# KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER NO. 75

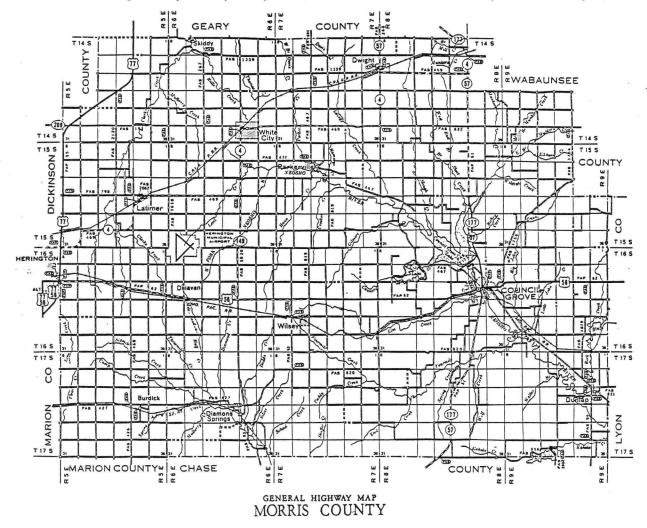
February 1989

#### **ANNOUNCEMENTS**

# Annual KHS Field Trip Set for Council Grove Area

The 1989 KHS field trip will take place on the second weekend in May, in the Flint Hills. That's Mother's day, so bring Ma along, or leave her at home, whichever is the greater treat for her. Exact dates are 12-14 May 1989.

The Flint Hills are a 40-mile-wide stretch of bluffs and tall grass prairie extending from Nebraska to Oklahoma. Scattered in the 500 million acres of prairie are vast expanses of wild flowers on hills liberally sprinkled with limestone rocks, streams and ponds. Open range is grazed by cattle and even buffalo, and, yes, deer and antelope play. The prairie boasts an amazing variety and quantity of wildlife. About 60 kinds of reptiles and amphibians



have been recorded in the counties adjoining Morris County. At least 25 likely county records remain each in Morris and Dickinson Counties.

Base camp will be set up Friday evening (12 May) at Council Grove Federal Reservoir, immediately north of Council Grove on Route 177/57. These are Corps of Engineers campgrounds, so be prepared to pay a site use fee of \$3 to \$8, with \$1 or \$2 extra for hookups. Signs should be posted marking the KHS camp area. CB channel #4 will be monitored in order to help herpers with CB's find the campground.

For more pampered surroundings, the Cottage House is a restored Victorian hotel furnished with antiques, worth touring even if you stay at the campground. Rooms start at

\$25. It is in downtown Council Grove, at 25 N. Neosho, phone (316) 767-6828.

In addition to several fast food restaurants, small cafes, and a bakery with donuts to die for, the Hays House restaurant (downtown) has excellent food in historic surroundings. Built on the Santa Fe Trail in 1857, it is the oldest continuously operating restaurant west of the Mississippi. It has also been used as a post office, courthouse, saloon, church, theater, hotel, and brothel. Add yourself to its list of famous guests, which includes General George A. Custer and Jesse James.

Known as the "Birthplace of the Santa Fe Trail," Council Grove is loaded with historic sites, including three trees designated as National Historic sites. Other points of interest are the Old Calaboose, once occupied by Wyatt Earp, the Hays House and the Seth Hays home, the Last Chance Store, the Hermit's Cave, and the state-operated Old Kaw Mission, all dating from before the Civil War.

Contact Olin Karch, 103 South Exchange, Emporia, Kansas 66801, for further information, or call (316) 342-5275.

#### Missouri Forms New Herpetological Society

Under the stimulus of Tom Johnson's excellent new 1987 book, *The Amphibians and Reptiles of Missouri*, Show-Me State herpetologists gathered at an historical meeting on 8–9 October 1988 at the Reis Biological Station near Steelville to form the Missouri Herpetological Association. The MHA recently issued their first Newsletter (Number 1, 1988), an 8-page document which contains abstracts of talks held at their first meeting, plus a compilation (by Tom R. Johnson and Robert Powell) of all new Missouri county records for 1988. This newsletter is a must for all owners of Johnson's book, because it permits them to update their range maps and stay current with Missouri herpetological happenings. The KHS editorial staff is pleased to note that Johnson and Powell have restricted new county and size maxima records to preserved voucher specimens, thereby ensuring that continued legitimate and accurate information will be available for the second edition of Johnson's fine tome. Anyone wishing further information about the MHA should contact Tom R. Johnson, Missouri Department of Conservation, P. O. Box 180, Jefferson City, Missouri 65102.

# Florida Herpetological Conference

The Twelfth Annual All Florida Herpetological Conference will be held on Saturday, April 22, on the campus of the University of Florida, Gainesville. "International and Florida Herpetological Conservation" will be the theme of the morning session, "Captive Breeding and Maintenance of Herptiles" will be the afternoon theme. In addition, a "Workshop for Young Herpetologists" will be presented. The conference is cosponsored by the Florida Museum of Natural History and the Gainesville Herpetological Society.

The cost will be \$8.00 if you register before April 10th. The dinner Saturday night is an additional \$6.00. There will be an evening auction and program. Costs after April 9th are \$10 and \$6, respectively. People 16 years old and younger need pay only \$6 total for the

conference and dinner. Call or write David Auth at the museum for a detailed program and registration sheet, which will be available after February 15th.

