

KANSAS HERPETOLOGICAL SOCIETY

TENTH ANNIVERSARY MEETING

12-13 NOVEMBER 1983

DOWNS AUDITORIUM

MUSEUM OF NATURAL HISTORY, UNIVERSITY OF KANSAS

LAWRENCE

PROGRAM

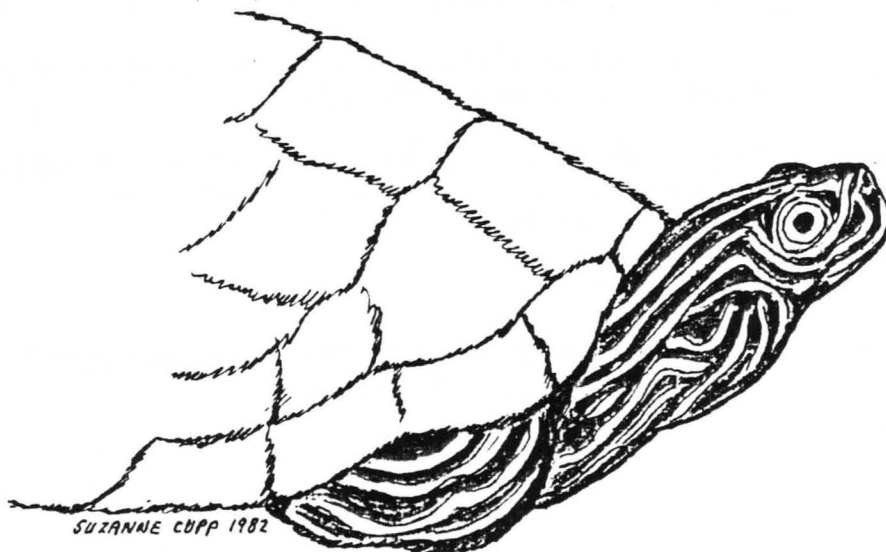
SATURDAY, 12 NOVEMBER

- Noon -REGISTRATION at Downs Auditorium Entrance
- 1:00 pm -WELCOME, Philip S. Humphrey, Director, Museum of Natural History
- 1:15 pm -LOUIS GUILLETTE (Wichita). "Reproduction in Kansas lizards (Genera Crotaphytus and Eumeces). " 15 minutes
- 1:35 pm -JOSEPH COLLINS (Lawrence). "The spring peeper (Hyla crucifer) in southeastern Kansas." 15 minutes
- 1:55 pm -KHS General Business Meeting and Election of Officers, KHS President JOSEPH COLLINS presiding
- 2:20 pm -BREAK for Group Photograph by LARRY MILLER on front steps of the Museum
- 2:40 pm -PETER GRAY (Lawrence). "The Strecker's chorus frog (Pseudacris streckeri) in southern Kansas." 15 minutes
- 3:00 pm -JAMES B. MURPHY (Dallas Zoo). "Husbandry of reptiles in zoological gardens." 45 minutes
- 3:50 pm -SLIDE SHOW--Bring your best color slides of amphibians and reptiles, and tell us about them. Limit per person = 25 slides.
- 5:00 pm -DINNER BREAK
- 7:00 pm -BEER social and AUCTION in BIG EIGHT ROOM of the Kansas Union, next door to the Museum.

SUNDAY, 13 NOVEMBER

- 9:00 am -JEFFERY T. BURKHART (Dodge City). "The green toad (Bufo debilis) in western Kansas." 15 minutes
- 9:20 am -KELLY J. IRWIN (Topeka). "The alligator snapping turtle (Macroclemys temmincki) in Kansas." 15 minutes
- 9:40 am -RAYMOND K. LORAIN (Lawrence). "The present status of the cave salamander (Eurycea lucifuga) in southeastern Kansas." 15 minutes
- 10:00 am -LARRY MILLER (Caldwell). "The red-spotted toad (Bufo punctatus) in Barber County, Kansas." 15 minutes
- 10:20 am -BREAK for TOUR of Museum's Division of Herpetology, led by RAYMOND K. LORAIN
- 10:50 am -SLIDE SHOW: History of the KHS, an extravaganza of color slides depicting our Society's first 10 years. All members are warned to attend this show and defend their reputations.
- 11:45 am -JOHN SIMMONS (Lawrence). "Reptiles of the Venezuelan Llanos." 30 minutes
- 12:20 am -HAVE A GOOD TRIP HOME, and support your KHS during its next decade. See you at the Silver Anniversary Meeting in 1998.

NOTE: ERIC RUNDQUIST, KHS Secretary-Treasurer, will be on hand to take 1984 dues. Also, bring donations to the AUCTION. If you have any questions about this meeting, call John Simmons (913) 864-3342, or Joseph Collins (913) 864-4920.



KHS FIELD TRIP 16-18 SEPTEMBER AT BOURBON STATE FISHING LAKE

The final 1983 KHS field trip will be held in Bourbon County, Kansas, at the Bourbon State Fishing Lake. Primitive camping is available at the 103 acre impoundment on Wolfpen Creek, a tributary of the Marmanton River.

Bourbon County is in eastern Kansas along the Missouri border. The lake is located five miles east of the junction of Highway 59 and a county road at Elsmore. Signs mark the turn at the junction. Elsmore is located between Moran and Savonburg on Highway 59. The lake is very close to the Allen-Bourbon county line, so collecting in the two counties will be quite easy.

