KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER NO. 69

October, 1987

ANNOUNCEMENTS

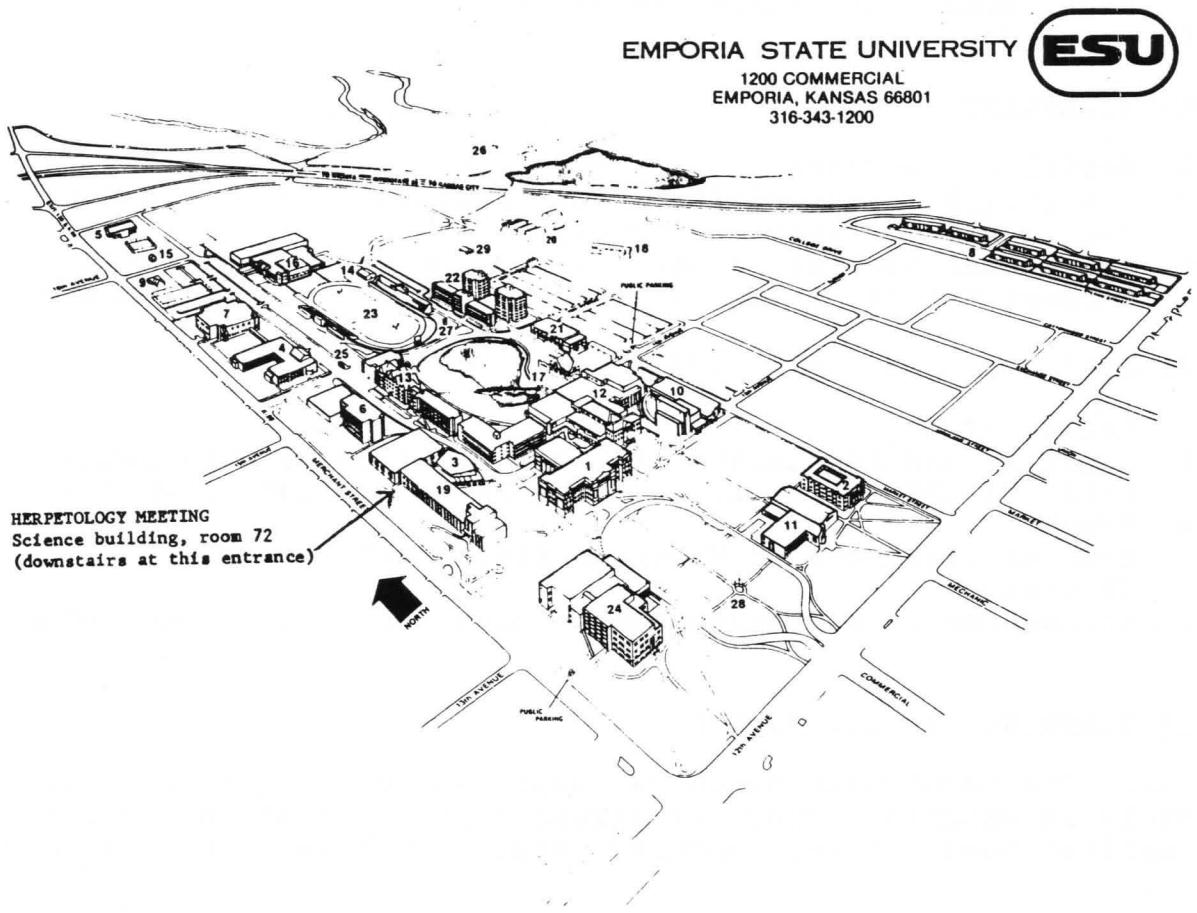
1987 Annual Meeting of the Kansas Herpetological Society

The annual meeting of the Kansas Herpetological Society will be held at Emporia State University in Emporia, Kansas, on November 14-15, 1987. There is direct highway access to Emporia State University from Interstate I-35. Exit south at the Merchant Street (K-99) exit.

The meeting place will be room 72 of the Science Building (also known as Breukelman Hall) on the west edge of the campus, on Merchant Street. The meeting room is downstairs at the west entrance of the building, by Breukelman Hall.

