

August, 1987

ANNOUNCEMENTS

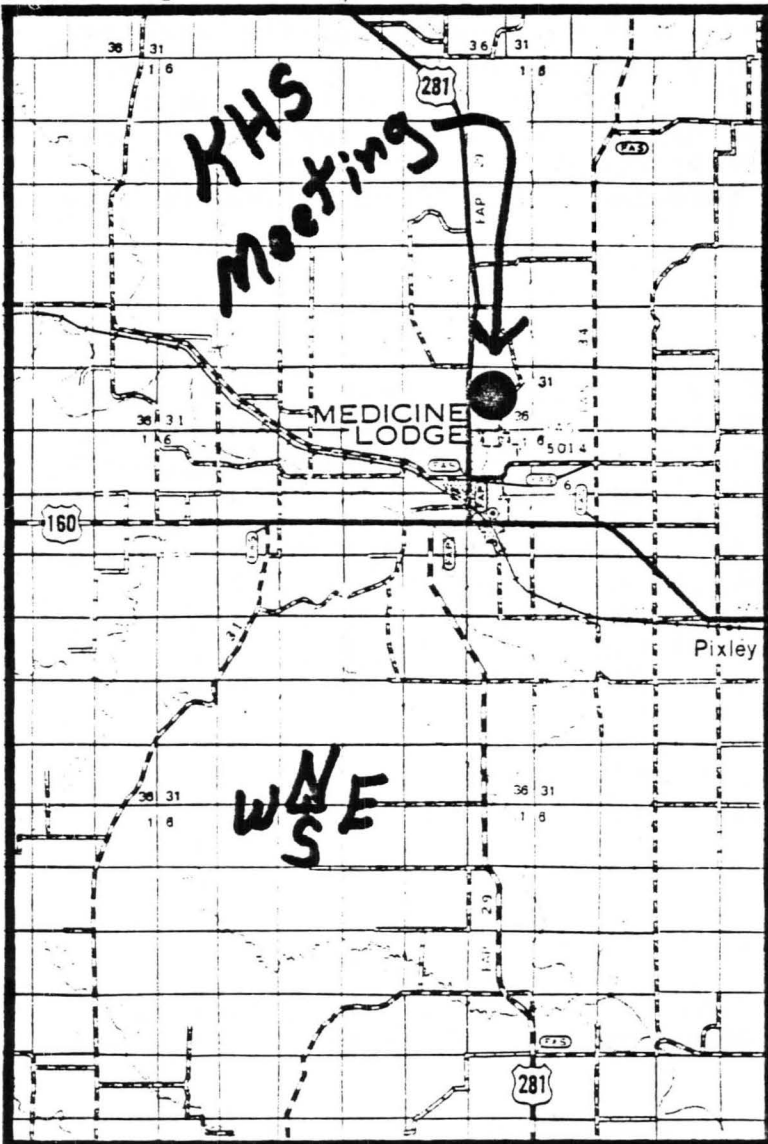
September KHS Field Trip set for Barber County

The Kansas Herpetological Society will hold a fall field trip this September in Barber County, Kansas. The field trip will be from Friday evening 25 September until Sunday, 27 September. The camping site will be at the Barber County State Lake (Section 36, Township 31, Range 12) which is located at the north edge of Medicine Lodge on the east side of US Highway 281. Medicine Lodge is in southcentral Kansas, and is about 20 miles north of the Oklahoma border. US Highway 160 runs through the city east and west while US 281 runs north and south. Barber County State Lake is the only state lake in the county. Thus, everyone attending should end up at the proper meeting site.

A large number of different species of amphibians and reptiles can be found in Barber County. The Red Hills habitat of the county is most unique. There are many miles of roads, dozens of streams, gypsum caves, and lots of rocks in the county. Most of the land has not been greatly altered by humans. It is a herpetologists' dream come true.

There are several good places to eat in Medicine Lodge. Fuel is available and a fine motel for those that do not wish to camp at the lake. Maps of the county will be available at the meeting site so KHS members and their friends can find their way around the area. Plan to attend this special get together, and bring friends.

Contact either KHS President Olin Karch or



KHS Secretary/Treasurer Larry Miller if you have questions. CB radio channel 4 will be monitored in the area for those attending with CB radios. Just call for the KHS.

Annual Fall KHS Meeting to be in Emporia

The 1987 annual meeting of the Kansas Herpetological Society will be held 14-15 November, 1987, on the campus of Emporia State University campus in Emporia, Kansas. Start making your plans to attend now. A detailed program for the meeting will appear in the next issue of the KHS Newsletter. For further information on the planning of this meeting, contact KHS President Olin Karch (see address and phone number on the inside front cover of this newsletter).

As always, the meeting will be free and open to anyone interested in reptiles and amphibians.

Wildlife Stamps

KHS member Larry Miller has alerted us that the 1987 American Wildlife Stamps released by the U.S. Postal Service recently (\$0.22 denomination) feature 50 different animals of North America, including one reptile--the "Box Turtle" (its actually a desert box turtle, Terrapene ornata luteola as far as I can tell...). No amphibians rated stamps this year. So, there are lots of birds, mammals, and insects. The turtle stamp is very attractive, however.

