FALL KHS FIELD TRIP PLANNED FOR 17-19 SEPTEMBER IN BUTLER COUNTY

The final field trip for 1982 will be held on 17-19 September 1982 in Butler County, Kansas. The camping area for the field trip will be at the 351-acre Butler State Fishing Lake, which is located in the southeastern part of the county. There are several good collecting areas located in the county. Some may wish to arrive on Friday evening. Everyone should plan to be there by 10:00AM to get organized for the day's activities. There is the possibility of a trip to a cave on private land near El Dorado if we can obtain permission from the owner. This should be a good trip, so plan to attend. Contact the program chairperson, Larry Miller, for more information: 524 North Osage St., Caldwell, Kansas 67022.



REPORT OF THE FIRST SPRING KHS FIELD TRIP TO SUMNER COUNTY, KANSAS

The annual Chikaskia River Wildlife Study was also a joint spring meeting of the Kansas and Oklahoma Herpetological Societies this year. The event, which was held on land owned by the Freeman Dillard family, attracted between 120 and 130 persons from many parts of Kansas and Oklahoma. About 30 of those attending were members of the state herpetological societies and most of the others were students from area schools. A total of 29 species of amphibians and reptiles were recorded during the weekend. Three species of snakes were new county records: the New Mexico blind snake (Leptotyphlops dulcis dissectus), the red milk snake (Lampropeltis triangulum syspila), and the ground snake (Sonora semiannulata). No venomous amphibians or reptiles were found during the meeting.

The three new species discovered in Sumner County spend most of their lives underground. The blind snake seldom attains a length greater than eight inches, and the ground snake is usually less than 12 inches. Little is known about the habits of either the blind snake or ground snake in Kansas.

Those attending the wildlife study this year spent much time looking for interesting plants and animals of all types, fishing, playing games, learning more about some of the native animals, and just resting and visiting. New friends were made and an enjoyable weekend was had by all.

The Chikaskia River Wildlife Studies - the first one held at the Drury Park on April 7-9, 1977 - are organized by Larry Miller of Caldwell and Gene Trott of Wellington. Mr. Trott and Mr. Miller have been assisted by a number of people in planning such events each year. Several land owners have allowed the group to use their land for field trips and the group has camped on the Freeman Dillard property since 1978. The purpose of the outings is to give more people a chance to learn about the environment. Professional biologists and other wildlife workers have worked with young people at the meetings. Many of the interesting finds have been made by elementary school students. Chikaskia River Wildlife Studies have been quite successful. For some, 1982 was their first wildlife study, but for at least 15 of those who signed the guest book, it was their sixth wildlife study.

Larry Miller and Gene Trott would like to thank everyone who attended this year. They would like to give special thanks to Mr. and Mrs. Freeman Dillard, Marla and Vikki for all of their help and hard work. Without aid from many people the event could never have been successful.

Gene Trott will be in charge of organizing the 1983 wildlife study. Anyone with suggestions or comments should contact him by letter. His address is: 1116 East Lincoln, Wellington, Kansas 67152.

List of Amphibians and Reptiles Collected in Sumner County, Kansas During the Annual Chikaskia River Wildlife Study, 14-16 May 1982

Plains Spadefoot Toad (<u>Scaphiopus bombifrons</u>) Great Plains Toad (<u>Bufo cognatus</u>) Woodhouse's Toad (<u>Bufo woodhousei</u>) Blanchard's Cricket Frog (<u>Acris crepitans</u> blanchardi)

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Plains Leopard Frog (<u>Rana blairi</u>) Plains Narrowmouth Toad (<u>Gastrophryne</u> olivacea)
Ornate Box Turtle (<u>Terrapene</u> <u>o</u> . <u>ornata</u>)
Western Spiny Softshell (<u>Trionyx spiniferus</u>
Texas Horned Lizard (Phrynosoma cornutum)
New Mexico Blind Snake (Leptotyphlops
<u>Dulcis dissectus)</u> Plains Blackhead Snake (<u>Tantilla nigriceps</u>
<u>nigriceps)</u> Black Rat Snake (<u>Elaphe o. obsoleta</u>)
Common Kingsnake (Lampropeltis getulus)
Prairie Kingsnake (Lampropeltis c. calligaster)
Red-sided Garter Snake (<u>Thamnophis</u> <u>sirtalis</u>
rDiamondback Water Snake (<u>Nerodia</u> <u>r</u> .
rnombitera)

-----Larry Miller, The Caldwell Messenger, 20 May 1982, Caldwell, Kansas 67022.



(Pseudacris s. streckeri in Harper County 28 April 1982, photo by Larry Miller)

KHS FIELD TRIP TO ATCHISON COUNTY A GREAT SUCCESS

Stout-hearted KHS members and friends braved inclement weather (see photo below taken by Larry Miller) to collect in the vicinity of Atchison County State Fishing Lake over the Memorial Day weekend, 28-31 May. Although there was a lot of rain which rapidly formed small streams across the numerous gravel roads around the lake, the sun emerged on Saturday. This created a weather condition that reminded one KHS member of Africa. A large group journeyed into Doniphan County and found several hillsides that were covered with numerous limestone rocks. The sight of this site was enough the warm the heart of any true herper. The rain completely soaked the ground, making it nearly impossible for any snake to be below the surface. Therefore, many where found under the rocks. A total of 14 red milk snakes (Lampropeltis triangulum syspila) were discovered. Numerous prairie ringnecks (Diadophis punctatus arnyi) and great plains skinks (Eumeces obsoletus) were also seen. A maximum size record western worm snake (Carphophis amoenus vermis) was also taken. Although we searched an area that a local farmer considered to be timber rattler habitat and failed to find one, a DOR was found on a gravel road near the lake. The rain also encouraged female snapping turtles (Chelydra serpentina) to search for nesting sites, and many were seen on the roads. All in all, this was a very enjoyable field trip.