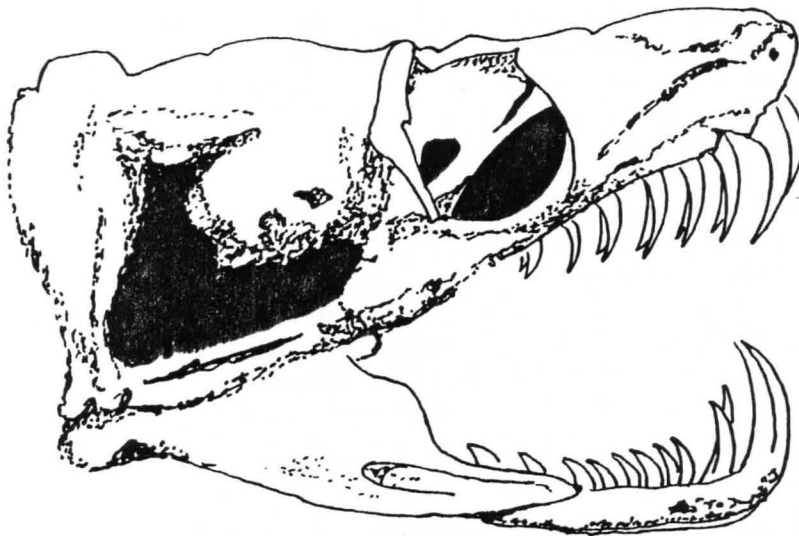
Those attending the meeting should be able to get information from the Kansas Fish and Game officer on duty on CB channel 5, or they may contact KHS members on CB channel 4. The lake is small, so there should be no problems finding the KHS.

Plan to arrive Friday evening, the 16th, if possible. We expect the Emporia Chapter of the Audubon Society to join us at Bourbon State Fishing Lake for this field trip. Bring friends, and let's make this the best field trip of the year.

For further information, contact:

Larry Miller, Program Chairperson
524 North Osage Street
Caldwell, Kansas 67022

Home phone (316) 845-2680
Work phone (316) 845-2414



MEADE COUNTY KHS FIELD TRIP SUCCESSFUL

Although plagued by tornadoes and herds of Memorial Day weekend campers, all sixteen people who participated in the Meade County Field Trip 27-29 May had an enjoyable weekend of rock turning, road cruising, and general relaxation under the only dense stand of trees for miles around! I would like to thank Joe Lillie of the Kansas Fish and Game Commission for allowing KHS members to use facilities in his care and thanks also to Mark Goldsberry, manager of Lake Meade State Park for his valuable assistance.

The following is a list of species either collected or observed in Meade County from 24 May through 29 May:

Plains Spadefoot, Scaphiopus bombifrons
Great Plains Toad, Bufo cognatus
Woodhouse's Toad, Bufo woodhousii
Cricket Frog, Acris crepitans
Spotted Chorus Frog, Pseudacris clarki
Striped Chorus Frog, Pseudacris triseriata (county record, not collected)

Bullfrog, Rana catesbeiana

Yellow Mud Turtle, Kinosternon flavescens
Ornate Box Turtle, Terrapene ornata
Red-eared Slider, Chrysemys scripta

Collared Lizard, Crotaphytus collaris
Eastern Fence Lizard, Sceloporus undulatus
Texas Horned Lizard, Phrynosoma cornutum
Great Plains Skink, Eumeces obsoletus
Six-lined Racerunner, Cnemidophorus sexlineatus

Texas Blind Snake, Leptotyphlops dulcis
Eastern Hognosed Snake, Heterodon platyrhinos
Prairie Ringneck Snake, Diadophis punctatus
Coachwhip, Masticophis flagellum
Glossy Snake, Arizona elegans
Bullsnake, Pituophis melanoleucus
Prairie Kingsnake, Lampropeltis calligaster
Common Kingsnake, Lampropeltis getulus
Milk Snake, Lampropeltis triangulum
Longnose Snake, Rhinocheilus lecontei
Western Ribbon Snake, Thamnophis proximus
Plains Garter Snake, Thamnophis radix
Blotched Water Snake, Nerodia erythrogaster
Prairie Rattlesnake, Crotalus viridis

There were a total of 29 species observed.

Our next field trip will be 16-18 September at Bourbon County State Lake. See you there!

--Kelly J. Irwin
Topeka, Kansas

KHS OFFICER NOMINATIONS FOR 1984

The KHS Nominating Committee, consisting of Kelly Irwin, Raymond Loraine and John Simmons, have proposed the following individuals for 1984 office:

For PRESIDENT-ELECT: Marty Capron (Oxford)
Louis Guillette (Wichita)

For SECRETARY-TREASURER: Eric Rundquist (Lawrence)

Please note that current President-elect John Fraser automatically assumes the KHS presidency for 1984. Further, retiring President Joseph Collins will serve as Past-President for 1984.

The nominees for President-elect and Secretary-Treasurer will be voted on at the KHS General Business Meeting, on Saturday, 12 November, in Lawrence.

COMMERCIAL COLLECTING PERMITS FOR KANSAS HERPS

The Kansas Fish and Game Commission now requires a permit for "commercial harvest" of any amphibians or reptiles in the state. There is currently no fee being charged for the permit, but an annual harvest report must be filed. The application for the permit calls for the following information:

1. Description of methods of harvest and kinds of capture equipment.
2. The uses to be made of the animals collected under the permit.
3. When and where the harvest of amphibians or reptiles will occur.
4. How many individual animals will be taken.

Commercial collecting is not allowed between 1 April and 15 June.

COVER THOSE HOLES IN YOUR WALL...

...with stunning "exquisite, full-color art prints" by the renown herp artist David M. Dennis. There are currently four prints available: (1) Green Frog and Damselfly, (2) Painted Turtle and Dragonfly, (3) Spotted Salamanders in Courtship, and (4) Red Salamander and Hercules Beetle.