--David L. Auth The Florida State Museum University of Florida Gainesville, Florida 32611 (904)392-1721

# Celebrate With Our State Reptile this April in Caldwell

Turtle lovers everywhere should already have the weekend of 14-16 April 1989 marked on their official calendars. That's the weekend of the third anniversary celebration of the signing of the Kansas state reptile bill to be held in the Caldwell, Kansas area.

Field trips, exhibits, and a big advertisement are in the planning stages at this time. There should be something for the whole family.

See pages 2-3 of KHS Newsletter No. 74 for more detailed information, or contact KHS member Cleda Baker at 3 South Main Street, Caldwell, Kansas 67022.

-- Friends of the Ornate Box Turtle Caldwell, Kansas

#### Talk About A Bargain

Following is a list of regional herp societies and the cost of a regular individual membership in each:

Chicago Herpetological Society	\$17.00
Maryland Herpetological Society	\$16.00
New York Herpetological Society	\$15.00
Southwestern Herpetologists Society	\$15.00
Bay Area Amphibian and Reptile Society	\$15.00
Florida Panhandle Herpetological Society	\$12.00
Greater Cincinnati Herpetological Society	\$12.00
Long Island Herpetological Society	\$12.00
Northern Ohio Association of Herpetologists	\$12.00
Rocky Mountain Herpetological Society	\$12.00
San Diego Herpetological Society	\$12.00
Colorado Herpetological Society	\$10.00
Connecticut Herpetological Society	\$10.00
Gainesville Herpetological Society	\$10.00
Georgia Herpetological Society	\$10.00
Great Lakes Herpetological Society	\$10.00
Greater Dayton Herpetological Society	\$10.00
Idaho Herp News	\$10.00
Massachusetts Herpetological Society	\$10.00
Minnesota Herpetological Society	\$10.00
North Texas Herpetological Society	\$10.00

St. Louis Herpetological Society	\$10.00
Wisconsin Herpetological Society	\$9.00
Tucson Herpetological Society	\$7.50
Oklahoma Herpetological Society	\$7.00
Philadelphia Herpetological Society	\$6.00
Kansas Herpetological Society	\$6.00
New Mexico Herpetological Society	\$5.00
North Carolina Herpetological Society	\$5.00
Virginia Herpetological Society	\$5.00

#### **Endangered and Threatened in Kansas**

The phrase "endangered and threatened species" is heard often these days. Depending on your own particular frame of reference, it can mean anything from saving the environment to heading down the road toward economic ruin. Environmentalists like to point proudly to the whooping crane, saved from the brink of extinction. Those for development at any cost think of the "insignificant little snail darter" holding up construction of the Tellico dam in Tennessee.

Just what is the significance of an endangered or threatened species? An endangered or threatened species is important as an indicator of environmental quality. It is a species singled out for attention because there is documented evidence of the decline of its population and habitat. When we lose an endangered or threatened species to extinction, we also lose an endangered or threatened species, we also lose the quality of the habitat that supported it. Consider the California Condor. This magnificent bird is now a resident of a few zoos. Perhaps the individuals in captivity will be able to reproduce, perhaps not. But even if they do, we won't ever see wild California Condors again--the habitat has been altered too much for them to survive in it naturally. A lot of other species in that habitat that were not on the list were severely damaged as it was degraded until it would not support the birds. We may have the California Zoo Condor in the future, but that's about it.

The mention of endangered and threatened species can bring out the worst in people. I have even heard the argument that it is "natural" for species to go extinct, so what's the big worry? The big worry is the rate of extinction. Species are now going extinct at a rate estimated to be about fifty times greater than ever before in the history of life on earth. This accelerated rate of extinction is the result of thoughtless human activity--especially habitat destruction.

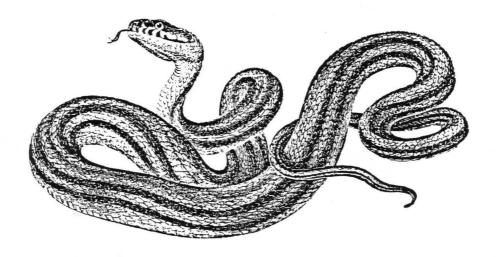
In the highly recommended book, extinction, Paul and Anne Erlich make an analogy between the extinction of species and popping rivets out of an airplane wing. You can remove some of the rivets an the plane will still fly, but at some point the wing will come apart in the air and you will crash. Extinction and habitat loss are rivets popping on the spaceship earth. If we continue to accept an accelerating rate of environmental destruction, we will soon have damaged the earth beyond its ability to repair itself. In human terms, we will have committed suicide.

You don't have to go to the tropics to find habitat destruction, or look for some noble and majestic animal like the condor to find endangered species. We have many species and a lot of habitat in serious trouble here in Kansas. We cannot blindly proceed on our present course in Kansas of poisoning the land, draining the rivers, and building needless highways through wetlands without paying a very high price. We are foolishly popping rivets left and right.

Below is a list of the endangered and threatened species of reptiles and amphibians in Kansas, as of January 1989. Look it over carefully. Think about where these animals live. How much of natural Kansas do we have to lose before we realize that we have already lost too much? Remember: extinction is the opposite of progress.