-----Hank Guarisco, Museum of Natural History, University of Kansas, Lawrence, KS.

(The afternoon of 28 May 1982 near Atchison County State Fishing Lake. Larry Miller)

NEW HERPETOLOGICAL RECORDS FOR SUMNER COUNTY, KANSAS

The knowledge of herpetology in Sumner County, Kansas increased greatly between the time "Amphibians and Reptiles in Kansas" by Joseph T. Collins was published in 1974 and the second revised edition, published in the spring of 1982. Members of the Kansas Herpetological Society, students from the Caldwell School System, and a number of other interested people collected many new county records and size records. New records have continued to be found since the second edition.

The date for the release of the second edition of Collins' book was 23 April 1982. It is interesting that on that Friday afternoon a new county record was collected by a group of fifth and sixth grade science students from Caldwell while they were on a field trip along Bluff Creek, just southeast of Caldwell. Cory Ward, a sixth grade student, collected a young western coachwhip snake (<u>Masticophis</u> flagellum testaceus).

As mentioned in the previous article, three new county records were collected during the 1982 Chikaskia River Wildlife Study. These animals were collected on Saturday, 15 May near the Oklahoma border in Red Hills habitat. The blind snake was found by Kelly J. Irwin of Topeka, the milk snake was collected by Regina LaShay of Wichita, and the record ground snake was found by Joseph T. Collins of the University of Kansas in Lawrence and Shelley A. Tarbet of the Oklahoma City Zoo. The ground snake was also a new length record for the state of Kansas in addition to being a new Sumner County record.

A second New Mexico Blind Snake was collected on the evening of 21 May 1982 by a group of KHS members and students in a small canyon southwest of Caldwell. About fifty ground snakes were found under rocks at another location south of Caldwell on the next day. The group collecting on 21 and 22 May included KHS members, Marla Black, Jolene Ehlers, and Larry Miller. Working with them was Ronnie Morris, Larry Thrower, and Holly Warner who are students from Caldwell

The recent flood of new county records raises the possibility of finding even more in the area. Other animals that are associated with the Red Hills habitat may occur in Sumner County. Intensive work by a large number of people has greatly increased the herpetological knowledge in the southcentral Kansas county since 1974, but there is always more to be discovered.

-----Larry Miller, Sixth Grade Teacher, U.S.D. #360, Caldwell, Kansas 67022.

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SCIENTISTS FOR THE ENDANGERED SPECIES ACT

The crisis of species extinction and diminishing biological diversity is well known within the scientific community, but little appreciated elsewhere. The scientific community has a special responsibility with respect to this issue because it has a more than ordinary personal stake in the problem of species loss and may be in a good position to contribute significantly to its solution.

"Sceintists for the Endangered Species Act" is an <u>ad hoc</u> group of scientists interested in securing the reauthorization by Congress in 1982 of the federal Endangered Species Act. The goal of the group is to insure that the Act continues to provide a strong legal basis for the effective conservation of plants and animals that are now, or may foreseeably become, in danger of extinction.

Funds to implement and enforce the Endangered Species Act will no longer be available after September 30, 1982, unless Congress affirmatively reauthorizes it. There is strong pressure from some industry groups to weaken this federal law. The purpose of "Scientists for the Endangered Species Act" is to alert policymakers to the significance of the problem of species loss and to demonstrate the strong support within the scientific community for the preservation of biological diversity and the protection of endangered species.

All public statements made on behalf of "Scientists for the Endangered Species Act" will be approved by a committee consisting of: Dr. G. Evelyn Hutchinson(Yale University), Dr. George Woodwell (Woods Hole), Dr. Peter Raven (Missouri Botanical Garden), Dr. Thomas Eisner (Cornell), and Dr. Thomas Lovejoy (World Wildlife Fund - U.S.). Scientists who wish to become associated with this effort can obtain information concerning how to do so by writing: Scientists for the Endangered Species Act, c/o Environmental Defense Fund, 1525 18th Street, N.W., Washington, D.C. 20036.

-----taken from, "Association of Systematic Collections Newsletter," April 1982.



BETTER SNAKE BITE TREATMENT IS STUDIED

What do you do when you're bitten by a poisonous snake, hours from the nearest medical clinic? "There really is a void in emergency treatment," says Richard Straight of the federal Venom Research Laboratory in Salt Lake City. "We've never been satisfied with what is recommended," he explains - namely lancing the wound, attempting to suck out the poison and perhaps applying a tourniquet to the bitten limb between the wound and the heart. But a technique has been tested in Australia that is so stunningly simple its efficacy begs belief. One merely splints the unwashed bitten limb and then wraps an elastic bandage as tightly as possible about a wide area encompassing the wound.

Successful use of the technique lends support to previous suggestions from animal research that venom molecules are so large that they prefer to travel in the lymph vessels instead of in the bloodstream.

Australian herpetologist John Pearn is believed to have conducted the first human trial, on himself, according to the January Scientific Australian. Having followed reports of its success in five years of monkey trials at the Commonwealth Serum Laboratories in Melbourne, Pearn was prepared to use it on himself when an Australian brown snake bit him a year ago February. "Just how effective this new treatment (first suggested 40 years ago) is was demonstrated by the fact that there were no symptoms of envenomation two hours after the bite," Pearn says in the Australian magazine. Medical tests confirmed the absence of venom in his blood at that time.