Each print is 20 x 24 inches, signed by the artist, and numbered in limited editions of 500. The price is just \$30 each (\$95 for the set of four), plus \$4.50 shipping. For orders, further information, or a color brochure describing the prints, contact:

Biographics
12 Eagles Head Road
Ithaca, New York 14850

IN THE FIELD

Times have changed since the infant KHS was incubated and ultimately hatched. Membership has ebbed and swollen, and a great many changes have swept our chosen field of interest, changes on legal, technical, and ecological levels. Things just aren't the same anymore. In the airport bar in El Salvador where I sipped a ron y cola in 1977 while en route to Costa Rica, mercenaries now lounge between battles. Rebel forces sip the suds in Nicaragua where my fellow herpers and I used to relax. You just can't grab a snake-hook and head for the tropics anymore. Yes, even the simple pleasures of herper life have changed, even the field trips.

Since the beginning of the KHS, field trips have been an integral (at times infamous) part of the KHS spirit. Ah, the adventures of the open highway, the road food...microwave sandwiches at Kwik Stops and six packs of hot soda pop. Cold cans of creamed corn or noodle soup ingested while huddled in an economy car during a summer deluge on a distant Barber County road. But on the road we've sampled some of the world's finest cuisine, like the burgers at that little joint on the west side of the street in Coldwater, or the breakfasts at the Latham Cafe. Victuals fit for a king or a snake-hunter, it was sometimes the food that was the biggest part of the adventure. Or maybe the car problems.

The road hunting, too, has always been a big slice of field trip pie. Falling out of trucks, being thrown off of car hoods, the sight of a dozen herpers armed with snake-hooks atop an old car in a lightening storm. The thrill of almost mistaking a little prairie rattler for a bullsnake in the dim glow of your tail-lights. The miracle that no one ever remembered to bring a flashlight. Or the genuine rush of adrenalin at finding a Meade County longnose snake still alive on the road. And the car problems.

In the early days it was always the striking of camp that drew the biggest cheers, the on-going saga of Jan Perry vs. Tent, or what sort of new fangled device Kelly Irwin would bring to hole-up in. Nowadays, its more the excitement of just finding the camp at all!

At times it has been the sheer numbers of herps (and county records) that made the trip. Like that mid-1970's, mid-summer meeting at Cheyenne Bottoms when it seemed as though the whole state was alive with herps. It was the mostest and the biggest, fer sure. And oh yes, the car problems.

The weather sometimes fouled us up, too hot or too dry or too wet. Yet always we perservered. The sight of dual tornados at the Meade County trip this spring brought a definite high point to that trip, but there were so many high points to that trip it is hard to single out one in particular...even something so impressive as a twister. Like one entire afternoon when it was too hot to herp, five of us lay back in seven inches of clear, cool Cimmaron River beneath the bridge demolishing two cases of the proper refreshment while Kelly Irwin serenaded us with the plaintive verses of "This Bud's 3.2%." It was one of those grand sort of times. And yes, we had car problems.

Attendance has fallen off for field trips over the years, but there is surely no lack of adventure, thrill or beauty at the root of this. Perhaps it is the economy, the cost of travel. Yet, for the money, Australia never held a candle to a KHS field trip. The three grand I spent Down Under would have been as wisely invested in ten year's worth of rambling about Kansas with a couple of comrades in a car that wouldn't run, hunting glossy snakes and copperheads and sampling the local cuisine. Sometimes the strangest of adventures are to be found in your own backyard, and like Kelly Irwin has so often told me, "This whole state is my backyard!"

I reflect back upon all of this now from my table in the pool hall here in Oxford, the jovial three-hundred-pound Mexican bartender hovering over my notebook as I write, probably wondering what I'm getting at. A lot of herping has fallen to other activities, inside things like breeding tri-colored kingsnakes and such. But I surely think that those dedicated folks would enjoy a weekend on the road, beneath the open sky, seeing herps alive and outside and free as they really should be. It'd be nice to see some more of you next time the KHS goes afield.

--Martin B. Capron
Oxford, Kansas

KHS BRINGS YOU NEWS OF THE WORLD AND BEYOND

Father's Demonstration Ends Painfully

LAKE CITY, Fla. -- Arlie "Buddy" Waldron was showing his son how to handle the canebrake rattlesnake the boy found in a tree. Waldron, 42, was going to bite the reptile's head. But, before Waldron could bite, the snake bit -- seven times, once on Waldron's tongue. He was hospitalized for four days and his head and neck "swelled up like a balloon," Waldron said. He's OK now, but he's given up snake-biting.

--USA Today, 12 August 1983

(submitted by Loren East, San Francisco, California)

Venom Research Takes Wrong Turn

ST. LOUIS (AP) -- A man bitten by his pet Gila monster while doing venom research was released from a hospital intensive care unit Tuesday after recovering from the lizard's poison, hospital officials said.

William Johnson, 23, was discharged after spending a painful night under observation, said Charlene Bancroft, assistant director of public relations at Barnes Hospital.

Johnson, a paramedic and amateur herpetologist, had been conducting studies on the lizard's venom, police said. The lizard bit Johnson after he took it out of a cage at his home Monday night to extract some of the poison.

"Everybody thinks they (Gila monsters) are slow," said Robert Vico, another herpetologist who was with Johnson when the reptile grabbed Johnson's right index finger. "But that's a myth. They can move fast. This one just whipped around and nailed him."

Gila monsters do not have fangs, Vico said. Their venom is chewed into the victim through six grooved lower teeth.

--Lawrence Journal-World, 17 August 1983

(submitted by Irving Street, Lawrence, Kansas)

Unusual Weather Triggers Many Miseries

Unusual weather patterns that hurled storms, floods and record-breaking heat at the nation are now being blamed for more suffering: rattlesnake bites, surfing accidents, death-dealing mosquitoes, hay fever and even the plague.

Dry weather coaxed rattlers out of the Rockies and damp heat made a perfect breeding ground for encephalitis-carrying mosquitoes in the East.