Inventory Information Request

As usual for this time of year, Frank L. Slavens is requesting information from "all persons keeping live reptiles and amphibians" for his very interesting and comprehensive Inventory of Live Reptiles and Amphibians in Captivity. He needs your name and address, name and sex of all adult animals in your collection, lists of species bred during 1986, and longevity records you may have. Deadline for submissions is 1 January 1987.

The current (1986) issue is available for \$32.50 hardbound, \$25.00 softbound. Softbound editions of 1983-1985 are also available for \$25.00 each. Add \$2.50 postage per book ordered.

Send information and orders to:

Frank Slavens
P.O. Box 30744
Seattle, Washington 98103

American Federation of Herpetoculturists

The American Federation of Herpetoculturists (AFH) is a newly-formed national non-profit society dedicated to the ad-

vancement of herpetoculture in the United States and abroad. The Vivarium, the official publication of AFH, will be a forum for the exchange of news, ideas, reviews and other topics as they specifically relate to the propagation of reptiles and amphibians in captivity. The Vivarium is planned as a high quality, 56-64 page color journal, to be published four times a year. AFH is now accepting memberships for \$20.00/year (U.S.), which includes a one-year subscription to The Vivarium. For membership application forms, write:

American Federation of Herpetoculturists
P.O. Box 1131
Lakeside, CA 92040

Third Annual Midwestern Herpetological Conference

The Iowa and Nebraska Herpetological Societies are sponsoring the Third Annual Midwestern Herpetological Conference on 16-17 October at the Belton Inn, in Des Moines, Iowa. Some of the speakers and their topics will be Richard S. Funk (Common reptile diseases and their treatment); Joseph T. Collins (The Third Edition of the Peterson Field Guide: Problems and Frustrations) and Richard Reed (An overview and new directions for reptile gardens).

Registration is \$20, which includes a Friday evening social, after which J.T. Collins will conduct of his memorable auctions. An optional banquet on Saturday night is \$15. Save \$5 by registering before 15 September (when the fee goes up to \$25). Send checks to:

Allen Anderson, Cordinator
P.O. Box 166
Norwalk, Iowa 50211
Phone (515)981-0402 after 5 p.m.

Poison Frogs

A effort is underway to establish a society for individuals who have in interest in the Poison Dart Frogs of the family Dendrobatidae (Dendrobates, Phylobates, and Colostethus). The notice received by KHS refered (incorrectly) to these frogs as the "Arrow Frogs" and their list of genera included Atelopus, which is actually in the family Bufonidae, and has a very different type of poison. Oh, well... If you are interested in further information about this group, send three \$0.22 postage stamps to cover the mailing to:

Dale Bertram
Chairperson-Steering Committee
Arrow Frog Society [sic]
One Virginia Terrace
Madison, Wisconsin 53705

State Reptile Bumper Stickers Available

Yellow vinyl bumper stickers (3" x 11.5") honoring the

Kansas State Reptile will be available by the first of September 1987. These attractive stickers will have a drawing of an ornate box turtle (the one on the front of this newsletter, drawn by the renown Martin Capron) with the words "ORNATE BOX TURTLE" and "STATE REPTILE OF KANSAS" printed in black.

The stickers will be available by mail for a total cost of \$1.00 each while supplies last. Mail your money to:

Larry Miller
State Reptile World Headquarters
524 North Osage
Caldwell, Kansas 67022

*Those KHS members living in Lawrence may purchase their stickers at the Museum Shop in the Museum of Natural History on the KU campus.

"Grow-a-Frog" a New Environmental Hazard?

It has recently come to our attention that some stores in Kansas are carrying a new Grow-a-Frog kit, which is reputed to contain "everything you need to grow a frog, except the frog." But not to worry, send in the coupon in the kit and the company will send you a free live tadpole ("World's Best Pet"). Unfortunately, the tadpole is an African clawed frog, Xenopus. What's so bad about that? There is a good possibility that if released, the frogs could survive and thrive in Kansas as they have done in several places in California, to the detriment of native aquatic species. African clawed frogs have been sold in pet stores for some time, but the advertising for this kit is designed to reach an audience which knows little about frogs--hence the fear that they might be released. We have already heard of one successful rearing of a tadpole. If you see this kit marketed in your area, or know of anyone who has been successful raising the tadpole, please let us know here at the KHS Newsletter. This looks like something worth keeping track of.

Turtles Added to Endangered and Threatened Species List

The Fish and Wildlife Service has listed the flattened musk turtle (Sternotherus depressus) as a threatened species. Its historic range was limited to the upper Black Warrior River system in Alabama. It is now considered threatened from overcollecting, disease, and habitat degradation due to siltation and water pollution.

Another Alabama turtle has been added to the endangered list. It is the Alabama red-bellied turtle (Pseudemys alabamensis), found only in the lower part of the floodplain of the Mobile River in Baldwin and Mobile counties. The gopher tortoise (Gopherus polyphemus) has also been listed as threatened, from the Tombigbee and Mobile rivers in Alabama west to southeastern Louisiana. The historic habitat of the species has been reduced by urban growth and agriculture, and the quality of the remaining habitat has been degraded by "certain forest management practices."

KHS BUSINESS

Annual KHS Field Trip Held at Atchison State Lake

The 1987 annual field trip of the Kansas Herpetological Society was held at the Atchison State Fishing Lake north of the city of Atchison the weekend of 6-7 June, 1987. Olin Karch and sons, together with friends and associates, were the first to arrive and set up camp around noon on Friday, 5 June. Several species of herps were subsequently seen or heard around the lake, and juvenile common snapping turtles (Chelydra serpentina) were captured in the shallow waters along and adjacent to the shore.