Within 10 minutes of carefully removing the bandage, however, signs of poisoning appeared. Venom was detected in his blood 5 minutes later. Following treatment with the appropriate anti-venom, Pearn recovered completely. Straight notes that an Australian medical journal has reported another incident where the technique was used for a tigersnake bite. That individual survived a six-hour trek to the hospital, again without venom movement.

The elastic bandage sufficiently compresses lymph vessels so that the flow of lymph and tissue fluids is halted. Straight still considers the concept that venom might selectively choose the lymph system "unproven" but an "exciting idea." So intrigued are researchers at his Utah laboratory that studies have already begun there to explore the physiology of venom transport and action during compression. If the technique proves as effective in his controlled animal studies as the human anecdotal accounts would suffest, it could become the preferred treatment for snake-bite emergencies.

----by J. Raloff, Science News, vol. 121, 24 April 1982.

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THE CHINESE SALAMANDER

Because the salamander <u>Megalobatrachus davidianus</u> makes sounds like a baby crying, its common name in China is "baby fish." The largest amphibian now in existence, it may grow to 180 cm in length and weigh up several dozen catties (1 catty = $\frac{1}{2}$ kg); one specimen caught in Hunan Province weighed 65 kg. It is one of three salamander species belonging to the Cryptobranchidae. The other two, <u>Cryptobranchus japonicus</u> in Japan and <u>C. alleganiensis</u> in the eastern United States, are similar to the Chinese species in shape and size, but the American one is much smaller.

The amphibians flourished when the earth consisted of a single continent, Pangaea, about 200 million years ago. At that time Cryptobranchid salamanders were more widely distributed over the northern hemisphere than now. Fossils have been found from formations of the Oligocene, Miocene, Pliocene epochs of Europe, the Miocene of North America, the Palaeocene of east Asia, and the Oligocene of Kazakhstan. The oldest fossilized specimen unearthed so far, from the Lower Eocene in Wyoming, is between about 3 and 70 million years old. When Pangaea split apart into plates, these drifted further and further from one another and became separated by oceans. With changes in geography and climatic conditions, many Cryptobranchid species, like other animals, were eliminated through natural selection, leaving only the two in east Asia and one in the eastern United States.

The Chinese species is the most widely distributed. It occurs in the tributaries of the Yangzi River, the Yellow River, and the middle or lower reaches of the Pearl River, its range covering 17 provinces and regions, among them Shanxi, Shaanxi, Henan, Hubei, Hunan, Anhui, Sichuan, Guizhou, Guangxi, Guangdong, and Fujian. These salamanders are usually solitary, living in fast clear mountain streams, 200 - 1000 meters above sea level. They position themselves in dark, muddy rock crevices that are wide enough to allow them easy movement, facing outwards for feeding and self-defence, and remain still. The water temperature varies between 10 and 18 C. In spring and summer they are found at cave entrances and in autumn and winter deep within. In the daytime they are sluggish and slow, shunning the light, although in spring, they sometimes come out to bask in the sun. Immumer and autumn they come out by night and hide by day. The adults are lazy and inactive, but temperamental, snapping at each other during the night.

The breeding season is from June to August. They are oviparous, fertilization occurring externally. Spawning takes place in caverns: the ova are attached to rocks in areas with a slow-moving current, the male fertilizing the eggs after the formale has spawned. Each female produces more than 300 of the round, bean-shaped ova which are covered by transparent gel to from a long chain-like tube. Incubation takes about three weeks. The number of eggs is not large. The egg counts of a <u>Megalobatrachus</u> 100cm long and weighing about 7.5 kg is 1500; at 40-80cm and .5-3kg it is 300-600. Survival rate is very low and the young grow slowly, reaching around 200mm in length and less than 100g after three years.

To catch its prey, the salamander hides among the rocks at night, attacking suddenly when a suitable prey passes by and swallowing it immediately. Crabs and frogs are the main food (60-70%); fish, shrimp, snakes, aquatic insects, young

turtles, water rats and plant residue are also eaten. The young are herbivorous, becoming carnivorous when about two years old. The salamander's metabolism is slow, but its ability to endure starvation is considerable, and even after long periods it does not lose weight. It can survive without food for a full year, but it cannot live out of water. The flesh is delicious and nourishing, and also has medicinal value.

The salamander is a protected species in China's second category. Local people and scientists agree that they should only be caught under license by responsible authorities, and that poison bait should be strictly forbidden. Because the salamanders do not reach sexual maturity until they weigh at least .5kg, none under that weight should be sold, and they should be specially protected in the breeding season. In some areas, too many have been caught and numbers have declined. Campaigns to promote strict protection are needed so that breeding can resume unhindered, and in counties where conditions are appropriate, captive breeding should be encouraged.

-----by Huang Zhujian, ORYX, 16(3):272-273.

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TREASURER'S REPORT

We have received dues for 1982 from 122 members and our current balance is \$736.01. If you have not paid your dues for this year, please send \$4.00 to Rose Etta Kurtz, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045. The cost of postage has increased this year, as well as the cost of printing the newsletter.



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BAD PUBLICITY FOR HERPS?

Recently and throughout the years, animals of all kinds have been receiving bad publicity. I am referring especially to the movies. Perhaps you have seen the recent television showing of, "Alligator," or in years past you may have seen the shocking thriller, "Jaws." The rights of animals are being exploited, and many people will not "go back in the water" because they are afraid. Since animals have to bear the brunt of all this unpopularity because of movies such as, "Venom," "Grizzly," and even, "King Kong," I think something should be done to help them out. The directors should put a note at the end of the movies acknowledging that the scenes presented are fictitious. Since many directors have disclaimers after movies involving criminals, why not do this for animals as well?