# Endangered (E) and Threatened (T) Species in Kansas

Amphibians				
Cave Salamander	Eurycea lucifuga (E)			
Central Newt				
Dark-sided Salamander				
Eastern Narrowmouth Toad	Gastrophryne carolinensis (T)			
Graybelly Salamander	Eurycea multiplicata griseogaster (E)			
Green Frog				
Grotto Salamander  Northern Crawfish Frog				
Northern Spring Peeper	Pseudacris crucifer crucifer (T)			
Strecker's Chorus Frog				
Western Green Toad	Bufo debilis insidior (T)			
Reptiles	•			
Broadhead Skink	Eumeces laticeps (T)			
Checkered Garter Snake				
Eastern Hognose Snake	Heterodon platirhinos (T)			
Kansas Glossy Snake	Arizona elegans elegans (1)			
New Mexico Blind Snake	Storeria occinitomaculata occinitomaculata (T)			
Texas Longnose Snake				
Texas Night Snake				
Western Earth Snake				
Species in Need of Conservation in Kansas				
Amphibians				
Red-spotted Toad	Bufo punctatus			
Reptiles				
Alligator Snapping Turtle	Macroclemys temminckii			
Rough Earth Snake	Hotorodon pasique			
Western Flogriose Strake				
	John E. Simmons			
	Lawrence, Kansas			



#### KHS BUSINESS

#### Presidents of the Kansas Herpetological Society

This historic anecdote is brought to you by the KHS Editors so that you are more informed about the Society's past. As KHS President-elect for 1989, Nancy Schwarting automatically assumes the KHS Presidency in 1990.

1974	Eric M. Rundquist	Lawrence	1
1975	George R. Pisani	Lawrence	2
1976	Janalee P. Caldwell	Lawrence	3
1977	Robert F. Clarke	Emporia	4
1978	Larry Miller	Caldwell	5
1979	Kelly J. Irwin	Topeka	6
1980	Peter Gray	Wichita	7
1981	Jeffrey T. Burkhart	Dodge City	8
1982	John Tollefson	Lawrence	9
1983	Joseph T. Collins	Lawrence	10
1984	John Fraser	Fredonia	11
1985	Louis Guillette	Wichita	12
1986	Martin Capron	Oxford	13
1987	Olin Karch	Emporia	14
1988	Jeffrey Whipple	Lawrence	15
1989	James Marlett	Wichita	16
1990	Nancy Schwarting	Lawrence	17



#### KHS BRINGS YOU GREAT NEWS OF THE WORLD

#### Careful Thieves Take Valuable Zoo Snakes

Dallas (AP) - Thieves who stole eight snakes from the Dallas zoo picked the most valuable snakes and the easiest to handle, authorities said.

The snakes are worth about \$8,000, officials said.

"The thing is it's just these specific snakes that were taken," said Victoria Furber of the zoo staff. "We figure that somebody knew what they were doing and just went after some of the most valuable snakes."

--Topeka Capital-Journal, October 17, 1988 (Submitted by Suzanne L. Collins, Lawrence)

# Man Stomps Snake, Starts House on Fire

Fort Wayne, Ind. (AP) - A garden snake that startled a one-legged man triggered a series of events that left his car and house in flames.

The 3-foot, non-poisonous snake was napping under the front seat of Al Fitzwater's car, but awoke when the Fort Wayne man climbed behind the wheel Thursday to test the engine he'd been repairing.

"The snake bit me on the ankle," said Fitzwater, 45, who lost his right leg in a hanggliding accident in 1975. "I started stomping it and hit the gas, and then the car lunged forward."

The car bolted ahead, spilling a can of gas that was open on its bumper and causing flames to shoot out of the open carburetor. In the process, the car crashed into the rear of Fitzwater's house.

The ensuing blaze quickly enveloped the front of Fitzwater's car and leaped to his home.

"I was lucky," Fitzwater said. "The car started again and I backed it away, then got out."

A passerby notified the Fort Wayne Fire Department, which brought the blaze under control about 30 minutes after it began.

While firefighters fought to smother the last of the flames, the snake was still curled inside the front seat of the abandoned car. Next to a fire truck parked in front of his home, Fitzwater sat in his wheelchair watching the smoke and shaking his head incredulously.

"I can't believe that damn thing's still alive."

-- Rapid City, South Dakota

#### Press Strikes for Story of Snake's Laser Surgery

Irvine, Calif. (AP) - Laser surgery on an 8-foot boa constrictor's throat cancer turned a small university clinic into a media zoo.

The 12-minute operation Thursday drew cameras and reporters from four television stations, an independent network and assorted newspapers to the Beckman Laser Institute at the University of California, Irvine.

The patient was Sid Vicious, a snake named after the late rock n' roll star and owned by Mission Viejo High School.

The press presence was so great that a pool arrangement more common to courtrooms and battleships had to be set up for television.

Just before surgery, Dr. Scott Weldy, a veterinarian, held up the sleepy-looking boa and said: "He's beginning to look a little stupid now." The photo opportunity set lights flashing and cameras whirring.

The specialists took Sid into the operating room and stretched him out on the table. A TV reporter's crew failed to capture the scene on videotape.

"Why aren't we getting this?" yelled the reporter, demanding that the entry scene be repeated. Sid was taken off the operating table, hauled back out, then made another entrance.

Camera flashes continued as a red laser beam shot into Sid's mouth.

"I think the camera flashes are bothering his eyes," Weldy said. Cotton was taped over the snake's eyes and the laser therapy continued, ultimately to be declared a success.

> --Lawrence Journal-World, 15 January 1989 (Submitted by Birnam Wood, Lawrence)

#### Turtle Death Rate Balloons

The balloon launch sponsored each year as part of National Science Week may be discontinued because of protests from a marine-life specialist in New Jersey who claims the balloons are harmful to an endangered species of sea turtle.