The warm weather and the nearly cloudless sky prevailed the next day, and by Saturday afternoon, a total of fourteen KHS members and friends had arrived at the camp site. Numerous prairie ringneck snakes (Diadophis punctatus arnyi), a northern water snake (Nerodia sipedon), three five-lined skinks (Eumeces fasciatus), a western plains garter snake (Thamnophis radix haydenii), and an ornate box turtle (Terrapene ornata) were caught or observed in the area.

Jim Wray and Jim Gubanyi found the only significant limestone outcrop in the vicinity of the lake and caught two red milk snakes (Lampropeltis triangulum sypila). One of the milksnakes was approximately thirteen inches long, and the other, a gravid female, was approximately twenty-seven inches long.

A multitude of recently metamorphosed toads (Bufo americanus?) were seen among the short vegetation of a swampy area next to a pond not far from the lake. That evening, two separate parties explored regions to the north and east in Atchison and Doniphan counties. An unsuccessful attempt to procure specimens of the fox snake (Elaphe vulpina) and northern leopard frog (Rana pipiens) was conducted along the floodplain of the Missouri River. Travis Taggart and Kevin Comcovich captured one juvenile western chorus frog (Pseudacris triseriata) and one Woodhouse's toad (Bufo woodhousii).

After sunset, the intrepid herpers returning to the lake were greeted by the choruses of cricket frogs (Acris crepitans blanchardi), bullfrogs (Rana catesbeiana), and gray treefrogs (Hyla chrysoscelis-versicolor). Searches along the lake's edge that night and the early morning of 7 June yielded bullfrogs, cricket frogs, plains leopard frogs (Rana blairi), and two adult American toads (Bufo americanus). The specimens of Woodhouse's toad and western chorus frog represented new county records established during the trip. By late Sunday morning, the majority of herpers had left the lake and were on their way home.

Overall, this year's field trip was a pleasant experience for most of those involved and was well attended despite the fact that most people had only a few days prior notice. There was also some confusion over the exact location of the lake mentioned in the field trip announcement. There are two county lakes in Atchison County, one in the northwest part of the county, and one in the northeast part. However, the latter is the only lake in northeast Atchison County and the only lake designated as a state lake. At least one KHS member ended up at the county lake far west of Atchison near the Brown County line.

The following is a list of all the species of amphibians and reptiles observed on this field trip, together with the number of individuals sighted (when known).

- (2) ✓ American toad, Bufo americanus
- ✓ Woodhouse's toad, Bufo woodhousii
- ✓ Blanchard's cricket frog, Acris crepitans blanchardi
- (1) ✓ Western chorus frog, Pseudacris triseriata
- (5) Bullfrog, Rana catesbeiana
- ✓ Plains leopard frog, Rana blairi

- (3) Common snapping turtle, Chelydra serpentina
- (2) Western painted turtle, Chrysemys picta bellii
- (1) Ornate box turtle, Terrapene ornata

- (3) ✓ Five-lined skink, Eumeces fasciatus

- (18) ✓ Prairie ringneck snake, Diadophis punctatus arnyi
- (2) ✓ Milk snake, Lampropeltis triangulum sypila
- (1) ✓ Northern water snake, Nerodia sipedon
- (1) ✓ Western plains garter snake, Thamnophis radix haydenii
- (1) Western worm snake, Carphophis vermis
- * (1) ✓ Black rat snake, Elaphe obsoleta obsoleta
- (1) ✓ Copperhead, Agkistrodon contortrix phaeogaster
- * (1) ✓ Timber rattlesnake, Crotalus horridus

--Keith Coleman
Lawrence

*Olin Karch reported that these two species were inadvertently left off Keith's list. The Timber rattlesnake, according to Olin, was found by "the Humboldt contingent, as they were driving away...on the road next to the campsite." My my, but some herpers are a bit foggy in the morning...

RECENT LITERATURE OF INTEREST

Rattlesnakes Make National Geographic

Stunning photographs of the timber rattlesnake, Crotalus horridus, along with a very interesting article about the research on this species being conducted by Dr. William S. Brown of Skidmore College may be found in the July 1987 issue of National Geographic (volume 172, number 1, pages 128-138). The illustrations include a nice painting showing the internal organs of the rattlesnake and a distribution map showing both present and former ranges for the snake.

The Disappearing Frog Caper

An article in a recent issue of the Journal of Herpetology

addresses the question of why native ranid frog species in western North America have declined (December, 1986, volume 20, number 4, pages 490-509). Many researchers have assumed that the introduction of bullfrogs in the American west was the cause of the extinction of many species of native western frogs, but the data the authors, Marc Hayes and Mark Jennings, have gathered indicates that more likely, it was introduced fish that caused problems for the frogs. It has been suggested that bullfrog populations be reduced to relieve pressure on the remaining native ranid frogs, but the authors recommend that careful field studies first be conducted in view of their findings concerning introduced fish. Simply reducing the bullfrog populations is probably not a good idea, since the bullfrogs themselves are an important resource.