----by KHS member, Jeff Louis.

A MODEST PROPOSAL TO DISCOURAGE ANIMAL ABUSE

I have been lecturing to the general public for the last ten years on the importance of preserving our reptile fauna. I have not seen that it has done much good. People are still rounding up rattlesnakes, running over turtles, and wearing alligator boots. Hollywood is gutting, stomping, shooting, setting on fire, and blowing up more reptiles than they ever have before. I admit that it is hard enough to drum up sympathy for big-eyed baby seals, let alone rattlers, so I have concluded that education is not the answer. What is required is psychological conditioning. People must have immediate negative feedback when they abuse wildlife. Therefore, it is up to us to provide that feedback. I suggest that we immediately construct what I call, "explosive roadside turtles."

These are mock ups of turtles that, when run over by a vehicle, say something as heavy as a pinto, would cause a pressure plate inside the turtle to make contact. This would allow current to flow from a battery to a small amount of plastic explosive. The resulting explosion would send a set of steel spikes through the shell of the turtle and puncturing the happy motorist's radials beyond repair. The average driver, after shelling out as much as a hundred dollars for a new tire, soon learns that there are better ways to amuse himself when driving than by squashing herps. Once the public has learned this lesson, we can undertake my next project, the "25,000 watt kingsnake."

----by Dana Knepper, 1556 Lacy Blvd., Sioux City, Iowa.

Editor's Note: Articles published in the KHS newsletter represent the views of the author and not those of the Kansas Herpetological Society or its officers.

SQUASHING TURTLES IS POOR SPORT

Without trucks and cars, this would have been a bumper year for turtles. They emerged from their hibernation May 1 to a wet spring, plenty of vegetation and a cornucopia of worms, crickets and mushrooms to feast on. Unfortunately, as in every year, a lot of three-toed and ornate box turtles - land turtles that can swim but mainly stay in the forests and prairies of Missouri and eastern Kansas have been going splat these last 30 days, victims of drivers who seem to delight in squashing them as the animals slowly cross the roads of both states.

How many? Nobody really knows. The other day a driver on Missouri 87 between Boonville and California, Mo., counted 20 freshly killed turtles in a 12-mile stretch. The remains of other turtles could be seen on the highway shoulders. "Then you didn't see half of what was killed," said Charles W. Schwartz, a retired biologist of the Missouri Conservation Commission.

Mr. Schwartz and his wife, Elizabeth R. Schwartz, also a retired Conservation Commission biologist, are the three-toed box turtle experts of Missouri and, for that matter, the world. The couple, both pushing their 70s, have spent the last 18 years studying the movement, density, physical characteristics, and reproductive practices of <u>Terrapene carolina triunguis</u>, a gentle, unafraid and ancient member of the reptile family that was developed to its current, highly efficient state long before emerging man probably even figured out how to pick his nose.

The Schwartzes point out that the three-toed box turtle, mainly an inhabitant of the Ozarks, is closely related to <u>Terrapene ornata ornata</u>, the ornate box found mainly west of Sedalia, Mo., and on into Kansas. The main differences are the number of toes on the rear claws and the coloration.

When the Schwartzes retired, they moved to Idaho but kept their home here, a 40-acre place where they've identified, marked and tracked 1,500 individual turtles since 1965. Mrs. Schwartz said there are about 400 to 600 turtles on their land and an adjoining 15 acres.

What should have been a pleasant trip home this spring to finish their turtle studies for the Conservation Department was marred. "As soon as we hit eastern Kansas we started seeing the turtles smashed all over the highways," Mrs. Schwartz said. Not that the Schwartzes advocate injuring oneself in a wreck to save a turtle. Often, expecially on winding roads in the Ozarks, a turtle will be just over the crest of a hill, and there is nothing - safely - that can be done. What galls the Schwartzes are the drivers who seem to take dead aim at the turtles, trying to crush them or flip them over. Even that latter maneuver usually fatally injures the animal.

"It's just stupid," said Mr. Schwartz, his bile rising. "An utter disregard for life. Consider just a few things. No other creature with vertebrae except man lives to be that old in this state. Not deer, not horses, not rabbits. We've worked on that, and a lot of these little guys get to be 75-80 years old."

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"They have a slow reproductive rate - four to eight eggs a year, and not all those survive. And they're tenacious. The only really accurate way to sex a turtle, despite what everybody says, is to dissect it. So Libby and I get ours off the road. We won't kill a healthy one. A lot you find smashed out there are still alive, just barely, but they're still fighting. And that's when you really get angry."

Mrs. Schwartz said two-thirds of road-killed turtles are male, suggesting they have romance on their mind. One of many turtle anomalies they've found is that some turtles stay close to where they were hatched for life; others - who may have superior genes - are wanderers.

There's one other point that Mr. Schwartz makes. The box turtle is a significant indicator of environmental conditions in a particular place over a long period of time. It may be that index animal by which man eventually can measure the effects of the problems he's created in this century - nuclear fallout, acid rain, pollution and the greenhouse effect.

"Maybe there's hope," Mr. Schwartz said. "The other day I saw the driver of a big 18-wheeler cut his wheel ever so slightly and miss a turtle. And I know of a woman who followed another car all the way into town here and read the driver the riot act for killing a turtle. "More people should do what those two did. Those people I applaud."

-----taken from "The Kansas City Times," Thursday, June 3, 1982.