The director of the Triangle Coalition for Science and Technology Education, which has sponsored the event since it began in 1985, said that the group would try to develop balloons made out of biodegradable materials. But if that cannot be done, said John M. Fowler, "we will not do the launch in this fashion next year."

Protests over the balloons' danger to sea life forced 25 of the 1,000 participating schools

to pull out of this year's launch, which took place last month.

According to Robert C. Schoelkopf, director of the Marine Mammal Stranding Center in Brigantine, N. J., six New Jersey residents also filed summonses citing the coalition for littering.

Mr. Schoelkopf drew public attention to the fact that turtles and other aquatic life may eat lethal doses of the balloon rubber when it falls to earth. He said last week that it was too soon to determine whether this year's launch had resulted in the death of any turtles, but that "one death plays an important role in the outcome of an endangered species."

Responding, Mr. Fowler said that the launches had played a "vanishingly small" role in the turtles' demise, and that the annual event was a worthwhile exercise to help students learn about weather and wind currents. "It's a nice experiment," he said. "It would be a shame to stop it."

-- Education Week, May 18, 1988 (Submitted by Suzanne L. Collins, Lawrence)

#### Snake Hunters Must be Wary or They'll be Bitten by Critters

Williamsport, Pa. (AP) - Ask a rattlesnake hunter if a snakebite is harmful and he's apt to reply that a victim will be all right with quick treatment.

Of course, by a rattlesnake hunter's standard, "all right" means alive. That doesn't count excruciating pain, permanent muscle damage and paralysis.

Enthusiasts gathered recently for the 33rd Annual Reptile Roundup in Morris, a sleepy Tioga County town about 30 miles northwest of Williamsport.

The area is prime rattlesnake country — lots of sunny, brush-covered clearings filled with large rocks suitable for snake dens.

The hunters came from New York, New Jersey, Delaware, North Carolina and Mississippi, according to Amos Osborin, chairman of the hunt, which benefits the local fire company.

Most snakes are returned to the wild, generally in the area where they were taken, said Ken Sutton, who came up from North Carolina for the event.

"Why just take it out and kill it?" he asked.

Like his fellow campers, the tall, weathered millright is a hard-drinking, hard-talking man with a penchant for telling stories.

Men who play this game generally follow the rules; safety pays when you're dealing with rattles and fangs.

A rattlesnake hunter wears protective leggings and carries a hook and a tong, or pincers, each mounted on a pole about the size of a golf club.

The hook is used to lift small rocks and to control the snake on the ground, often to tire it out before picking it up with tongs and placing it in a bag.

Great care is taken not to kill the snake. Large ones are sometimes killed later for their skin and meat, but the trick is to get the catch back to camp for the fun part — playing with the snakes.

In "freehandling," the snake's head is pressed against the ground with a hook, and the hunter picks it up using a specific three-fingered grip at the base of the head.

If held properly, the snake is immobilized. Grab it half an inch too low, and the snake can swivel its head and sink its teeth into your thumb.

Kurt Masurat, a 50-year-old chemist from Charlotte, N. C., offered to demonstrate the technique and "milk" the venom from one of the snakes the group had caught.

Masurat is a good-natured sort quick to share a joke. But the kidding stopped when the snake came out of the box.

A small crowd from other campsites joined Masurat's fellow hunters and watched in tense silence. The only sound was the low, steady buzz of the snake's tail.

His face set in concentration, Masurat pressed the snake's head to the ground and worked to get the correct grip, trying to get past the moment when the risk of being struck is greatest.

Finally Masurat had the snake in hand and lifted it in the air, rattle still shaking. The tension eased as the onlookers saw he was in control.

To milk the snake, he opened the rattler's mouth and hooked the fangs over the side of a drinking glass, causing a thick, clear venom to ooze out.

It was only after this demonstration that Masurat mentioned he hadn't freehandled a snake in at least 15 years.

Sutton and Glenn Hicks later pulled out one snake each and "played" with them before an admiring, if apprehensive, crowd.

"I think that's my favorite part of it," said Hicks, a Williamsport resident. "You want to take them back and show people. The ego thing plays a part in it."

--Lawrence Journal-World, 7 August 1988 (Submitted by Suzanne L. Collins, Lawrence)

# These Turtles Freeze, but that's Okay

Residents of northern climes will note that few reptiles share their environment. Those that do generally take elaborate measures to deal with frigid temperatures — such as hibernating underwater or in deep underground dens. But the young painted turtle has evolved a simpler strategy: It freezes.

Researchers removed 13 hatchlings from their winter nests and transported them in a bed of sphagnum moss to nearby Carleton University in Ottawa, Ontario. There, they froze a box of four hatchlings to 24.8°F, and two more hatchlings to 12°F. After 24 hours, all hatchlings were thawed back to 32.6°F. The entire 24°F batch survived, even though on average 52 percent of the body water in each froze solid. Just one turtle frozen to the lower temperature survived. Survival seems to depend on how much body water freezes: Anything much above 54 percent appears lethal, the researchers say.

Freezing doubled blood levels of glucose, tripled liver glucose levels, tripled blood glycerol levels and increased amino acid levels in blood 2.25-fold over those of nonfrozen hatchlings taken from the same nests. The researchers suspect that glucose and glycerol, which can limit the amount of freezing, helped the frozen animals survive. Taurine, an amino acid that appears to limit freezing in bivalves (Science News: 7/4/87, p.9), also may have played a role, they say. However, high levels of these chemicals apparently don't entirely explain the animals' survival, the researchers add, since painted turtles observed after spring freezes have survived "despite low levels of cryoprotectants."