Gray Treefrogs in Kansas

The American Midland Naturalist recently had an article titled "Distribution of Diploid and Tetraploid Species of Gray Tree Frogs (*Hyla chrysoscelis* and *Hyla versicolor*) in Kansas" (Volume 117, number 1, pages 214-217). As most amphibian fanciers know, gray tree frogs are very difficult to tell apart. The males have different mating calls, but the frogs appear to be virtually identical. KHS members David Hillis, Joseph T. Collins, and James P. Bogart collected frogs from throughout their known range in Kansas and did chromosome preparations--the only sure way to tell the species apart. As you would expect, both species are found in the state--including both at some breeding sites. The map they produced of the distribution of gray tree frogs in Kansas is reprinted below:

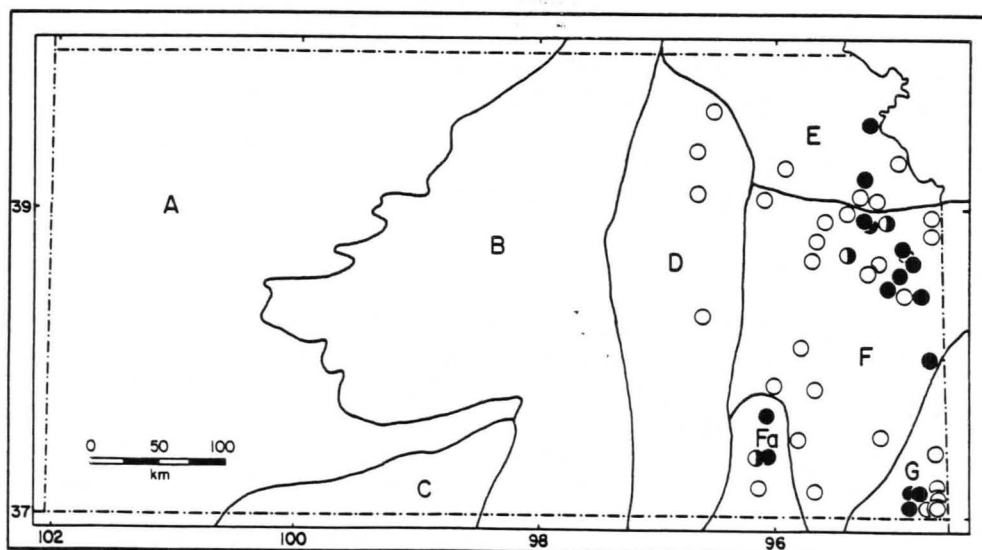


Fig. 1 - Distribution of *Hyla chrysoscelis* (open circles) and *Hyla versicolor* (solid dots) in Kansas. Letters refer to the principal physiographic regions of the area (A: High Plains; B: Low Plains; C: Red Hills; D: Flint Hills; E: Glaciated Region; F: Osage Cuestas, and G: Cherokee Plain; adapted from Kuchler, 1974). Fa identifies the Chautaugua Hills of the Osage Cuestas Region

NOTE: Half circles are localities where both species were found calling at the same site on the same date.

KHS BRINGS YOU NEWS OF THE WORLD

Beaded Lizard Hatched at Tulsa Zoological Park

The Tulsa Zoological Park announced the hatching of a beaded lizard on 9 February. The hatching is a result of a five-year cooperative effort between the Tulsa and Oklahoma City Zoological Parks and is the first successful hatching of the species for either institution. Of particular interest is that the parents have both been in captivity over 15 years and the female had successfully recovered from the removal of a prolapsed, strangulated right oviduct and the surgical removal of two retained, infertile ova in 1983.

Amethystine Pythons Hatch at the Oklahoma City Zoo

Eight male and nine female amethystine pythons (Python amethystinus kinghorni) hatched on 2 March at the Oklahoma City Zoo after 85 days of maternal incubation. A multichannel thermometer, coupled with a computerized printer, recorded temperatures within the exhibit, the egg clutch and female's coil. An orally administered telemetry device provided her internal body temperature. All eggs hatched, with the hatchlings averaging 63.6 cm in length and 52.9 g in weight.

Dallas Zoo Opens Behind-the-Scenes Reptile Exhibit

The Dallas Zoo recently opened an exhibit at its reptile house that allows visitors to look behind-the-scenes at the hatchery/incubation facilities and to view the animal care operations. An open "store front" allows visitors to speak with keepers, and other displays provide for the touching and close-up inspection of biology models. The exhibit, called "The Other Side," is an attempt to show and tell "the other (positive) side" of the reptile and amphibian story.

--AAZPA Newsletter 28(6), June 1987
(submitted by Ruth Gennrich, Lawrence)

Researching Grasslands

Joseph T. Collins, author of "Amphibians and Reptiles in Kansas," is a vertebrate zoologist and editor for the Museum of Natural History at the University of Kansas in Lawrence.

Collins and colleagues, Kelly Irwin of Topeka, Erroll Hooper of Ottawa, photographer, Suzanne Collins and Larry Miller, both of Caldwell have been looking for various species of amphibians and reptiles in the Cimarron National Grasslands.

Collins and entourage arrived in Elkhart, Sunday, May 31st. During their week long stay they have managed to locate 20 species of the 30 previously recorded in this area.

Collins searches in water, ponds, lakes, canyons and under rocks for various wildlife. One or two species are then collected and documented at the University of Kansas. He hopes to encourage university colleagues to venture to the Grasslands for

an in depth study of Morton County history.

