 1977(25% of Population)

	July 1977	Aug. 1977	Sept. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
Average	0	+21	+26	+29	+29	+29	+30	+27	+34	+40	+55
Max. Gain	0	+58	+56	+79	+74	+65	+71	+59	+66	+81	+92
Min. Gain	0	+ 8	+ 7	+ 5	+ 6	+ 4	+ 3	+ 2	+ 7	+ 6	+17

TABLE IV RATE OF WEIGHT CHANGE IN PERCENT (75% of Population)

	July 1977	Aug. 1977	Sept. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
Average	0	0	- 7	- 5	- 5	0	0	+ 1	+ 3	+ 8	+14
Max. Gain	0	+24	+ 5	+12	+ 9	+11	+11	+10	+21	+24	+38
Max. Loss	0	- 8	-15	-13	-17	-10	-10	- 9	- 5	-13	- 6

TABLE IVA RATE OF WEIGHT CHANGE IN PERCENT (25% of Population)

	July 1977	Aug. 1977	Sept. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
Average	0	+21	+ 5	+ 3	0	0	0	- 2	+ 6	+ 4	+11
Max. Gain	0	+58	+24	+15	+11	+ 5	+ 6	+ 5	+19	+ 9	+25
Max. Loss	0	+ 8	-12	-11	- 8	- 5	- 8	- 9	- 7	- 3	- 9

SUMMARY

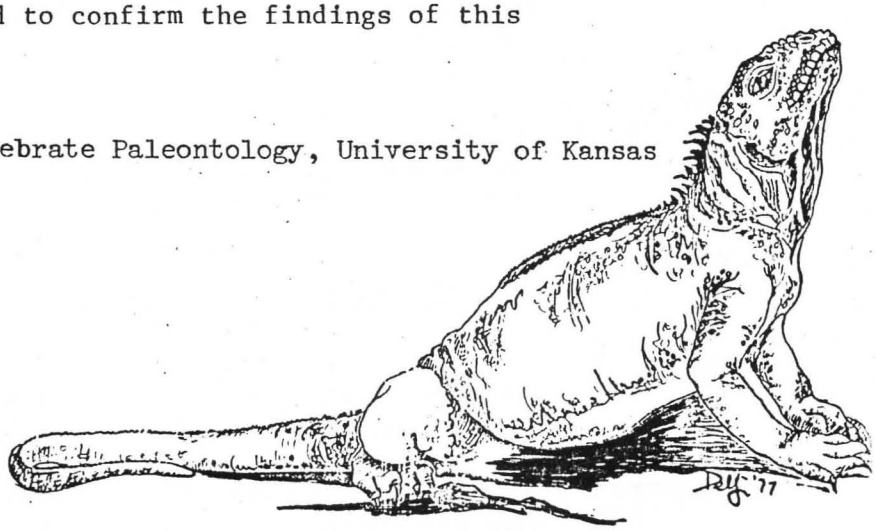
Study of a captive population of thirty-nine red milk snakes from Northeastern Kansas has shown that individuals of this species will readily accept mice as food and can survive well in captivity on an exclusive diet of mice. Captive specimens follow definite seasonal feeding patterns, even under unnaturally moderate temperatures, minor temperature fluctuations, no exposure to direct sunlight, and a total absence of darkness. Juveniles are less willing to feed on mice than adults and when they do, juveniles rarely

constrict their prey while adults almost invariably employ constriction. Specimens of all ages will accept dead mice as readily as live and several show a preference for dead mice. Limited evidence suggests that little feeding takes place except during spring and that there may be no intense feeding in preparation for hibernation, as is characteristic in mammals.

A considerable loss of weight, up to 35%, occurs during hibernation and is rapidly regained in spring in most cases. Food intake, cumulative weight change, and rate of weight change all follow general seasonal patterns. Some young specimens in captivity will continue to feed during the normal hibernation period, yet food intake, weight, variation, and rate of weight change conform to seasonal tendencies.

Several questions remain unanswered and more data is needed to answer those questions and to confirm the findings of this report.

--- AL KAMB, Museum of Invertebrate Paleontology, University of Kansas



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.
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1978. Turtles of the family Inosternidae in the southwestern United States and adjacent Mexico: Identification and distribution. American Mus. Novitates, 2642: 1-18. Available for $1.45 from: American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024.

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1978. The spring peeper, Hyla crucifer Wied (Anura, Hylidae) in Kansas. Trans. Kansas Acad. Sci., 80(3-4): 155-158.

Smith, H. M. and A. J. Kohler.
1978. A survey of herpetological introductions in the United States and Canada. Trans. Kansas Acad. Sci., 80(1-2): 1-24.

Williams, K. L.
1978. The systematics and natural history of the American milk snake, Lampropeltis triangulum. Milwaukee Pub. Mus. Publ. Biol. Geol., 2: 1-258 plus 10 color photographs. Available for $20.00 post-paid from: Milwaukee Public Museum, 800 West Wells Street, Milwaukee, Wisconsin 53233 (an excellent volume-highly recommended).

CHIKASKIA RIVER STUDY HELD NEAR CALDWELL

The 1978 Chikaskia River Wildlife Study was held near Caldwell, Kansas. It started the afternoon of 28 April and ended the afternoon of 30 April. Attendance during that time was over 70 people.

The wildlife study was organized by KHS members Larry Miller and Gene Trott. It was held on land owned by the Freeman Dillard family and the Marvin Schneider family.