While four frog species share a similar tolerance to freezing, the painted turtle is the only reptile and "the highest vertebrate life form known to tolerate the natural freezing of extracellular body fluids during the winter hibernation, "write Kenneth B. Storey and his co-workers in the November 1988 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES

(Vol. 85, No. 22). An understanding of how these animals survive could suggest techniques for cryopreserving human organs.

--Science News 134(24):382 (1988) (Submitted by Suzanne L. Collins, Lawrence)



#### Radiation Turned My Husband into a Frog!

Wife's anguished accusation in wake of Chernobyl disaster

He sits on the TV and tries to catch flies He croaks like a bullfrog day and night

He hops into backyard and looks for bugs

He sits in bathtub and blows bubbles

Straitlaced Alexei Mokrousov was a dignified scientist and scholar before Russia's Chernobyl nuclear disaster turned him into a nitwit — who thinks he's a bug-eyed bullfrog!

"All that radiation made my poor husband a blithering idiot," said Alexei's weeping wife Olga.

"Before the accident, he was the world's most wonderful family man, and everyone looked up to him. Now he acts like some kind of toad."

Anguished Olga said 41-year-old Alexei: Hops around the house and squats on top of the TV set trying to catch flies with his tongue; Croaks like a frog day and night; Bounds into the backyard looking for bugs after every rain; Lies in the bathtub for hours blowing soap bubbles with his mouth.

"This has been going on for months and it's driving me crazy," heartbroken Olga, 45, told reporters from her home outside Gden. "I'm afraid all those flies he's eating are going to kill him. They can't be good for him.

"Our children are 7 and 8 and they can't understand why their father hops and croaks all the time. In truth, no one else can understand it either."

Wacky Alexei was an engineer at the Chernobyl plant in April of 1986 when the worst nuclear power accident in history spewed radiation around the world.

"The government told my husband he was safe, and for some time he seemed perfectly normal," his weary wife recalled.

"Then, almost overnight, his mind turned to mush and he became convinced he really was a frog. And instead of getting better, he's getting steadily worse. I can see that now his eyes are starting to bulge."

The scientist turned frog has been examined by some top doctors and veterinarians in the country, but they've offered no answer.

"I want them to put my husband in a hospital where he can get some help," Olga said.

-- Weekly World News, 10 January 1989 (Submitted by Irving Street, Sibleyville)

#### Lizard Lady Bags Illegal Imports

Atlanta - They call her the Lizard Lady. She can tell at a glance if a handbag is cobra or crocodile, python or plastic. Nor is she cowed by rawhide vs. Naugahyde, boa vs. bogus.

As the U.S. Fish and Wildlife Service inspector at Hartsfield Atlanta International Airport, Carol Carson supervises the shipment of wild animals, checks fish bound for restaurants, sees that leather goods are properly imported and makes sure that endangered species or items made from them are not allowed into the country.

If an item comes from an endangered species, such as the hawksbill turtle or white

leopard, she doesn't monkey around.

The item is confiscated, and the worst offenders can receive as much as a year in prison and a \$20,000 fine.

Some travelers who have their souvenirs taken away submit quietly. Others have "made me glad I had a customs inspector standing next to me and that he was armed," Carson said.

She rides herd on hunting trophies from an African safari being shipped to a taxidermist in Birmingham, Ala., rare monkeys being exchanged by zoos for breeding, and European salmon headed for some of the southeast's finest restaurants.

For her territory — the Southeast with the exception of Miami — Carson inspects products ranging from Italy's smartest leather clothing and accessories to "cheap junk, tanned so badly it will start to smell in a few weeks."

A big day was the interception of 100 illegal elephant tusks. This day's haul, though, included cheap items sent from Nigeria to an address in the Atlanta suburb of College Park.

Seated on plastic trash bags spread on the floor of the KLM Royal Dutch Airlines freight terminal, Carson catalogued and counted a growing pile of purses, wallets and briefcases made of various reptile skins.

A glance told her whether it was cobra or monitor lizard. Some, however, weren't that easy. Her fingers probed the trim on a drawstring purse.

"It's fake," she finally said, grinning. "It's trimmed in fake alligator." Fake is legal.

But she confiscated 239 items that didn't have proper permits or were made from monitor lizards, whose skins cannot be brought into the United States under the Endangered Species Act.

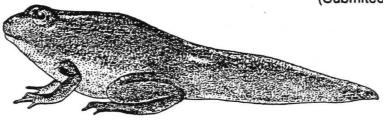
The rest of the shipment was either cowhide items or African garments colored with cheap vegetable dye. The clothing was possibly illegal because of import quotas for textiles, but that was a matter for the Customs Service.

--Wichita Eagle-Beacon, 26 December 1988 (Submitted by Jack Shumard, Wichita)

# Poison Dart-Frogs Breed

Blue poison-dart frogs, whose natural rain-forest habitat is being destroyed, successfully mated and produced young in captivity for the first time in the United States after scientists spent five years learning to create the proper breeding environment

--Science News, 133:247 (1988) (Submited by Suzanne L. Collins, Lawrence)



#### Study of Two-headed Snake Shows Separate Identities

Knoxville, Tenn. — Heard the one about the two-headed snake that couldn't agree on which head got to eat dinner?

It's no joke, if you're talking about the two-headed black rat snake named IM (for instinct and mind) that has been under observation at the University of Tennessee here since shortly after its birth 12 years ago.