Collins is pictured above with a rattlesnake who is non-aggressive, unless provoked, according to Collins.

This photographer took his word on it!

--Elkhart (Kansas) Tri-State News, 11 June 1987

(Submitted by Joe Hartman, District Ranger, Cimarron National Grasslands)

Snakes Just Give Him the Shakes

LUFKIN, Texas--Something's wrong. I didn't see a water moccasin last year or the year before. And I'm always looking hard.

Of course, I'd be the first to agree that no snakes is good snakes. Yet, it worries me. Maybe they're just laying low, waiting for me to drop my guard.

But not this snake-hater. Just when they think it's safe to come out of the water, KA-BLOO-EE!

Not that I'm one of those people who thinks you should kill all snakes. Not in the least. Just kill all the snakes you see.

Indeed, all snakes give me the shakes, but especially water moccasins. I don't cotton to cottonmouths.

Some people will try to tell you that rattlers are the worst kind. But rattlesnakes are gingercakes compared to cottonmouths.

As long as you don't back a rattler into a corner, slap it around and insult its mother, it'd just as soon leave you alone. That's why they rattle. They're shaking as bad as you are and just as scared.

But a cottonmouth comes looking for trouble, will all but look up your address in the phone book and come over to your house to have it out with you.

A fellow I know tells the story about the time he thought he needed to be on the side of the creek he wasn't, and had started across a fallen tree just when a cottonmouth came crawling up out of the water and onto the log.

Naturally, he backed off and then proceeded to walk along the bank for about a hundred yards until he came to another log. But just as he started across the second time, here was the snake to greet him.

"I swear," he swears, "that was the same cottonmouth, following me from one log to another, trying to pick a fight."

So, what did he do?

"As luck would have it, I was struck by a sudden desire to see the uplands instead, and headed myself in the opposite direction."

But the best snake story I know is about the old fellow who could grab one by the tail, snap it like a whip and pop off its head.

I've heard that kind of yarn almost all of my life, and maybe you have, too. But the stories were always secondhand, and only recently have I come across anyone who claims to have actually witnessed such a performance. I especially liked the details he supplied in this version.

The way he tells it, the man was an elder in the church where my friend grew up, back in the hills of Tennessee. On his way to prayer meeting, he liked to flush snakes out of the bar ditches along the road, grab them and give them that most severe case of whiplash. By the time he arrived at the church house, he'd be draped with dead snakes, much to the delight of the youngsters.

The next part is what sells me on the story.

"It aggravated my grandmother to no end," he told me, "in that she considered it not only a frivolous distraction from the study of the Lord's word but conduct most unbecoming a church elder."

Maybe she was right. But I like to believe that the Good Lord was understanding in such matters. An elder in a rural church in Tennessee had to take his sport wherever he could find it.

For that matter, I think that perhaps God even approved, the result being what it was and snakes being what they are.

But that's not to suggest, of course, that He'd want us to kill all the snakes.

--Lawrence Journal-World, 30 May 1987
(submitted by Irving Street, Lawrence)

After Pampering, Rare Turtles to Return to Wilds

Springfield, Mass.--It's a wonderful turtle life: A warm sun lamp, a climate-controlled tank, and all the lettuce you can eat.

It will come to an abrupt halt in June, when the 100 rare baby turtles that led the wonderful life here are released into the wilds. But officials are hoping that their coddling will have boosted their size and thus their chances of avoiding predators.

The reptiles are red-bellied turtles, more common from New Jersey south to North Carolina.

Terry Graham, who has been studying the endangered species for 20 years, estimates that between 200 and 300 of the reptiles with tomato-colored bottom shells are left in the isolated freshwater ponds of Plymouth County.

"The population is fertile, but the problem is that in many years no new youngsters have survived and there have been just enough in good years to keep the population stable," Graham said.

--Topeka Capital-Journal, 12 May 1987
(submitted by Suzanne Collins)

Male Bullfrogs Follow Croaks

Male bullfrogs can distinguish between familiar and unfamiliar bullfrogs by the pattern and location of their croaks, a biologist has found.

The biologist, Mark Davis, a graduate student at the Univer-

sity of Missouri, recorded bullfrog croaks in a pond and then broadcast them back through loudspeakers. Croaks from a familiar frog, coming from its usual location, did not elicit an aggressive response from the listeners. But when the croaks were those of an unfamiliar frog, the males increased their mating calls, gave aggressive croaks, splashed into the water, and then attempted to attack the speakers. When familiar calls were broadcast from an unfamiliar direction, the bullfrogs reacted in the same aggressive way.

Davis theorized that an ability to distinguish the calls of neighbors might help male bullfrogs in their struggle to establish and defend a territory, which in turn is crucial to attracting females for mating. Once males' territories are established, if their neighbors all produce distinct and recognizable calls, then the males can avoid wasting energy on aggressive behavior every time they hear a croak. A strange call, in contrast, represents a new potential rival and a threat to the territorial status quo. By recognizing a newcomer's croak, the frog can make the appropriate hostile response. Likewise, a neighbor's move to a new position might also represent a threat and would trigger aggression, according to this explanation.

The findings were presented recently at the annual meeting of the American Society of Ichthyologists and Herpetologists in New York.