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WHAT'S IN A NAME - HERPETOLOGICAL ETYMOLOGY

Sometime during the years 1875-78, the first European explorer to penetrate deep into New Guinea was amassing a collection of wildlife completely unknown to the outside world. Turning away many reptiles brought to him by natives, "having exhausted my store of spirits of wine," he nevertheless returned home to Italy in 1878 with many specimens never seen away from their homeland. Among the specimens were many reptiles, including a beautiful yellow-tan python with a black head and white lips. The snake, long called the white-lipped python, later became better known as D'Albertis' python (Liasis albertisi) after its discoverer, Luigi D'Albertis. Few people may remember this remarkable man and the pains it took, not only to bring even a single specimen from New Guinea to Italy in 1878, but even to make the trip itself. He remains the most important zoologist to have explored this area.

Sadly, the names used to describe animals often are misspelled or otherwise mangled to remove their original significance. Instead of D'Albertis' python, we hear of "D'Albert's python," quite a difference if your name is D'Albertis! Another example that if often heard is "Jacksoni chamaeleons" for the three-horned or Jackson's chamaeleon. Why mix Latin and English? Who cares? What's in a name anyway?

As every neonate biologist knows, there is a system of scientific names (binomial nomenclature) by which one name is assigned to each creature on this planet. All names are Latinized, although the words themselves may, in fact, originate from any tongue. Relatively few "Latin" names are, in fact, Latin. However, by using a language that is no longer actively used and thus not likely to change, universality and stability is achieved. Many names are Latinized versions of personal names. A Dutch collector named Van Phelsume was honored by Gray in 1825 when the Madagascan Day geckos were assigned to the new genus, <u>Phelsuma</u>. The Chinese crocodile lizard, <u>Shinisaurus crocodilurus</u>, was named for the professor who captured the type specimen. The literal translation of the name is, "Shin's lizard with crocodile tail." The American earless lizards are small iguanids named in honor of a great herpetologist, John E. Holbrook, hence the name, <u>Holbrookia</u>. In a similar way, species as well as entire genera, are named after people: <u>copei</u> (<u>Copeia</u>, a herpetological journal, was also named after Edward Drinker Cope), <u>taylori</u>, <u>yarrovi</u>, and so on.

More often, the intent of the name is to describe a certain character of the animal. <u>Crotalus</u>, means rattle-tail, <u>Coluber</u> means snake in Latin. The king cobra is known as <u>Ophiophagus</u>, which is Greek for snake eater. Indeed, snakes do make up a large part of the king cobra's diet. Hognose snakes belong to the genus <u>Heterodon</u> (different teeth). These toad-eating serpents have enlarged posterior teeth used to deflate their prey. The genus <u>Agkistrodon</u> (hook-toothed) contains two U.S. species, the copperhead (<u>A. contortrix</u>, twister) and the cottonmouth (<u>A. piscivorus</u>, fish eater). In these examples, the scientific and common names are not always similar, but both are accurate.

Some, however, are more cloaked in emotion than the coolness of science might prefer. Certainly, <u>Heloderma horridum</u> (horrid one with sun-skin, or studded skin) is more than the beaded lizard deserves. And is the greater earless lizard really a "dumb lizard" (<u>Cophosaurus</u>)? The flying dragons were named <u>Draco</u> by Linnaeus because

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he actually believed the tiny lizards were baby dragons. Aside from a possible mane-like skull (and that is really reaching) why are Chamaeleo "ground lions?"

Time has reduced the neatness of the scientific name; too many organisms share too many traits. The names, once given, are not to be changed. They remain in the literature, right, wrong, or redundant. Therefore, they are more like zip codes, or individual computer numbers that let one person know what another is discussing. It is unfortunate that there are no books for young (or not-so-young) readers about reptiles explaining the scientific names. No market, you say? Try to find a five-year old who doesn't know that <u>Tyrannosaurus rex</u> is "King of Tyrant lizards," or <u>Archeopteryx</u> is "Ancient Wing." Imagine this book, listing such items as Racerunners, <u>Cnemidophorus</u>, "bearing lower-leg armor," or aquatic caecilians, <u>Typhlonectes</u>, "blind swimmers." In a few cases, the scientific and common names are identical: <u>Boa constrictor</u> is "boa constrictor," <u>Chondropython viridis</u> means green tree python.

Maybe it doesn't matter these days how much grammar and etymology we know. So much of our language has become either slang or "hi-tech" combinations of acronyms that, in time, the search for origins will be pointless. Still, I think there is a desire among many young biologists to have a better grasp of what they are saying - to know what it means. There may even be beneficial side effects. For example, I once had the opportunity to work with a scholar from Nepal, whose English, although understandable, was only marginally better than my Nepalese (nil). Result: we conversed for two weeks in modified Latin. It'll probably never happen again...

-----Robert George Sprackland, Oklahoma City, OK.



BUG-EATING FROGS IN TROUBLE

The northern leopard frog, a hungry little amphibian that has been devouring pests in Wisconsin farm fields for as long as folks can remember, is dying. And, ironically, some scientists suspect - although it is not certain - that modern agriculture may be the killer. "Nobody knows for sure what's happening to these little creatures," said Jim Hale, director of the Department of Natural Resources office of endangered and non-game species. "What we're reasonably sure of is that the die off is an early warning that something's wrong with the environment."

Biologist Ruth Hine, who edited a recent DNR report on the leopard frog's mysterious demise in Wisconsin, said that historically, adult frogs gather on the banks of ponds, streams and rivers in autumn before swimming to the bottom and hibernating in the mud. Over the last decade, however, frogs by the thousands have been dying on the shore. "They sit on the edge of a pond and freeze to death," Hale said. "There have been times when a frog has been thrown in the water and, surprisingly, it will bust itself trying to get back to land."