"If one head gets a good grip on the head of the mouse and the other gets a good grip on the tail, they fight for hours unless you stop them," said Gordon Burghardt, who teaches psychology and zoology at the university.

"They're simply fighting for the privilege of swallowing the mouse,' he said this week. The prev in their twice-monthly meals, he noted, ends up in the common stomach.

IM is showing researchers whether over time animals can learn to share, he said.

"Over five years, the weight of the prey eaten was identical (for both heads). So the animals were in some sense splitting the resource. We didn't expect that."

The university got IM from nearby Oak Ridge National Laboratory, where two boys found the animal in their family's garden.

Back then, the two heads, "really had two separate identities," said Jerry Klein, a research engineer and amateur herpetologist at the Oak Ridge lab. "If one wanted to eat, it would try to keep the food from the other."

Burghardt said the animal also is providing clues on theories of motivation and cognition. "We can test out some ideas in motivational psychology that we normally couldn't, such as, why do you stop eating?"

"One is, do you stop eating when your stomach is distended? Or is the amount you eat determined by the effort in chewing and swallowing?"

-- Cincinnati Enquirer, 3 February 1989 (Submitted by Jerry D. Collins, Cincinnati, Ohio)



#### FEATURE ARTICLES

#### Rattlers Holding Own Despite Roundups

By J. B. Bittner

Oklahoma's diamondback rattlesnakes are holding their own despite heavy harvesting each spring in the state's snake hunts.

That's according to two Kansas University professors commissioned by the Oklahoma Department of Wildlife's Nongame program to study the situation.

With a \$4,220 conservation grant, professors Henry Fitch and George Pisani dove right into the middle of things to learn about Oklahoma's rattlers, said Erich Langer, Nongame Wildlife Program information specialist.

"They actually came down here to the state, attended five snake roundups and examined all the snakes turned in by hunters," Langer said. "They collected basic information like weight and sex and even examined some stomach contents.

"A lot of the research was just hands on right there," Langer said. "They spent Thursday through Sunday in each city during the hunts."

Overall, Langer said, the men determined the state's snake population is remaining at satisfactory levels despite the annual hunts, which are held each spring in several Oklahoma communities including Waynoka and Okeene. However, size of the trophy snakes has diminished over the years as the older snakes are harvested and those left are smaller and less mature, the men reported.

In general, the professors determined the state's rattlesnake roundups are managed well, although they were concerned about the welfare of the captured rattlers and advised fewer reptiles be kept in the same container to reduce the chance of the poisonous snakes biting each other.

"They get stressed out and the snakes actually strike each other," Langer said. "They recommend not more than 15 in a box."

The snakes often are not provided water in captivity, also, Langer said, and the researchers recommended that change.

The university researchers made notes on several features of the state's snake hunts, from the "gory aspect" of the public butcher shop at the Waurika hunt to the handling of butchering duties in Waynoka at a private location.

The men also pointed out the economic impact snake hunts have on the small hosting communities.

A 4-foot diamondback weighing 2 pounds can earn its captor \$35 after the head is sold for \$15 for ornamentation and the rattler, skin and meat are divided up and sold. Some hunts even offer the snake's gall bladder for \$1, an organ some cultures believe to have medicinal powers, Langer said.

"There's a lot of money in these things," he said.

With more than 10,000 snakes harvested annually in Oklahoma, the take definitely has a bearing on the economies of the five host towns, Pisani said, which are Okeene, Waynoka, Waurika. Apache and Mangum.

Snake hunts originally began in Oklahoma decades ago as a means of pest removal — to

thin the deadly snake population that threatened livestock as well as humans.

"They've evolved into an economic gathering for the city," Langer said. "And money made from the snake hunts goes to municipal fire departments, schools, churches, civic centers and parks.

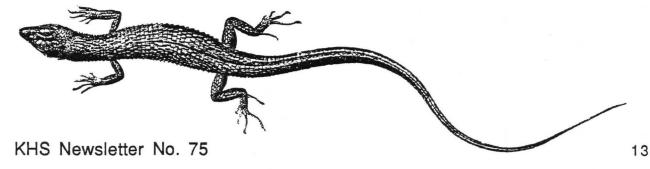
"It's not like P. T. Barnum coming in and setting up a snake hunt and pulling up and taking all the money with him," he said. "The money stays right there in the town's economy."

The snake study, paid for by the government agency that is funded by the check-off on state income tax forms, should ease the minds of people concerned about the impact of organized snake hunts on the state's reptile population, Langer said, as well as aid snake hunters and hunt promoters.

According to the researchers, the snake population has not been hurt by the annual hunts. Langer said, but from a wildlife conservation standpoint precautionary measures are needed.

"If they want these to continue the organizers should be extremely interested in research like this," Langer said. "After three or four years of exploiting a population you'll have a crash if you just go in there with reckless abandon."

> -- Enid Morning News, 16 October 1988 (from the Oklahoma Herpetological Society Newsletter)





#### **Biological Paradoxes**

by Bob Ball

In the preceding newspaper article, certain biological paradoxes have to be assumed by the reader for the article to be acceptable. Even though much of science is based on assumptions, I find those implied by this article very hard to accept. I find it very difficult to assume rattlesnake hunters can provide reliable estimates of rattlesnake population densities. They were fully aware of the possible outcomes resulting from the questions they were asked and in all likelihood greatly exaggerated. If we assume the sponsors of the roundups were not informed of this study in advance and assume they did not coach the hunters, we will not only lose these battles we will lose the war. During the spring of 1971 I visited the Okeene, Oklahoma, rattlesnake roundup. I arrived several days early only to see large cages on wheels pulled into Okeene by trucks bearing Texas License plates. Many of those rattlesnakes were released by sponsors prior to the opening day. I have not been to any rattlesnake roundups since that time.