Storms and high tides changed the shape of beaches in California, sending surfers crashing into newly formed sandbars, resulting in broken backs. And wet, cool weather in New Mexico fostered plague-carrying rodents.

El Nino, a recurring phenomenon involving Pacific sea temperatures, currents and trade winds, has been blamed for the unusual weather.

Long known to South American fishermen, El Nino refers to the Christ child, because it usually occurs around Christmas time. This year, the child stayed until July, spreading unseasonal rains, killing heat and storms across the land.

Meteorologists declared the 1983 edition of El Nino dead last month, but the aftermath continues...

Dry, hot weather has been no help in Montana, where rattlesnake bites are becoming more common as the reptiles come down from the mountains and into the more populated areas, following mice who search the lower areas for food and water.

The snakes are likely to be around for the next few weeks, until cooler autumn weather arrives, said Vince Yannone of the Fish, Wildlife and Parks Department. Three people in the Helena area have been bitten recently, officials said.

--Lawrence Journal-World, 17 August 1983

"Heard in Lawrence"

Perry Kitsmiller, Route 2 Lawrence, killed a 3-foot rattlesnake while crossing a pasture in the Route 1 area Monday.

Kitsmiller said he has eliminated rattlers before, but that it has been "about eight or nine years since I ran into the last one." He said the snake had five rattles, indicating it was about five years old. He said he hit it first with a rock and then finished it off with a pitchfork.

But Kitsmiller said he had seen no rise in the intrusion of rattlers in the local area. In other states hot, dry summer weather is luring rattlesnakes into populated areas, and snakebites are becoming more common, wildlife officials say.

At least three people in the Helena, Mont., area have been bitten recently, and one, school official Mike Cummings, spent four days in a hospital -- part of it because he is allergic to the antivenin.

The Fish, Wildlife and Parks Department there has said the snakes are likely to be around for the next few weeks, until cooler autumn weather arrives. The rattlers are following mice that migrate from the hills in search of food and water, he said. Midday heat makes the snakes most active in the mornings and evenings.

Locally, Vic Counts, project manager at Clinton Lake, said Monday that he has heard no reports of an abnormal incidence of snakes in wooded areas because of the hot weather.

"Nothing beyond the usual activity," Counts commented.

--Lawrence Journal-World, 16 August 1983

Snakes Drafted for Study - Clinton Denizens to Aid in Venom Research

Three timber rattlesnakes, minding their own business at Clinton Lake only recently, are destined to become participants in snake venom research in Salt Lake City, Utah.

Joseph Collins, a vertebrate zoologist at Kansas University's Museums of Natural History, will take the snakes with him to Utah in August when he attends a series of professional meetings there. The snakes will be turned over to Jim Glenn, a venom researcher at the Veterans Administration hospital in Salt Lake City.

"Jim is going to extract venom from each of the snakes, and I will bring them back and release them in some remote area of northeastern Kansas," said Collins.

"It seems that in the last few years, medical researchers -- those dealing with venom -- have discovered that snake venom varies from region to region in the United States," Collins explained. "This was first noticed with a reptile called the Mojave rattlesnake."

Researchers, he said, noticed considerable difference in the strength of venom from the Mojave rattlers found around the Mexican border and those found along the border between California and Nevada.

"This made a difference in how you would treat a person who was bitten by a snake," he said.

Now, Collins said, all snake bites from a particular type of snake are treated the same. A person bitten by a timber rattlesnake in Kansas receives the same treatment a victim would receive in Nevada.

Glenn's research will include venom taken from poisonous snakes found in various regions around the United States, such as the timber rattlesnake and the western diamondback rattlesnake.

From that study, the KU researcher said, Glenn hopes to be able to provide hospitals and physicians around the country better information about the treatment of snake bites in their area.

"Venom is an unbelievably complex substance," Collins said.

There are two main types of venom. One is neurotoxic, which affects the nervous system and is not painful. A victim of a bite will tend to lapse into a coma.

The other type is hemotoxic, which destroys tissue and is very painful. The four poisonous snakes found in Kansas and Douglas County -- the timber rattlesnake, prairie rattlesnake, copperhead and massasauga rattlesnake -- all have hemotoxic venom.

If Glenn's research proves that toxicity of snake venom does differ drastically from region to region, it may also alter the way antivenin -- the serum used to treat snake bites -- is produced.

Currently, Collins said, it is made by collecting venom from snakes found anywhere in the species range. The venom is mixed together and injected into horses. When the horse has built up an immunity, its blood is extracted and used in making the antivenin.

It is possible that, in the future, antivenin will be made regionally using venom from snakes found only in that part of the country.

However, there is another matter that Glenn's research must deal with, Collins said.

"Within the same area, (venom) can vary from snake to snake," Collins said. "But it's nice to know that so if you know the symptoms, the physician knows what to expect."

Information regarding treatment of snake bites and patient response to that treatment is difficult to accumulate, Collins said, because instances of snakes biting people are "extremely rare."

"So, instead of waiting until we've accumulated enough victims, why not examine the venom and determine what its properties are," he said.

--Lawrence Journal-World, 4 July 1983
(submitted by Orlando Grissman, Sibleyville, Kansas)

Tracking the Western Green Toad

DODGE CITY -- Jeff Burkhart coaxed the recorder into play, shut his eyes and smiled affectionately as a piercing series of screaming mechanical bleats filled his office.

This was it, he said, the voice of his summer pursuit. A voice, he added, that most people have never heard.

In the rough prairie terrain of Wallace and Logan counties, residents may go through their entire lives ignorant of these bellowing voices -- the sound of rare "jewels" hidden about the open grass plains.

However Burkhart is slowly indoctrinating them. An associate professor of biology at St. Mary of the Plains, he has devoted much of his summer to tracking the illusive [sic] Western Green Toad -- a secretive species believed to be threatened by a changing western Kansas environment.