There are numerous motels available in Emporia. The closest one to campus is the Ramada Inn (at the Merchant Street/K-99 exit off I-35). Anyone preferring to spend their money at the auction instead of at the motel may call Olin Karch at (316) 342-5275 to book floor space.

As usual, this year there will be another fun-filled and rewarding AUCTION, presented by Joseph T. Collins. Bring items



to be auctioned, and help support the Kansas Herpetological Society. The **auction** and **social** will be held at the Ramada Inn, which is located at the Merchant Street/K-99 exit off I-35. There will be refreshments and an optional cash bar at the social.

Program for the 1987 KHS Annual Meeting

Saturday Morning, 14 November 1987

8:30 **Registration**
9:15 Welcome by KHS President OLIN KARCH (Emporia)
9:20 **In Search of Sand Lizards**, ROBERT F. CLARKE (Emporia)
10:20 Break and Group Photo (LARRY MILLER, Caldwell)
10:45 **Zoos Around the World**, BOB ROSE (Emporia)
11:45 Break for lunch

Saturday Afternoon

1:00 **The Peterson Field Guide: Problems and Frustrations**, JOSEPH T. COLLINS (Lawrence)
1:45 Break
2:10 **KHS Business Meeting**, including election of officers
2:40 **Kansas Nongame Wildlife Program Update and Revised List of Endangered and Threatened Amphibians and Reptiles**, MARVIN SCHWILLING (Emporia)
3:00 **Turtle Studies in Southeast Kansas**, MARTIN CAPRON (Oxford)
4:00 **Tour of Emporia State University Reptile and Amphibian Facilities**, OLIN KARCH (Emporia)
5:00 Break for dinner

Saturday Evening

6:30 **Social** at the Ramada Inn. Free refreshments and cash bar (ID will be required for sales of alcohol, NO ONE under age 21 will be served alcohol)
7:30 **KHS Annual Auction**, JOSEPH T. COLLINS presiding. Help support KHS!!! Bring herp books, photos, etc. to donate.

Sunday Morning, 15 November 1987

9:00 **Registration**
9:30 **Reptiles and Amphibians of Cimmaron National Grasslands**, LARRY MILLER (Caldwell) and JOSEPH T. COLLINS (Lawrence)
10:30 Break
10:45 **Medical Treatment of Venomous Bites**, DON COLDSMITH (Emporia)
11:15 Announcements and Adjournment--Have a safe trip back home

Olin's Guide to Emporia Motels

KHS President Olin Karch has supplied the following listing of motels in Emporia. They are arranged in order of the increasing unlikelyhood of KHS members staying there. Approximate

prices are given for single/double (without tax). All telephones are Area Code 316:

Sunrise Motel, 1830 East Highway 20, 343-6922, $18/22
Ranch House Motel (Budget Host Inn), 4215 W 50 Highway, 343-7920, $19/22
Econo Lodge, 2630 W 18th Avenue, 343-1240, $23/26
Super 8 Motel, 2913 W Highway 50, 342-7567, $24/28
Copa Villa Motel, 3032 W Highway 50, 342-1787, $25/30
Red Coach Inn, West Highway 50, 342-3770, $26/33
Best Western Hospitality House Motel, 3181 W Highway 50, 342-7587, $33/38 (with 10% discount for an ESU event)
Ramada Inn, 1839 Merchant, 342-8850, $34/40 (this is where the social and auction will be held)
Holiday Inn, 2700 W 18th Avenue, 343-2200, $38/43

New Book Available on Missouri Herps

The Missouri Department of Conservation has announced the publication of The Amphibians and Reptiles of Missouri, written and illustrated by KHS member Tom R. Johnson. The book took six years to compile. It covers 107 species of salamanders, toads, frogs, turtles, lizards and snakes in its 368 pages. There are 258 color photos and 109 maps. See the order form elsewhere in this KHS Newsletter for ordering information.

A Quarter Century of Silent Spring

It has been 25 years since Rachel Carson published her famous and influential book, Silent Spring. To commemorate this anniversary, the Rachel Carson Council, Inc. has declared 1987 "A Year for Remembering...[to] help reawaken the overwhelming public support which followed the original publication of the book."