Hale said researchers suspected the ponds and streams have been polluted by agricultural chemicals. The frogs know something is wrong with the water, he added, and rather than expose themselves to pesticides, they remain on the banks and die. The DNR report said laboratory tests have ruled out viral and bacterial infections as the primary cause of the leopard frogs' demise. Hine said analysis of the livers of sick and dying frogs revealed a degeneration similar to that which occurs when frogs ingest toxic substances.

Former University of Wisconsin zoologist Richard Vogt, who also has studied the leopard frog predicament, is another who believes farm chemicals may be the culprit. He said the frogs' roving behavior, in which they forage through farm fields in summer searching for insects, make their exposure to toxic chemicals likely. The DNR report said frogs played important roles as predators. Even something as small as the inch long cricket frog consumes about 5,000 bugs in a single season.

Hale said frogs were an important item on the menu of other beasts - among them raccoons, shorebirds, snakes, turtles and a variety of fish. Likewise, adult frogs provide food for skunks, otters, weasels and even humans.

Hine said a frog watching survey has been initiated in Wisconsin. Volunteers, who have been trained to identify and count various frog calls, have been collecting data that will help researchers get some idea of how the frogs are distributed statewide. Tracking the state's leopard frog population was only one element of the research recommended by the DNR report. But getting accurate population data on Wisconsin frogs is difficult without funding, Hine said. Some experts have estimated that there may be fewer than half as many frogs in the US today as there were in the mid-1960s.

The DNR report ended on a somber note: "The decline in the abundance and health of the leopard frog in Wisconsin can be an indicator of stress in the ecological system that should not be ignored."

----by Steve Hannah, The Milwaukee Journal, March 28, 1982.

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TURTLES HUNG BY TAILS

Salina, Oklahoma - Live turtles a Salina man has hanging from their tails on a clothesline outside his home have prompted irate neighbors to label him the meanest man in town. The man reportedly plans to use the surtles' shells for ashtrays, but the police and neighbors don't understand why a more humane method can't be used to kill the creatures. "It makes me sick to see them hanging there," one housewife complained. "The whole neighborhood is mad about this. He has to be the meanest man in Salina.

-----(submitted by Frances A. Velay, taken from the Oklahoma City Times, 24 May 1982).

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DUTCH SNAKE SOCIETY

The secretary of the Dutch Snake Society, R. Verbeek, has contacted Larry Miller of the KHS so that our members will be aware of this society. This herpetological society is different from "Lacerta." The DSS publishes a bimonthly magazine entitled, "Litteratura Serpentium" which also has a short English summary. The names and addresses of the officers are given below should anyone wish to join or write to them.

President:	P. Stoel Verlengde Hoogravenseweg 16 3525 BE Utrecht.	Secretary: 5	R. Verbeek Alholm 76 2133 DD Hoofddorp.
Treasurer:	E. den Ouden Krugerstraat 33 3531 AN Utrecht.	Editor:	A. van Woerkom Baarnseweg 6a 3735 MG Bosch en Duin.



HOLLAND'S TRAVELIN' TOAD WINS FIGHT TO CROSS ROAD

This is a tale of travelin' toads, and how the amorous amphibians are winning a struggle with civilization in the Netherlands. Each March, as soon as the temperature goes above 46.4 degrees Fahrenheit, when a toad's fancy turns to thoughts of love, up to 1,000 of the warty wanderers will cross a well-traveled road behind the North Sea dunes to reach their mating and egg-laying grounds in the water-filled ditches beyond. And for the seventh year in a row, this city will close the road to vehicles each night so the toads - known to science as Bufo bufo - can romance without risk of a squashing.

The story began in 1965, when naturalists discovered that a city highway crossed the toad-mating route from their home in the seaside dunes bordering the city. Traffic was taking a rising toll in toads. Wijnand Bleumink is one of those who came to the toads' defense.

As the population of this city has grown, Dune Avenue - Duinlaan in Dutch - carried more and more traffic. "Because more and more cars passed, more and more toads were being flattened," said Bleumink, an amateur naturalist who works for the city Education Department. "Pffhht, nothing left except the skin and a dirty spot on the road," he recalled with a grimace.

A former director of the Education Department, Jan Nijkamp, told of the slaughter in a nature column he wrote for one of the local newspapers. "He got more and more protest letters," recalled Bleumink, noting the Dutch concern for conservation in a society that owes much of its dike lands - former sea beds to nature's willingness to adapt to man. So the Education Department began a campaign to adapt a bit to the toads, at least during the mid-March to mid-April mating season.

Meanwhile, local newspapers began to carry stories about man's inhumanity to toads, and how they were dying out around The Hague. That carried some weight in this country, known to its inhabitants as "Kikkerland" - Frog Land - because of its wetness. The close toad relation has also worked its way into the language in such expressions as "You can't pluck feathers from a frog," the local equivalent of the English "You can't make a silk purse out of a sow's ear."

In 1976, the city's police and Public Works Departments decided to close 500 yards of the highway between 6 PM and 6 AM. "The problem was not only to close the road, but at what moment," said Bleumink, who noted that the toads, common all over the Netherlands, breed once a year and only when the temperature and humidity are right. Every March evening, Bleumink, who lives nearby, checks his thermometer about dusk, the time toads prefer to fall in love. He has permission to close the gates on the road as soon as he spots the migration beginning.