Unlike the burly, gray Rocky Mountain Toad, the Green Toad is an exotic creature just over an inch long that adds a dash of color to a neutral prairie.

"They really are like little jewels, emerald green with yellow and black spots. And they are so secretive the local people aren't even aware of them," Burkhart said.

Historically, this prairie toad has never been very common throughout Kansas -- only in extreme western counties. Burkhart describes it as being nearer to a Mexican desert toad that extended its range northward into Kansas.

Records about it appeared through the 1920s, tracing the toad to the Cimarron River in Morton County. In the '30s it was designated as a threatened species and accounts vanished.

"With farming practices, irrigation and the drought...there were no more sightings until 1979. Stan Roth, a Lawrence biologist, was working on a project for Fish and Game and saw one of these toads in Wallace County," Burkhart said.

Burkhart, who is a member of the Amphibian and Reptile Committee of the Kansas Nongame Wildlife Advisory Council, decided to submit a proposal to the group requesting funds to study the elusive toad.

"Around \$125,000 is donated each year. It's part of what we call the Chickadee Check-off, that box you check on their state income tax that allows individuals to donate," he explained.

Burkhart's proposal was accepted "probably because nothing has been known about this toad and because I was the only one in western Kansas to do something like this."

His summer mission: determine the status of this obscure toad in western Kansas. His funding: \$1,400 to cover more than 3,000 miles of travel in 10 counties. His problem: he probably couldn't have picked a more difficult toad to study.

"Apparently they are limited to areas of undisturbed prairie which is not heavily grazed -- a mixed grass prairie of rolling hills and pond

systems. And they're very secretive. They spend most of the year underground and are only active following a rainfall of 2-3 inches, when they begin mating," he explained.

Considering this summer's weather, rain has become the mainstay of his research. But Burkhart has also developed a network of farmers and ranchers who allow him to roam their lands and go so far as to point out possible breeding grounds.

"Probably the most valuable aid to finding the toads is by talking to local people. We find them by describing their habitat to families and they take us out there. I have contacts out there who call me the minute they get a good rain," Burkhart said.

So far, Burkhart's prognosis for the Green Toad is directly linked to the breakup of its habitat and a dropping water table -- factors that could eventually destroy this toad that is vulnerable to change.

It disturbs him to see that habitat destroyed by plowing pastureland that will only produce a marginal crop. He advocates tax incentives to preserve native pastures.

"You could make a case for this toad as being very insignificant, but the ability of insignificant species to maintain themselves is sometimes an indicator of overall stability of our system and the impact man has on the environment," Burkhart said.

--The Hutchinson News, 9 August 1983
(submitted by Larry Miller, Caldwell, Kansas)

Apartment Dwellers Climbing the Walls Over Rumors of Snakes Behind Partitions

MADISON, WIS. -- Things that go "thump" in the night have forced a landlord to evacuate 10 families from an apartment house while an exterminator gets a grip on rumors that former tenants left behind a boa constrictor or two.

Odors from air vents and strange noises have set off serpentine tales about snakes 6- to 10-foot long climbing the walls.

But exterminator David Pauli's attempt to lure the creepy, crawly critters into the open with live bait -- a raccoon, rabbit and white mice -- produced no results Monday.

That didn't erase the suspicions of LaVone Stout, who lives with her mother in the 20-year-old Les Maisonettes complex on the city's south side.

"I don't know if it is a snake or not," said Ms. Stout, who returned to her apartment because her ailing mother didn't like living

in a motel. "Something makes a 'thump thump' sound. If I see a pair of eyes looking out the vents at me, I'll be moving."

The combination of odor and noise leads her to believe in the snake theory, Ms. Stout said.

"I worked for a time for a veterinarian and I know that smell," she said. "It's a very foul smell."

Pauli agreed. While he was not positive there was a snake slithering about, he said, "There is definitely something in the walls and a strange odor coming out of the vents that could tie in with snakes."

But reports of thumps and scratching also could be explained by rodents, he said.

Boas kill by wrapping themselves around their victims and strangling them, but Pauli said he doubts that a boa would attack anything as big as a human.

Rumors of a snake on the loose are taken seriously by residents of the 70-unit complex because several students had boa constrictors they would show to neighbor children.

"I know there was a boa," Julio Rios, 12, said. "Some college students had it. They let me pet it. It was about six feet long."

One rumor has it that an exotic dancer moved in with four boas but only took one when she left.

Building Manager Lisa Barkelar said 10 families were moved out of the complex into hotels Friday until the mystery could be solved -- and they were advised not to return prematurely.

"I don't know if there is a snake or not," Ms. Barkelar said. "It's strictly a rumor so far. But we've got to do the checking."

When Ms. Barkelar was asked why she doesn't simply take a hatchet through the plaster wall at the source of the noise as an alternative to baiting, she replied: "We would have holes all over."

Management has no rule about the kinds of pets tenants can keep, but Ms. Barkelar indicted that soon may change.

"We've never had one," she said, "but we will have."

--Lawrence Journal-World, 23 August 1983
(submitted by P. D'Artagnan, Lawrence, Kansas)

Poison Snakes are Sacrament for W. Virginia Congregation

JOLO, W. Va. -- Some people can't wait for the first robin of spring, but when the ancient hills of Appalachia begin to blush with redbuds Dewey Chafin's fancy turns to snakes.

Rattlesnakes, to be specific.

"I love to catch 'em," says the unemployed coal miner, who often handles poisonous reptiles during services at The Church of the Lord Jesus.

Chafin is a resident of Jolo, a place where people wager their dollars on fighting cocks and their souls on poisonous reptiles.