--The Wichita Eagle Beacon, 12 July 1987

Sympathy for Nasty Yaks, Lustful Deer and Ill Emus

Life at the Turtle Back Zoo:

A suburban zoo is a quiet spot until gates open. Marion Klein, a tour guide, takes solitary walks before the public gets here. "This is where I come when I want peace," she said. She patted a baby goat, then headed up a hill, toward the mouflon.

Good animal keepers can't help taking home work. Mrs Mitschke recently took home a ground hog that had his teeth knocked out. Allen Foust, who just won a Best in Show from the New York turtle society, keeps a bucket of turtle eggs in his living room.

After three decades in the business, Richard Ryan, the zoo director, has noticed behavioral patterns. Reptile keepers are introverted.

"A few are normal, but not too many," he said. "Bird keepers are more likely to travel. Mammal keepers relate well to people--people are mammals."

--New York Times, 21 July 1987

(submitted by Suzanne Collins, Lawrence)

State Reptile is 'Captured' on Oxford Wall

Marty Capron may be fulfilling a childhood fantasy as he paints the walls of buildings here in town--but the drawing

doesn't resemble childhood art.

The illustration on the north side of Oxford's city building is a professional rendition of the Ornate Box turtle, the state reptile.

The painting, 7 by 13 feet, was a joint endeavor of the city, Oxford Lumber Co., which donated the materials, and Capron who donated his time.

The turtle, surrounded by an outline of the state of Kansas, was completed in three days.

Capron, a professional artist who occasionally works for the Kansas Fish and Game Commission, said he had been toying with the idea since the state adopted the turtle.

He said he first approached Caldwell with the idea since sixth grade students there proposed the legislation that led to the adoption.

When Caldwell didn't respond by contacting him, Capron approached the Oxford.

"If I can keep just one person from running over one of the turtles, my time will have been well spent," said Capron, a former president of a herpetological society.

--The Winfield Daily Courier, 25 July 1987

Cause of Blackout Still Unknown

The cause of an explosion that triggered a major power outage in downtown Winfield Wednesday is still being investigated.

Two snakes apparently blacked out part of Winfield by shorting a circuit breaker at the West 14th power plant. When city employees attempted to reset the switch shortly after 8:30 a.m., a switching cabinet exploded on the second floor of the plant. Power was restored a few minutes after 4 p.m.

Winfield firefighters found the dead snakes, a bull snake and black snake, lying on a copper electrical bar outside the power plant next to a transformer. That equipment was installed in the 1920s, and is not insulated.

The snakes may have been only part of the problem. This morning, electrical engineers from Kansas City were investigating why the switching equipment exploded.

--The Winfield Daily Courier, 29 May 1987
(submitted by Marty Capron, Oxford)

Giant Musk Turtles Hatched at the Detroit Zoo

The Detroit Zoo hatched four giant musk turtles, the second time this species has been bred at the zoo, but the first time there have been viable hatchlings. Ten eggs were discovered in the exhibit pool on 3 December 1986 and incubated in vermiculite at 25-27 degrees C. Some hatchlings emerged after 142-168 days and weighed 7.3 to 8.9 grams. The remaining eggs in the clutch

were still incubating as of 9 July 1987.
--AAZPA Newsletter, August 1987
(submitted by Ruth Genrich, Lawrence)

Green Snakes Restored to Missouri Homeland

Slivers of green were added to Missouri's outdoors recently when a dozen shy and harmless snakes edged under old boards for a new try at life in their former home territory.

The western smooth green snake, a critter found in Missouri when the state had prairies, is back home--compliments of Wisconsin and the dedication of Tom Johnson, herpetologist for the Missouri Department of Conservation.

The green snake couldn't nip a human if it wanted to. It might harm a fly--more preferably a spider--but will not strike or even attempt to bite.

The reptile, about the size of a foot-long pencil, lives a quiet and sheltered life usually out of human sight.

There were no "ooohs" and "ahhhs" of similar releases--such as turkey or otters--and only four people attended the snake release, but the event had all the excitement and hopes of other successful wildlife restorations by the Missouri Department of Conservation.

"This is a restoration attempt of a natural element--just like ruffed grouse or otters, two of the animals we are trying to restore to our state wildlife ranks, Johnson said.

"Snakes are really good guys. They have been associated with more fear and misunderstanding than any group of animals."

Johnson hopes to change that attitude, but he knows the fear of snakes is acquired--mostly through misunderstanding.

Since some people will go out of their way to get rid of any snake, the release was a low-key event. The release site will not be publicized to protect the snakes, six of which were expected to become new snake mothers in June.

"We purposely chose future mother snakes as another boost in the restoration attempt. We don't plan any checks--just leave them alone and let nature take its course for the present. We will take a population peek next year to see how they are doing," Johnson said.

Meanwhile, the snakes will provide beneficial insect control as they feed on grasshoppers, spiders, caterpillars and other insects.

The snake biologist had hoped to install tiny radio transmitters in the snakes as an aid in locating them.

"But they are too small for the electronic gear," he said.

"Green snakes are prairie animals. They followed the native grasses...replaced by fescue. Pesticides also took a toll on the green snake populations in Missouri," Johnson said.