Among other events, Houghton Mifflin is preparing a 25th anniversary edition of Silent Spring and CBS is working on a program to dramatize the life of Rachel Carson. In this anniversary year, it is worth noting that the quantity of pesticides made in the United States has increased from 638 million pounds in 1960 to 1.4 billion pounds in 1985.

Most importantly, the Rachel Carson Council, Inc., is having a membership drive. Donations of any amount (for $15 you become an Associate and receive the Council publications for a year) may be sent to:

Rachel Carson Council, Inc.
8940 Jones Mill Road
Chevy Chase, MD 20815

New Threatened and Endangered Species List for Kansas

As our society expands and alters the environment, wildlife are losing their communities--some species are even reduced to the point that laws are necessary to protect them from extinc-

tion. That's where the threatened and endangered wildlife list comes into the picture.

Through continuing research and management, the listing for Kansas has recently been updated and expanded to include 19 endangered species, 29 threatened species, and 58 species in need of conservation.

Endangered

Gray bat	Graybelly salamander
Black-footed ferret	Grotto salamander
Bald eagle	Arkansas river shiner
Peregrine falcon	Pallid sturgeon
Eskimo curlew	Sicklefin chub
Whooping crane	Speckled chub
Least tern	Amphibious snail
Cave salamander	Heel-splitter mussel

Threatened

Eastern spotted skunk	Strecker's chorus frog
Snowy plover	Western green toad
White-faced ibis	Eastern narrowmouth toad
Piping plover	Northern spring peeper
Western earth snake	Dark-sided salamander
Eastern hognose snake	Central newt
Checkered garter snake	Chestnut lamprey
Northern redbelly snake	Redspot chub
New Mexico blind snake	Hornyhead chub
Kansas glossy snake	Arkansas darter
Texas longnose snake	Silverband shiner
Broadhead skink	Flathead chub
Northern crawfish frog	Scott riffle beetle
Green frog	

--from Kansas Nongame Notes 5(4), July/August 1987

In Memoriam: A. Byron Leonard

Professor emeritus A. Byron Leonard of the University of Kansas died 23 September 1987 in Lawrence, Kansas. His speciality was paleontology, specifically snails and mollusks, but his interest ranged far and wide in the field of biology. Several generations of Kansas biologists were taught by Prof. Leonard during his long and varied career.

Prof. Leonard was born in 1902 in Manhattan, Kansas. He recieved his B.A. in 1931 from Central State Teacher's College in Oklahoma, and came to KU as a graduate student. He completed his M.A. in 1933 and Ph.D. in 1937, becoming an associate professor at KU. He taught a wide variety of courses at KU, ranging from introductory biology in Spanish for those who wished to improve their language skills, to biological photography. Prof. Leonard co-authored, with Claude W. Hibbard, the first account of the spotted toad in Kansas in a 1936 article in Copeia.

New Book on Crocodilians Announced

Wildlife Management: Crocodiles and Alligators has just been published by Surrey Beatty and Sons as the seventh in their natural history series. Its 630 pages (plus color plates and diagrams) cover a survey of world crocodilians, crocodilian management programs in 6 countries, a section on "Crocodile Management and Indigenous People", six articles on studying crocodilian populations, higher education and crocodile management, and four articles on capturing crocodilians. There are sections on crocodilian eggs and embryos, behavior and thermoregulation, crocodile farming, and four articles on the trade in crocodile skins. The price per book is US $61.00, including postage. Order from:

Surrey Beatty & Sons Pty. Ltd.
43-45 Rickard Road
Chipping Norton 2170
New South Wales, AUSTRALIA

Something New for 1988

When the 34th annual "Sports, Boat and Travel Show" arrives in Wichita, Kansas, February 17-21, at Century II Convention Center and Expo Hall, the KHS will have a booth and will be displaying an alligator snapping turtle (Macroclemys temmincki), common snapping turtle (Chelydra serpentina serpentina), and our State Reptile, the ornate box turtle (Terrapene ornata ornata). Volunteers for the booth will be Joe Collins, Larry Miller, Eric Rundquist, Marty Capron, Kirk Mullen, Dan Schupp and Jack Shumard.