Not everybody, of course, attends the local Jesus churches or the clandestine cockfights. However, this remote, rugged southern West Virginia community not only is the site of the oldest, continuously active serpent-handling church in the area, but also the scene of frequent, surreptitious get-togethers where specially bred fighting fowl battle to death while onlookers bet on the outcome.

Chafin and Johnny Adair, both local residents, say they shy away from these illegal, weekend gambling events. Their Saturdays and Sundays are devoted instead to a non-secular and strictly legal form of risk taking.

The two men spend their weekends attending their respective churches, where they often take up serpents and clasp the poisonous snakes to their bosoms as an indication of their religious fervor and faith.

Chafin, whose mother and stepfather founded Jolo's Church of the Lord Jesus some 30 years ago, watched his sister die from a rattlesnake bite suffered at such a ceremony.

"Her name was Columbia Gay and she died back in 1961," he says. "I had handled the same snake earlier in the service."

Since then, Chafin says, he himself has been bitten some 86 times, but continues to worship in this unusual fashion.

Although worshippers often flock in from nearby communities such as Panther, Beartown and Cinderella, many of Jolo's residents have never been to a Jesus church and say you couldn't pay them enough to pick up a rattlesnake. On the other hand, Chafin, who keeps his church's reptiles in the closet of a spare bedroom at home, says his hands get itchy if they go too long without handling a wriggling rattler.

"I've got two rattlers and a copperhead in the closet," he says. "But, these snakes are holdovers from last summer, and they may not last much longer."

So, says this soft-spoken man, who procures snakes for his church and other such houses of worship in the area, he plans soon to foray for some fresh sacraments.

"I get them up there," he says, gesturing at the steep, wooded hills that surround Jolo. "You usually can find them on the bare, rock ledges once the weather gets warm."

Chafin usually snags his snakes with a metal hook attached to a pole.

"Sometimes, though, I'll just reach down and pick 'em up with my bare hand. I caught 26 one day last year, 25 rattlers and one copperhead."

Adair attends a competing Jesus church in the area and also has gone on snake-hunting expeditions. He acknowledges, though, that Chafin is the master when it comes to catching the scaly reptiles.

Chafin, who says he has been handling snakes for 27 years, wears his mantle modestly.

"It's not hard to catch them," he says. "There's plenty of snakes in these hills."

There are also plenty of fighting cocks in hills and hollows surrounding Jolo, whose some 500 residents are scattered over a radius of two or three miles.

"Lots of people raise them around here," says David Church, a local resident. "You go up some of these hollows and they're running around everywhere."

Church's observations are corroborated by Magistrate Mike Nasser, who recently levied \$20 fines on 74 people arrested at a Jolo cockfight.

Unlike serpent handling, which is legal in West Virginia, cockfighting is punishable by a maximum fine of \$100 and six months in jail.

--Lawrence Journal-World, 11 June 1983
(submitted by J. Edward Simmons)

RECENT LITERATURE OF INTEREST

Towards a Toad-all Diet

Claussen, Dennis L. and Jack R. Layne, Jr. 1983. Growth and survival of juvenile toads, Bufo woodhousei, maintained on four different diets. Journal of Herpetology 17(2): 107-112.

According to this paper, an unbelievable 15 million frogs and toads are used each year in the United States for teaching and research. With that in mind, the authors decided to compare the nutritional qualities of four common laboratory diets for amphibians. The diets they selected for testing were mealworms, crickets, cabbage loopers, and a diet which was a combination of all three items. They collected juvenile toads (Bufo woodhousii) and fed them regularly, weighing each individual three times per week during the nine weeks of the study. About 80% of the young toads survived the entire nine weeks. All four diets were good, but the authors concluded that mealworms were superior for promoting growth in the toads.

Sex in Mexico

Guillette, Louis J., Jr. 1983. Notes concerning reproduction of the montane skink, Eumeces copei. Journal of Herpetology 17(2): 144-148.

KHS member Louis Guillette of Wichita State University reports here on a study he conducted on a high altitude Mexican lizard. He documented for the first time that this lizard, Eumeces copei, is viviparous (live-bearing), as had been suspected. He collected lizards from April-June, and in August and October, at elevations of 3000 to 3200 meters. After preservation, he measured the gonads of both sexes. For additional evidence of their reproductive cycle, he also examined 80 museum specimens.

Guillette discovered that these lizards mate in the fall, with the young being born in the spring. He expected them to be viviparous, since the short summer at high elevations would pose problems for eggs incubating in the environment, and also mean the small young would hatch right at the end of the growing season. Spring birth gives them the entire summer to feed and grow before they must hibernate for the first time.

TWELVE NEW, ADDITIONAL, NEVER-BEFORE-REPORTED HERPETOLOGICAL RECORDS FROM THE GREAT STATE OF KANSAS

It has recently come to my attention that considerable potential exists for new herpetological records in Kansas. The following important contribution demonstrates the lack of imagination of most recent herpetologists, and further shows the enormous amount of additional scientific investigation that is required in the state of Kansas.

NEW STATE RECORD: Bipes canaliculatus. Observed 18 August 1983, Museum of Natural History, Lawrence, Douglas County, Kansas, by J. C. Tollins. This is the first record of this species from the state of Kansas (Tollins, 1982; Tollins, pers. comm.).

NEW COUNTY RECORD: Bipes canaliculatus. Same data as above. First record for Douglas County (Tollins, 1982; Tollins, pers. comm.).

NEW AREA CODE RECORD: Bipes canaliculatus. Same data as above. First record for Area Code 913 (Tollins, 1982; Tollins, pers. comm.).

NEW ZIP CODE RECORD: Bipes canaliculatus. Same data as above. First record for zip code 66045 (Tollins, 1982; Tollins, pers. comm.).