--The State, 19 July 1987
(submitted by Nadia Seigel, Columbia, South Carolina)

FEATURE ARTICLES

Thamnophis proximus proximus in Nebraska

by

John Lokke

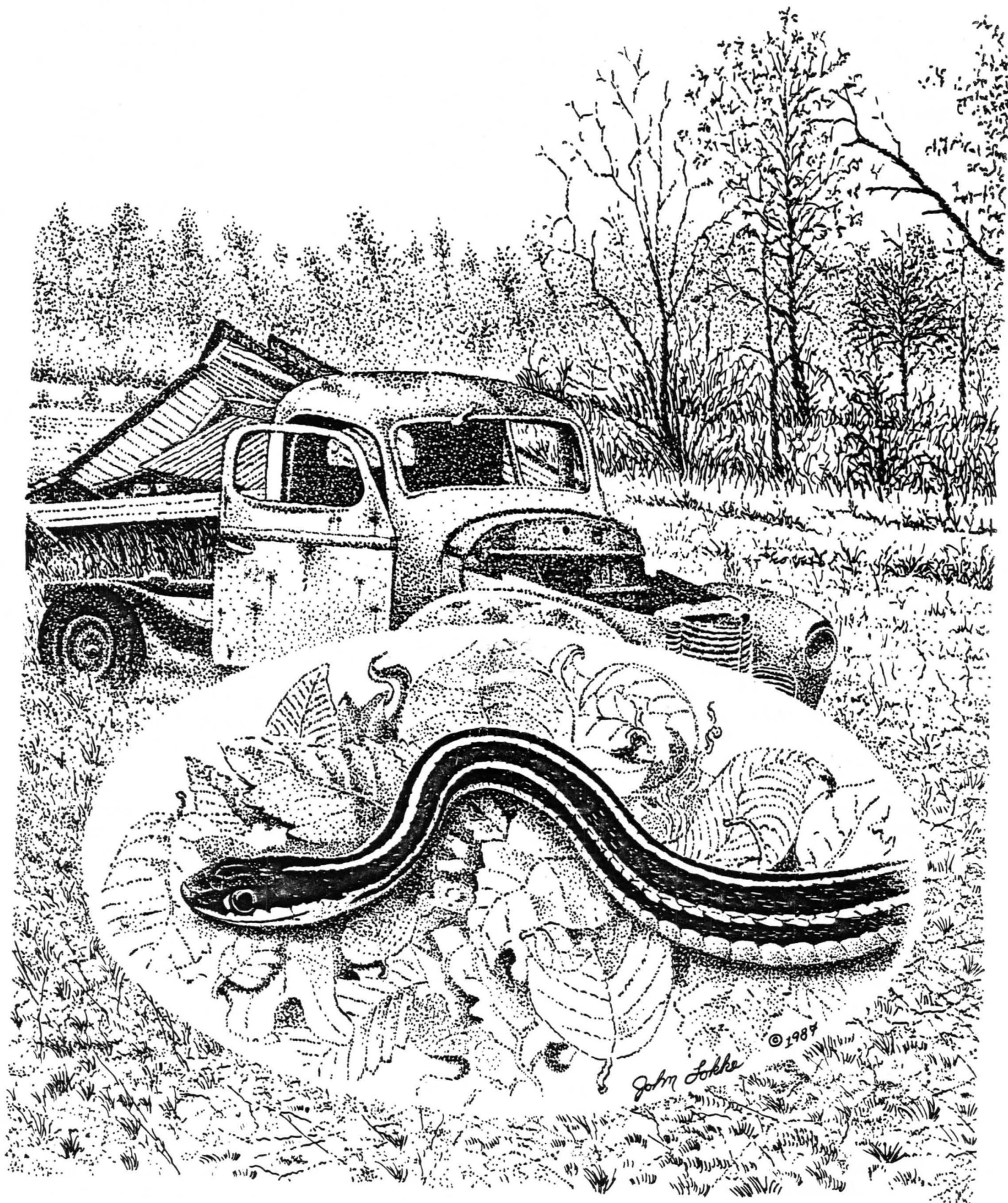
6308 Charles Street
Omaha, Nebraska 68104

Many people living in Nebraska are familiar with garter snakes of the genus Thamnophis. Four species of garter snakes occur in the state, but most people encounter only two kinds. Many of these encounters take place in the city of Omaha, where the western plains garter snake (Thamnophis radix haydenii) is locally abundant. This species and the red-sided garter snake (Thamnophis sirtalis parietalis) occur throughout Nebraska. The red-sided garter snake, although considerably less common in urban areas, is, in my experience, the most frequently seen garter snake in rural areas of southeastern Nebraska. The wandering garter snake (Thamnophis elegans vagrans) is very widely distributed in the American west, ranging from Alberta and British Columbia in Canada through the Rocky Mountains and the Great Basin to southern Arizona and New Mexico. This species reaches an eastern range limit in Sioux County, Nebraska, occurring near the Niobrara River and a few other streams in the area. This is the only member of Nebraska's herpetofauna whose distribution is limited to the Pine Ridge.

The western ribbon snake (Thamnophis proximus proximus) is one of the most attractive and uncommon snakes found in Nebraska. Its distribution is apparently limited to small, localized populations along the Missouri River and a few other streams in the eastern one-fourth of Nebraska. Actual records for this species exist along the Missouri River in Cass, Nemaha and Thurston counties, the Big Blue River in Saline County, the Platte River in Sarpy County, and the Salk Creek drainage in Lancaster County (Hudson 1942; Lynch 1985).