The crossings, which last about a week, begin with mostly male toads, who are joined in increasing numbers by the larger females. At the height of the mating period, the 2.6 inch females carry the 2.2 inch males piggy-back to the breeding grounds. Bleumink said the piggyback position, known as amplexus, provides the stimulation for the female to lay 3,000 to 6,000 eggs in the stagnant ditch water.

----by Abner Katzman, Associated Press Writer, Lawrence, Journal-World March 21, 1982

BOOK REVIEW: AMERICA THE POISONED, BY LEWIS REGENSTEIN

Lewis Regenstein, Vice-president of The Fund for Animals, just completed an outstanding book documenting dozens of cases involving the poisoning of our environment. The book, "America the Poisoned," contains about 400 pages of well documented material dealing with what deadly chemicals are doing to wildlife, humans, and the rest of the environment. Cases from every part of the country are described in the book. Several references are made to the serious pesticide misuse problems that have been documented in southern Kansas and northern Oklahoma since 1976.

Mr. Regenstein recently appeared on the "Today Show" and told the audience a little about his new book. He has also been seen on several other TV programs, and his work has appeared in such noted newspapers as: "The Washington Post," "The New York Times," and "The Los Angeles Times." He has worked with many national conservation and environmental groups.

"America the Poisoned" is a hardbound book that sells for \$16.95 in the United States. It should be available in most book stores in the near future. The book has already been reviewed by many noted writers and environmentalists. It is best summarized by a statement made by Jack Anderson. Anderson stated, "Not since Rachel Carson's "Silent Spring" has a book so shockingly documented the chemical warfare that his nation's government and industry giants have waged on its own people."

-----Larry Miller, 524 North Osage St., Caldwell, Kansas 67022.

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REQUEST FOR RESEARCH ANIMALS

Anita Steed of the Department of Zoology, University of Oklahoma, Norman, Oklahoma 73019 is requesting specimens of the following genera for her research: <u>Storeria</u>, <u>Tropidoclonion</u>, and <u>Virginia</u>. Ske may be reached by writing to the above address or by telephone: home 405-360-9461, work 405-325-4821.

James R. Stewart of the Faculty of Natural Sciences, University of Tulsa, 600 S. College Ave., Tulsa, Oklahoma 74104 requests examples of lined snakes (<u>Tropidoclonion lineatum</u>) for his research.

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BOOK REVIEW: AMPHIBIANS AND REPTILES IN KANSAS (SECOND EDITION)

The present work by Joseph T. Collins is a revised and updated version of the first edition which appeared in 1974. Since this time, much more information about the amphibians and reptiles of Kansas has been accumulated. For example, over 525 new county records have been obtained during the past eight years, which gives us a better understanding of the distribution of these animals in the state. There are also 27 new maximum size records presented in the second edition.

Many recent field observations have contributed to our knowledge of the habits of these animals. KHS member, Larry Miller, recently observed breeding choruses of the Red-spotted toad (<u>Bufo punctatus</u>) in Barber County. Earlier studies indicated that the gray treefrog in Kansas was Cope's gray treefrog (<u>Hyla chrysoscelis</u>). More recent work indicates that both this species and the eastern gray treefrog (<u>H. versicolor</u>) are found throughout much of eastern Kansas. These species are so similar that they can only be distinguished from one another by their different calls. The second edition also contains more natural history information about the milk snake (<u>Lampropeltis</u> triangulum) in Kansas. The red milk snake (<u>L.t. syspila</u>) is found in the extreme eastern part, while the central plains milk snake (<u>L.t. gentilis</u>) occurs throughout western Kansas. The pale milk snake (<u>L.t. multistrata</u>) is no longer considered to occur in the state. The common kingsnake (<u>L.g. holbrooki</u>) and the desert kingsnake (<u>L.g.</u> <u>splendida</u>). Since 1974, Strecker's chorus frog (<u>Pseudacris s. streckeri</u>) has been discovered to be a part of the state's fauna and an account is included in the second edition. Many other changes have been made during the past eight years.

The complete bibliography, excellent black and white photographs, and good technical key make this publication extremely useful to both the novice and the aficionado. This is a combination of a good field guide and a natural history book of the amphibians and reptiles of Kansas. Many of us may remember poring over a worn copy of Roger Conant's, "A Field Guide to Reptiles and Amphibians of Eastern and Central North America" during our younger years. I can still remember details of many of the color plates. Likewise, I can envision Collin's second edition stimulating the imaginations of individuals throughout Kansas for many years to come.

Collins, J.T. 1982. Amphibians and Reptiles in Kansas (Second Edition). Univ. of Kansas Publications Museum of Natural History. xiii + 356 p. \$12.00.

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FRENCH HOBBYIST WISHES TO CORRESPOND WITH KHS MEMBERS

Monsieur Alain Turbillon, 246 rue de Bellevue, F-92700 Colombes, France, is a member of the Herpetological Society of France and is interested in the biology and ethology of lizards. Anyone interested in communicating with him is welcomed to do so.

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BOOK REVIEW: THE ANIMAL CONNECTION

For every one exotic animal that lives to make its way from the wilds of Asia, Africa, or South America to your local pet store or zoo, an estimated ten others of its species die from the trauma of capture, improper housing and handling, shipment, starvation, dehydration, etc. In "The Animal Connection" a former exporter tells without apology how he contributed to the slaughter of specimens in the name of commerce, and provides frightening data about the traffic in wild creatures which still continues full force today, despite protective legislation designed to halt it.

The author, Jean-Yves Domalain, tells a fascinating story of his gradual realization of the horrors of the animal connection while detailing the methods of acquisition and conditions under which specimens are housed and transported. He operated out of Thailand and Laos, but similar conditions prevail in the trade in most other countries of the world that still have living wild faunas of commercial desirability.