NEW MAXIMUM SIZE RECORDS FOR KANSAS, DOUGLAS COUNTY, AREA CODE 913, AND ZIP CODE 66045: Bipes canaliculatus. Snout-butt length: 140 mm; total length: a little more than 140 mm.

NEW MINIMUM SIZE RECORDS FOR KANSAS, DOUGLAS COUNTY, AREA CODE 913, AND ZIP CODE 66045: Bipes canaliculatus. Snout-butt length: 140 mm; total length: a little more than 140 mm.

Discussion

The ramifications of organizing herpetological records in the manner reported herein are obvious. This new method should provide numerous new and fruitful avenues of research. It could even be applied to states other than Kansas, except for the difficulty in finding worthy researchers outside of our state.

Acknowledgments

I thank Dr. J. C. Tollins for advise and encouragement during this study. Dr. J. C. Tollins made all of the identifications. Thanks are also due to Dr. J. C. Tollins for making the measurements. Finally, I dedicate this paper to Dr. J. C. Tollins for his pioneering work on the reptiles and amphibians of Kansas, without which this study never would have been possible. I also thank one anonymous reviewer for ridiculous comments which I ignored.

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J.C. Tollins
Tollins Corners, Kansas

ON SNAKES, SNAKE HUNTING, AND SNAKE BITES...

Sometime back, in the summer of 1979, in fact, there came a day in my life that a great many people claimed to be inevitable. It was the day I got snake-bit. A lot of folks, not the least of whom was my mother, got in their "I told you so" that day. I'd learn a lesson from that, they said. And perhaps I have...but more on that later.

Subsequently, KHS Newsletter No. 33 (pp. 6-9, October, 1979) published an article about this fiasco that dealt with how the average person comes to be a candidate for snake-bite and various other hypothetical aspects of this very serious matter. It didn't go into a lot of detail about treatments and I didn't get into the gory details of the symptoms of venomous snake-bite... particularly those of my own experience. I'm afraid I would lose all objectivity in the matter, writing of my own snake-bite. Being both a self-proclaimed journalist and a born and bred resident of Oxford, Kansas, I knew I couldn't help but embellish the tale with larger-than-life images of the pain and horror.

At the time it was, of course, less of a "thrilling war story" and more of an embarrassment to me. And herein lies the heart of this article. Then KHS Editor Hank Guarisco had what I thought was a good idea when he read my story and formulated the questionnaire that followed it regarding the incidence of snake-bite among KHS members. The results of this impromptu survey? They were just as I expected. Almost no one returned the survey, which could be analyzed one of three ways. One, they were too embarrassed to admit to having been bitten (or perhaps they just considered it nobody else's business...which is a valid point). Two, no one in the KHS had ever been bitten. Sure. And three, they couldn't afford the postage to return it. Possible. I decided it was Reason Number One and quickly thought of a rather hit-or-miss method to arrive at a figure myself. I went down a list of the KHS membership, making a check mark beside those I knew who had the dubious honor of being snake-bite victims. Don't worry, I'll use no names. Suffice it to say that although I personally have known only a small fraction of the people on the membership list at any one time, of those I do know a great many share the distinction of having been bitten. It is not an honorable nor "cool" list to be on but it proves one thing very clearly -- everyone makes mistakes. Most of the bites I am aware of were suffered by people between 18 and 30 years of age. Most of the bites were by copperheads and rattlesnakes, Western Diamondbacks in

particular. Nearly all were the result of manipulating captive animals for one reason or another.

A very arbitrary list of villainous reptiles and the toll they have exacted upon my herper colleagues now follows:

	Copperheads	7 bites
Western Diamondback	Rattlesnakes	2 bites
Eastern Diamondback	Rattlesnake	1 bite
Other	Rattlesnakes	4 bites
	Cottonmouths	2 bites
Purple-spotted	Pit Viper	1 bite
	Puff Adder	1 bite

Of this very partial listing, only two people were bitten more than once by various snakes. Evidence that people usually learn to do things right after only one bite. Three of these bites were sustained by people living in a state other than Kansas. Fortunately, all of these bites ended with the recovery of the victim...though several suffered a loss or partial loss of the bitten extremity. The puff adder bite was apparently a dry bite (no venom or very little injected).

I cannot stress enough that this is a random list, compiled from the very limited knowledge I have of bitten friends and associates. These bites have accumulated over a lengthy period of time, too, but at least ten of them occurred within the past ten years.

Aside from wayward herpers like myself who run afoul of venomous snakes, children figure highly in the national snake-bite statistics. Looking back on the bizarre and wreckless days of my youth it surprises even me to think that it took twenty years before I got what was coming to me, reaching under rocks and such. The circumstances of one afternoon's collecting in particular come to mind...

Brad Anderson, his wife and I were herping south and east of Arkansas City in Cowley County one afternoon and began hunting a long, rocky draw. I came upon a likely looking slab of limestone about five feet by four feet and about two inches thick. A real Kelly Irwin rock. Unable to lift and look at the same time, Brad's wife said she would look beneath it as I lifted. There was a space along the underside of the rock where I could grip (also where a snake might be resting) and I thrust my fingers beneath the rock. I knew it was stupid when I did it but nothing had ever grabbed me like that before. Immediately some large and as yet unseen serpent savagely latched onto three fingers of my right hand. I jerked my hand away to find it quite lacerated and bleeding profusely. The rock seemed to be considerably lighter when, with the rush of adrenalin one gets at such times, I flipped it with my left hand so as to identify my attacker. An enormous coachwhip snake made a hasty exit and disappeared into the grass and I was substantially relieved, though still bleeding considerably. It could have easily been one of the copperheads that flourish in that area and, as I have found, have a habit of lying just beneath the over-hang of rocks like that.