It is rather paradoxical that while the size of "the trophy snakes' has decreased over the years leaving "smaller and less mature snakes" that they are holding their own. I had assumed that the data gathered on the reproductive biology of rattlesnakes were widely accepted by the biological community. I am baffled! Just how do smaller, less mature individuals become fecund enough to maintain satisfactory population densities, especially when they are harvested year after year during the peak of their mating season?

I would like to see OHS sponsor and financially support actual field studies on all the sites utilized in our state for rattlesnake roundups. I also suggest we have planned field trips on and near these sites during the period of time when large numbers of imported rattlesnakes are likely to be released. I have been told the Mangum, Oklahoma, sponsors have informed participants not to bring any rattlesnakes to their hunt. However, the individuals who told me this both left for Mangum with many prairie rattlesnakes and harmless snakes collected in the Oklahoma panhandle and adjacent Kansas. I think it safe to assume that at least 75% of all the rattlesnakes which appear at any of the Oklahoma hunts come from many miles away from the hunt sites. I am sure that many of the snakes continue to come from Texas. I am sure many rattlesnakes are collected during the fall dennings and held all winter.

I also find it paradoxical that the public turns to those least knowledgeable for information about snakes. How many of the people in charge of "education" at these events know anything about rattlesnakes? I would like to see each OHS member more actively involved in educating our youth about conservation and/or biology. Most of this state's public school students do not receive an adequate conservation education. Most of our students are "taught" by teachers who not only dislike snakes but are either poorly or not educated to teach science. The Oklahoma Department of Education has conservation objectives in its suggested curriculum. Your school district should have an accessible curriculum. You need to take the time and check the one in your school district to help insure at least some conservation education for your children.

I would like to see each of you make arrangements now to help educate all Oklahomans. You can make the difference by speaking to individuals and groups alike. You need to start making the arrangements now to speak in your schools, to church and other youth groups, and to adult groups in your community. You should also consider joining other conservation oriented organizations, as many people in your community just might reciprocate and help us. You could also go to and do something really educational at one of the annual rattlesnake roundups. You can also circulate copies of a petition to regulate rattlesnake roundups available from Bob Clark, 10204 Ski Dr., Oklahoma City, Oklahoma 73162. Please do something!

--Oklahoma Herpetological Society Newsletter 1988, No. 4.

# NEW RECORDS OF AMPHIBIANS AND REPTILES IN KANSAS FOR 1988

By

Joseph T. Collins Museum of Natural History The University of Kansas Lawrence, Kansas 66045

The new county or maximum size records listed below are those accumulated or brought to my attention since the publication of records for 1987 (Collins, 1988). Publication of these new records permits me to give credit and express my appreciation to the many individuals who collected or obtained specimens and donated them to me for deposition in an institutional collection. Further, recipients of this list are permitted an opportunity to update the range maps and size maxima sections in *Amphibians and Reptiles in Kansas* (Collins, 1982). Finally, these new records represent information that greatly increases our knowledge of the distribution and physical proportions of these creatures in Kansas, and thus gives us a better understanding of their biology. This report is my fourteenth in a series that has appeared annually since 1976.

The Kansas specimens listed below represent the first records for the given county based on a preserved, cataloged voucher specimen in an institutional collection, or represent size maxima larger than those listed in Collins (1982). Any information of this nature not backed by a voucher specimen is an unverifiable observation. All new records listed here are presented in the following standardized format: common and scientific name, county, specific locality, date of collection, collector(s), and place of deposition and catalog number. New size maxima are presented with the size limits expressed in both metric and English units. Common names are those now generally accepted and in use across North America, as proposed by Collins *et al.* (1982).

The records listed below are deposited in the herpetological collections of the Museum of Natural History, The University of Kansas, Lawrence (KU), the Museum of the High Plains, Fort Hays State University, Hays, Kansas (MHP), and the Carnegie Museum of Natural History, Pittsburgh, Pennsylvania (CM). I am most grateful to the members of the Kansas Herpetological Society, and to personnel of the Kansas Wildlife and Parks Commission, who spent many hours in search of some of the specimens reported herein. Support for field work, that led to discovery of some of the specimens listed below, was given via research grants from the Kansas Nongame Wildlife Advisory Council (Chickadee Checkoff Funds). Special thanks are due also to Philip S. Humphrey, Director, and William E. Duellman, Curator, of the Museum of Natural History, The University of Kansas, E. D. Fleharty, Museum of the High Plains, Fort Hays State University, and C. J. McCoy and Ellen Censky, Carnegie Museum of Natural History.

#### **NEW COUNTY RECORDS**

GREAT PLAINS TOAD (Bufo cognatus)

GRAY CO: Cimarron, Sec. 11, T26S, R28W, 14 May 1982, A. Flake (MHP 6406).

WESTERN CHORUS FROG (Pseudacris triseriata triseriata)

GRAY CO: Arkansas River, 0.4 km S & 2.4 km W Cimarron, Sec. 9, T26S, R28W, 2 July 1985, P. S. Salm and M. T. Nulton (MHP 6410).