Domalain is fond of snakes, and tells several good snake stories, although he does refer to a prey item being "crushed" by a python. He also says that after he had quit the export business and returned to his native France, he occasionally succumbed to the impulse to "rescue" some reptile specimen from a pet store by purchasing it. Many pet dealers do try to care properly for their reptile stock, if for no other reason than that they have invested money in the specimens and they wish to sell healthy examples to keep their customers. However, we all know of dealers who keep their charges under the most appalling conditions before selling. Domalain cautions that even if you buy only from good dealers, each time a customer purchases an animal which had been imported from the wild, that customer is completing the vicious circle of cruelty and destruction, insuring that another ten animals along the chain will die before the one live individual reaches the retail dealer to replace the one bought. Each time a reptile is sold, it encourages the trade to continue.

The graphic descriptions of the fates of so many animals unfortunate enough to become caught up in the web of export are distressing to anyone who appreciates animals for their intrinsic value. Books such as "The Animal Commection" should impress KHS members with the importance of captive breeding of reptiles and amphibians to provide specimens for the dedicated herper who wishes to maintain live animals without participating in the slaughter involved in commercial collecting.

Domalain, Jean-Yves. 1977. "The Animal Connection." William Morrow & Co., Inc., N.Y. 250 pages (+ listing of Appendix I & II protected species as of 1977, sample animal dealer price list, and air freight waybills from the authors former enterprise).

----John Simmons, Department of Herpetology, University of Kansas, Lawrence, Kansas-

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KHS EDITORSHIP CHANGES HANDS

For the past three years, I have had the pleasure of serving as editor of the KHS. During that time, I have enjoyed sifting through much of the herpetological literature and manuscripts that have been submitted to provide the membership with a balanced, informative, and interesting newsletter. Conservation, education, and legislation have been some of the main areas that the newsletter has concentrated upon. In addition to informing members about recent field trips and activities, the newsletter has attempted to focus upon the world of herpetology, inside and outside of Kansas. Due to travel plans in the near future and the growing problem of not having enough time to do the things that must be done, I reluctantly resign as editor.

The newsletter is in very capable hand, however. John Simmons, collection manager of the Division of Herpetology, has been appointed by the KHS executive council to assume the role of editor. I highly endorse their choice, and feel that his excellent writing style, experience in proofreading, and his wit will undoubtedly improve the newsletter. Thank you for the opportunity of serving as editor of the KHS for the past three years.

-----Hank Guarisco, Museum of Natural History, Unversity of Kansas, Lawrence, Kansas.

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THE CONCEPT OF CONSERVATION

The term, "conservation" is commonly used in many ways. Webster's dictionary defines conservation as, "protecting from loss, waste, etc., preservation." Conserving energy means achieving your goals using the least amount of natural resources. This implies that some of the natural resources will be used up because of this activity. Eventually, we must decide what constitutes a "necessary" activity. Conservation implies performing actions to achieve goals with minimum use of resources (eg) we drive automobiles no faster than 55 mph to conserve energy, but this also limits our freedom to drive faster. Therefore, a value judgment has be made which implies that driving faster than 55 mph is an "unnecessary" activity.

Likewise, we are aware that most activities have direct or indirect effects upon the environment. Therefore, any activity that we choose to perform carries with it an explicit or implicit judgment that the benefit of the activity outweighs the cost. Pursuing this cost/benefit analysis quickly leads us into many problems, however. Although we may attempt to reduce all values to costs and benefits which can be measured objectively, the various categories are qualitatively different, ie. "comparing apples and oranges." For example, how would you compare the monetary benefit of removing timber from a virgin rainforest to the environmental cost of degradation of this habitat? Unfortunately, it is usually much easier to assess the monetary benefit than the cost of habitat destruction. Many ecological questions remain unanswered. Even if these could be answered, the assessment would still be fraught with difficulties. How do you quantify the aesthetic value of a virgin

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rainforest? Does this benefit increase with the number of individuals that have access to the area? Is a consensus of opinion enough justification for deciding to use a certain amount of unrenewable resource? What of our responsibility to future generations?

Because or inspite of these theoretical considerations, decisions are made. They are made by various legislative bodies - local, regional, federal and international. At this point I would like to mention a certain bias in our thinking that may be partially due to our democratic society. We vote on many issues that become permanent parts of our lives. All of us are subject to regional laws which define the limits of necessary or allowable activities. Unnecessary activities (unallowable) are collectively condemned and carry with them certain sanctions. We have even elected to change the time of day via Daylight Savings Time. Carrying this concept to the extreme, we may believe the sun rises because we have collectively wished it to do so.

We must recognize the limitations of our collective power and obtain a more realistic image of our place in the world. For years we have placed ourselves apart from nature. Man has reason, and therefore, is the "crown of creation," and master of the planet. Recently, we have seen some unexpected results of our activities - pollution, species extinction, and habitat destruction and degradation. We must remember that we collectively, albeit implicitly, judged these activities to be allowable because of an unrealistic concept of the world.

Much progress has been made in recognizing the fragility of the biosphere and redefining our place within it. Education programs have helped many see the beauty of traditionally repulsive animals, such as snakes and spiders. We no longer consider ourselves lords of the universe because we have collectively decided to do so. Yet we have a great amount of power - power that comes from the depth of our understanding. We have the power to recognize our limitations by deeping our understanding. In this way we will be able to correctly decide what is a "necessary" (allowable) activity, and take the "conservative" course of action.

-----Hank Guarisco, Museum of Natural History, University of Kansas, Lawrence, Kansas.