A number of interesting plants and animals were found during the study. They included 20 species of herps, a number of birds, mammals, trees, wildflowers, spiders and insects.

One highlight of both Friday and Saturday night was the collecting of large moths. Dr. J. E. Turner, a dentist from Caldwell, showed the group two methods of collecting moths. One, was the use of a bait made from molassas, beer, and rum. The bait would attract the insects and when they ate it, they got drunk, which made it easy to catch them. The second method was to shine light into their eyes. The light would cause the flying moths to fall to the ground where they could be caught.

The weather was beautiful and collecting started off Good Friday evening. The following species of amphibians and reptiles were collected Friday: Two bullsnakes (Pituophis melanolecus sayi), a red-sided garter snake (Thamnophis sirtalis parietales), a midland softshell turtle (Trionyx m. muticus), one prairie lined racerunner (Cnemidophorus sexlineatus), several fence lizards (Sceloporus undulatus), a bullfrog (Rana catesbeiana), a Rocky Mountain toad (Bufo woodhousei), a number of Blanchards' cricket frogs (Acris blanchardi), one plains leopard frog (Rana blari), and a Texas brown snake (Storeria dekayi).

It rained a little Saturday morning, but stopped before the field trip started at 10:00 AM. A number of people, both young and old, went on the trip that covered a five kilometer stretch of the river. It was rather cool (13°C) with overcast skies.

Several ringneck snakes (Diadophis punctatus arnyi), some spotted chorus frogs (Pseudacris clarki), a black rat snake (Elaphe o. obsoleta), and one plains narrow-mouthed frog (Gastrophyne olivacea) were collected that morning.

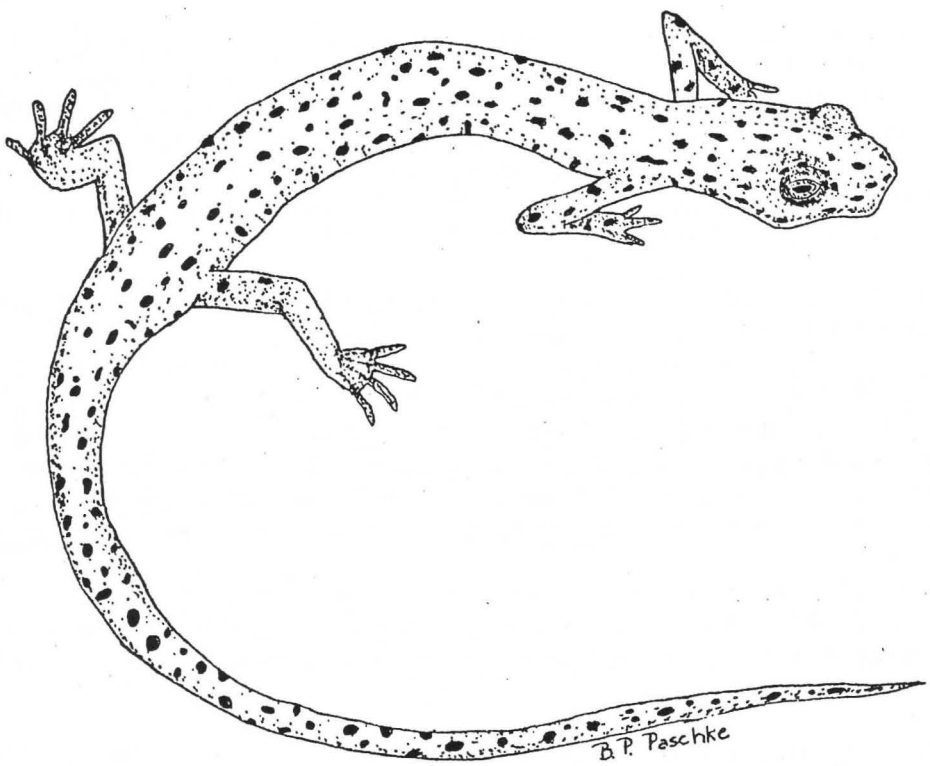
Saturday afternoon was the best for collecting, the sun came out and the temperature increased. Several more species of herps were found which included the blotched watersnake (Neroda erythrogaster transversa), eastern yellow-belly racer (Coluber constrictor flaviventris), Great Plains toad (Bufo cognatus), and plains spadefoot toad (Scaphiopus bombifrons). Many more lizards were also observed in a sandy area on the east side of the river. Later in the evening a northern water snake was found (Nerodia s. sipedon).

Saturday night several of the study group enjoyed a wild game of frisbee and of course some time was spent around the campfire telling stories. There was also moth collecting using flashlights.

Two species of turtles were the only additions after Saturday evening. They were the red-eared turtle (Chyrsemys scripta elegans) and the ornate box turtle (Terrapene o. ornata).

Most of the group was up by 10:00 AM Sunday morning! The day started with a great breakfast served by KHS members from Wellington and Hunnewell. The meal included bacon, eggs, pancakes, milk and Kool-aid. After breakfast the group cleaned up the campsite and everyone headed for home. It has been a wonderful weekend on the clean and beautiful Chikaskia River.

--- MICHELLE WARNER, 309 North Webb, Caldwell, Kansas and
ROB WENCEL, R.R. #3, Caldwell, Kansas



--- 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) or $15.00 (Contributing) payable to: Marjorie Perry, 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.