My own experiences with western ribbon snakes in Nebraska is limited to five specimens, all from Cass County. Each of these snakes was found in the same kind of habitat, consisting of Missouri River floodplain adjacent to a limestone quarry in the bluffs. At the base of the bluffs are several deep excavations which now are full of water. In most cases a fairly extensive growth of cattails and small cottonwoods adorn the edges of these "ponds." Red-sided garter snakes are common inhabitants, sunning on the rocks and quickly slipping into the water at the slightest disturbance.

One day in late April, 1985, I was visiting one of these sites, carefully working along the edges of the pond, turning and replacing the available rocks. Under one of these rocks I surprised a very svelt and active garter snake which all but escaped my grasp in a dash toward the water. In my hands was a young male western ribbon snake!



The snake was about 510 mm (20 inches) in length and probably no thicker than the average ball point pen at midbody. The tail was quite long and finely tapered, making up one-fourth of the snake's total length. The entire form was gracile and flowing; the head was distinct from the delicate neck.

These snakes are marked with a simple but striking color pattern with two hallmarks that serve to distinguish it from the other two species of Thamnophis which share its range in Nebraska.

With practice, the casual observer can make these separations and need not have the snake in hand. Western ribbon snakes are marked with three dorsal, longitudinal stripes, one vertebral and two laterals. The ground color is a solid sepia or jet black which, unlike other garter snakes in Nebraska, lacks an alternating checkered or spotted pattern. The vertebral stripe is bright orange yellow that fades to light yellow posteriorly. The lateral stripes are cream or almond yellow and appear on the third and fourth rows of scales. The head is greenish black on top with two tiny gold dots, one on the inside edge of each parietal scale. The eyes are somewhat larger than those of other Thamnophis, and the iris is gold. The lips, chin and throat are white and unmarked. The other three species of garter snakes found in Nebraska have barred lips. The belly is greenish white and unmarked.

In my efforts to observe and photograph western ribbon snakes in the wild, I have noted on two occasions a behavior that contributes to the likelihood of their being easily overlooked and thus infrequently reported. In addition to a general shyness and swift movement towards the safety of a body of water when disturbed, ribbon snakes I have flushed from under rocks or basking at the waters edge would dash into the water, swim a short distance across the surface, only to stop and float motionless with the head and neck elevated among tall grasses partially inundated near the waters edge. The dark ground color and tawny longitudinal stripes of the snake amongst the still dormant grasses and cattails of early spring conceal the little reptiles very well indeed. This habit of fleeing into and remaining stationary in vegetation of similar color and form has also been noted among several species of whipsnakes, genus Masticophis (Collins 1982; Tennant 1984). I can only guess that this form of concealment kept the western ribbon snake out of my view for some time. I have visited the microhabitats described above for six consecutive years in search of Nebraska's less common snakes, but only in the early spring of the last two years have I been able to find this species.

As for other aspects of the natural history of the western ribbon snake in Nebraska, my experience is, unfortunately, very meager. Western ribbon snakes, like all Thamnophis, bear live young rather than lay eggs and I have no data from Nebraska concerning number of young in a litter or characteristics of the young. Collins (1982) indicates that the number of young per litter varies from 4 to 27 in Kansas.

Ribbon snakes are known to feed on small amphibians and fish. I collected one small specimen for close-up photography and scale counts which ate a Blanchard's cricket frog (Acris

crepitans blanchardi) before being released.

Like most members of Nebraska's herpetofauna, Thamnophis proximus proximus enjoys a period of activity from April to October and may become nocturnal during the warmer parts of summer.

The locality records for Thamnophis proximus proximus cited above reflect a wide but thin distribution along the major drainages of eastern Nebraska. Much more is yet to be learned about the natural history and range of this species in Nebraska. It is likely that the western ribbon snake is better dispersed than existing literature would suggest, by virtue of its occurrence in ditches, oxbow lakes, old rock quarries, floodplains, etc.--in general, places that afford a requisite aquatic microhabitat that is less affected by agricultural practices and less often visited by humans.

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Another Bullsake Story

by

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I could see the large snake slowly crossing US Highway 81 as I started up the hill south of Caldwell that spring afternoon in 1987. I was more than a mile away when a local farmer topped the hill heading north. The snake was in the middle of the road and I thought the big reptile was about to die. However, the farmer pulled his truck to the edge of the road just enough to miss the snake.

There was another small car about a mile ahead of me, also heading south at the time. I was amazed when it quickly pulled to the right and came to a quick stop in the ditch. It seemed the driver was also wanting to miss the snake. That driver quickly jumped out of his car and headed for the snake, pulling his belt from his pants.

It was only about a minute later when I pulled my pickup off

the road behind the small car, but it was too late for the snake. The driver of the small car had already beaten the reptile to death with his belt as other cars and trucks dodged from side to side to miss the man and/or snake.

The man seemed surprised when he turned and noticed me parked behind his car. He walked toward me and stated proudly, "I think it's dead--I mashed its head."

I waited a few seconds and then replied, "Why?"

The man then seemed very nervous and said, "It was a snake."

I pointed out that the six-foot snake was a bullsnake and that some farmers and ranchers get rather upset when someone kill such a beneficial animal. The man slowly moved back toward his car and said, "Oh, that was a bullsnake." And then, as he worked to hold his pants up and put his belt back on, he said, "I'm sorry."

The man got into his car, which had a Missouri plate, and drove away. The large bullsnake remained in the center of US 81 as a remainder of one man's stupidity.