- BULLFROG (Rana catesbeiana)
  - PAWNEE CO: 1.6 km SE Garfield, 15 June 1988, S. Roth, N. Musser, and D. Sewing (KU 209779).
- COMMON SNAPPING TURTLE (Chelydra serpentina)

JACKSON CO: on U. S. Rt. 75, Secs. 9-10, T5S, R15E, April 1988, L. Good and J. Kitterman (KU Color Slide 8113).

THREE-TOED BOX TURTLE (Terrapene carolina triunguis)

BUTLER CO: Sec. 26, T27S, R6E, 4 July 1988, J. L. Shumard (KU 209824).

ORNATE BOX TURTLE (Terrapene ornata ornata)

**PAWNEE CO**: Santa Fe Twp., Sec. 34, T22S, R17W, 13 March 1988, J. Damm (KU 209751).

WESTERN PAINTED TURTLE (Chrysemys picta bellii)

**JEFFERSON CO**: Camp Jayhawk, Sec. 10, T9S, R18E, 22 June 1988, C. Karch (KU 209766).

RED-EARED SLIDER (Chrysemys scripta elegans)

ALLEN CO: Neosho River at Humboldt, 27 August 1988, T. Taggart (KU 209946).

WESTERN SPINY SOFTSHELL (Trionyx spiniferus hartwegi)

BARTON CO: pond on Brit Spaugh Zoo grounds, Great Bend, 1987, Brit Spaugh Zoo staff (KU Color Slide 8101). HARVEY CO: Sec. 31, T23S, R1E, 10 July 1988, J. L. Shumard (KU 209943).

EASTERN COLLARED LIZARD (Crotaphytus collaris collaris)

**SUMNER CO**: Sec. 34, T35S, R3W, 14 April 1988, J. T. Collins, S. L. Collins, and L. Miller (KU 209752).

EASTERN FENCE LIZARD (Sceloporus undulatus)

**GRAY CO**: 0.8 km S Cimarron, Sec. 12, T26S, R28W, 12 May 1984, P. J. Kramer (MHP 6415).

GREAT PLAINS SKINK (Eumeces obsoletus)

GRAY CO: 4.8 km W Cimarron, Sec. 5, T26S, R28W, 6 May 1983, M. T. Nulton (MHP 6416)

PRAIRIE-LINED RACERUNNER (Cnemidophorus sexlineatus viridis)

LINN CO: 0.48 km N Cadmus on Ks. Rt. 7, 27 April 1986, T. W. Reeder (KU 209944).

EASTERN HOGNOSE SNAKE (Heterodon platirhinos)

**GRAY CO**: 2 km S & 0.4 km W Cimarron, Sec. 14, T26S, R28W, 4 May 1985, T. A. Unruh (MHP 6417). **JOHNSON CO**: 7.5 mi N Olathe, 10 September 1972, R. Plumlee (CM 58718).

PRAIRIE RINGNECK SNAKE (Diadophis punctatus arnyi)

**SEDGWICK CO:** Sec. 11, T28S, R1E, 10 August 1987, J. L. Shumard (KU 209755).

- KANSAS GLOSSY SNAKE (*Arizona elegans elegans*)

  GRAY CO: 9.6 km S & 2 km W Cimarron, Sec. 3, T27S, R28W, 8 September 1982, M.

  T. Nulton (MHP 6418).
- PRAIRIE KINGSNAKE (Lampropeltis calligaster calligaster)

  GRAY CO: 2 km S & 0.4 km W Cimarron, Sec. 14, T26S, R28W, 12 October 1984, T. A.

  Unruh (MHP 6419).
- LINED SNAKE (*Tropidoclonion lineatum*)

  GRAY CO: Cimarron, Sec. 11, T26S, R28W, 12 May 1983, A. Flake (MHP 6420).
- TEXAS BROWN SNAKE (Storeria dekayi texana)

  NEMAHA CO: Sec. 33, T2S, R13E, April 1988, L. Good and J. Kitterman (KU 209761).
- GRAHAM'S CRAYFISH SNAKE (*Regina grahamii*)

  MORRIS CO: Kahola Creek below spillway at Kahola Lake, Sec. 33, T17S, R9E, 21 May 1988, C. Karch (KU Color Slide 8114).
- BLOTCHED WATER SNAKE (Nerodia erythrogaster transversa)

  MORRIS CO: Kahola Creek, Sec. 33, T17S, R9E, 21 May 1988, O. Karch (KU 209759).
- NORTHERN WATER SNAKE (*Nerodia sipedon sipedon*) **DICKINSON CO:** Rock Springs 4-H Camp, Sec. 5, T14S, R5E, 3 July 1988, O. Karch (KU 209767). **GRAY CO:** 0.8 km S Cimarron, Sec. 12, T26S, R28W, 16 May 1982, P. S. Salm (MHP 6405) and Sec. 12, T26S, R27W, 1 October 1988, L. Miller (KU 209945).
- PRAIRIE RATTLESNAKE (*Crotalus viridis viridis*) **GRAY CO**: Cimarron, Sec. 2, T26S, R28W, 15 October 1980, M. T. Nulton (MHP 6421).

#### **NEW MAXIMUM SIZE RECORDS**

MUDPUPPY (Necturus maculosus)

OSAGE CO: Melvern Reservoir, Sec. 13, T18S, R14E, 4 April 1988, Tom Mosher (KU 209746). Snout-vent length = 262 mm (10 1/4 inches); total length = 385 mm (15 1/8 inches). Sex undetermined.

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