Care should be taken when collecting, especially in the company of youngsters, for although they exceed in energy and sheer numbers and

often turn up many valuable specimens, they are participating in a potentially dangerous recreation. A hand thrust beneath a board in areas known to harbor venomous snakes is asking for trouble and a poisonous snake-bite is not the kind of lesson that should be learned by trial and error, though it seems we often end up finding out that way.

Another incident that happened along the Walnut River comes to mind. I was collecting on a rocky, wooded bluff when a man and five young boys came my way down a path. The kids rushed about wildly, rolling over logs, poking under ledges and reaching beneath rocks. "Whaddya have in the sack?" the man asked. "Seven copperheads," I replied, adding "you'd better watch those kids..." "Don't worry, son," the man told me confidently, "we've got the Lord watching over us."

I have no doubt of this man's faith, but his sanity is definately in question. They say the good Lord watches over fools and children and if this is so, well, I suppose that man and his kids are alive and well today. Personally, I think a little common sense and caution add immeasurable to one's security.

I believe that television and the movies also tend to lead younger people astray on the snake-bite matter with their depictions of it. The hero cuts it open, sucks out the poison, and rides off into the sunset. Though most people know that it isn't quite so simple, it must be remembered that Hollywood's best special-effects technician could never come close to the singularly horrifying spectacle of a serious snake-bite. Movies are only two hours long or so, incapable of portraying an ordeal that almost always drags on for weeks if not months. These are points to consider and remember when collecting far afield and confronting an angry Prairie Rattlesnake. A hospital is never close enough, and a little proper herping etiquette may help us all avoid embarrassing as well as life-threatening accidents.

Martin B. Capron
Oxford, Kansas

DISCOVERY OF THE REMAINS OF A BOA CONSTRICTOR IN JOHNSON COUNTY, KANSAS

On 22 May 1983, while returning from observing reptiles and amphibians in an extensive natural area of Johnson County, Kansas, Henry S. Fitch and I discovered the decaying remains of a 1.5 meter long boa, Boa constrictor. Most of the skeleton was visible and several large patches of skin were evident, allowing easy identification of the specimen. The carcass was found in a field about 0.5 km from a major highway. The presence of scattered debris, such as pieces of tin and wood, indicated that this field was used as a dump site. Although there is no way to determine whether the boa constrictor represents the introduction of an alien (non-native) reptile into Kansas or the improper disposal of a carcass, the latter seems more likely.

The introduction of alien reptiles is a growing problem throughout the United States, as Smith and Kohler (1977) have noted. Two southern species, the green anole (Anolis carolinensis) and the Mojave Rattlesnake (Crotalus scutulatus), have been found in Kansas. However, neither would probably have survived the low winter temperatures (Collins, 1982). If the boa constrictor found in Johnson County escaped from captivity or was released, it also would have undoubtedly succumbed to cold weather.

If the specimen was discarded post-mortem, there is still cause for concern. An exotic species such as Boa constrictor may possess a host of potentially pathogenic organisms not present in local reptilian populations. Without previous exposure to these organisms, native reptiles may be unable to immunologically cope with them. This could cause an epidemic resulting in extensive mortality. In addition to the potential threat of disease to the native herpetofauna, an improperly discarded carcass poses a health hazard to human populations. For example, Aeromonas hydrophila, a gram-negative bacillus which is a causative agent in reptilian septicemia and ulcerative stomatitis (Heywood, 1968) also causes enteritis, osteomyelitis, and fatal septicemia in humans (Lopez et al., 1968; Shilkin et al., 1968). Perhaps the most celebrated link between reptilian and human disease is the transmission of Salmonella. Studies have shown that reptiles, especially baby freshwater turtles, commonly transmit human salmonellosis (Altman et al., 1972). This situation has led to the restriction of the sale of turtles by Federal law (Anon., 1975).

Given the above potential health hazards, proper disposal of reptile and other animal carcasses is imperative. Incineration is a method commonly used to dispose of dead laboratory animals. To obtain information concerning disposal methods, one should contact the local public health service or humane society.

I thank Joseph T. Collins and John E. Simmons of the Division of Herpetology, Museum of Natural History, University of Kansas for critically reviewing the manuscript and offering helpful comments.

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--Hank Guarisco
Lawrence, Kansas

SOMETHING WILD!

By Robert F. Clarke, Ph.D.


MUDPUPPY

Necturus maculosus





THIS SALAMANDER, SOMETIMES CALLED "WATER DOG," IS FOUND IN STREAMS IN THE EASTERN THIRD OF KANSAS. THOROUGHLY AQUATIC, IT NEVER LEAVES THE WATER, RESPIRING WITH THREE RED, FEATHERY GILLS ON EACH SIDE OF THE BACK OF THE HEAD. MUDPUPPIES MAY EXCEED A FOOT IN LENGTH. THE FOOD IS A VARIETY OF SMALL AQUATIC ANIMALS. THIS IS THE ONLY SALAMANDER IN OUR AREA WITH FOUR TOES ON EACH REAR FOOT.

AS MANY AS 150 EGGS MAY BE LAID AT A TIME. THEY ARE PLACED ON THE ROOF OF A SUITABLE CAVITY, SUCH AS THE UNDERSIDE OF A ROCK OR LOG, REQUIRING CONSIDERABLE ACROBATICS ON THE PART OF THE FEMALE. SOMETIMES THE FEMALE WILL GUARD THE EGGS.



THE MUDPUPPY IS CAUGHT ON FISHING LINES AT TIMES. MANY PEOPLE BELIEVE THAT THEY ARE POISONOUS! (THEY'RE NOT, OF COURSE)



A contribution from the Nongame Wildlife Improvement Program
Kansas Fish & Game Commission

A FINAL WORD FROM THE EDITOR

Thanks for assistance with the production and mailing of the KHS Newsletter are due to David Cannatella, Rebecca Pyles, Linda Ford, and Bernie Willard.