This is a very big event that Wichita has every year, and it draws thousands of people. Kirk Mullen and Jack Shumard will be donating turtles for this event. Lets hope that this is a very successful event, as the education of the general public is badly needed. See you at the show.

--Jack Shumard, 607 Marcilene, Wichita, KS 67218, (316) 684-9675

KHS BUSINESS

KHS Nominating Committee Report

The Kansas Herpetological Society Nominating Committee has identified the following excellent candidates for the offices of President-elect and Secretary-Treasurer for 1988. They are:

For President-Elect: James Marlett (Wichita)
Jack Shumard (Wichita)

For Secretary-Treasurer: Larry Miller (Caldwell)-unopposed

These candidates have been active in the KHS, and have consented to stand for office for 1988. The 1988 president-elect

will automatically serve as KHS president in 1989.

Additional nominations will be accepted from the floor for these offices during the business meeting at the annual KHS meeting in Emporia, Kansas, on 14 November.

--Joseph T. Collins
Larry Miller
Eric Rundquist
Nominating Committee

September 1987 Field Trip Report

For the first time in over three years, an official KHS field trip was held the weekend of September 25-27 at Barber County Lake, on the north edge of Medicine Lodge, Kansas. When I arrived Friday night around 11:00 p.m., the KHS camp had already been established with several tents and six or more vehicles. Dispite the lack of a large visible sign to indicate that this was the KHS camp, I quickly confirmed it after noticing our president's Volkswagon van in the fleet. Briefly greating those that were still awake, I retired to peaceful slumber in the back of my truck.

Saturday morning, everyone awoke to a beautiful, sunny skies and air temperatures in the 60's and climbing. Some left to find their own areas to look for creatures in, and around 9:00 a.m. those of us still in camp formed a small convoy and followed Larry Miller to an area further west, near Sun City, to begin an interesting day of adventure.

The Red Hills habitat of this entire region is unique. For several members, myself included, this was our first visit ever to this area. We spread out on foot in a large, grassy canyon with numerous gypsum and limestone outcrops.

A few herps were found and approximately an hour later everyone met back at the road again--at least, almost everyone. A couple of the participants were not back yet, so several of us set out to find them. I headed into the bottoms near the creek bed and several others took off over the hills to search. Walking not more than half a city block I came upon them, content in their photography of the surrounding flora and fauna.

When we arrived back at the road, some of the search team were still "out there" somewhere, and momentarily we wondered if a second team might have to be sent out to find the first team. Being lost or disoriented is actually a very normal occurance on a KHS field trip, so I wasn't worried.

Finally the last two searchers came straggling in and a little after noon, we headed on to Kiowa County and explored a couple of areas there, and were back in camp around 5:00 p.m. A little later, Ken Brunson took off with several others for Kiowa and western Barber counties again, a few others went to a prairie dog town in southwestern Barber County, and still others chose to simply road hunt for herps. By 10:00 p.m., almost everyone had made it back to camp, sharing stories and tales of the day and other jaunts.

Sunday morning, most of us converged on a small cafe for a

hot meal, then those with a long drive ahead departed for home.

Around 9:30, I left town followed by two carloads of the KHS faithful, determined to make one last outing and possibly to turn up some more herps. We headed west on US-160, then turned southwest on a road which was properly named "The Gyp Hills" scenic route. This road turned out to be, in my opinion, the most interesting course of this trip. Winding over massive hills, buttes and canyons, one could not help but appreciate the expansive, wide open and rugged terrain. A few herps were collected or observed, as well as a lone coyote strutting away at our last stop near the end of this loop.

Many of us agreed that the KHS should have at least two and preferably three field trips each year, two in the spring and one in September. This is vital to promoting interest and active participation in our society. This idea will be discussed at the annual meeting in Emporia, on 14-15 November.

Approximately 35 people attended this fall field trip, and my thanks go out to all those who have me a list of what they saw or collected. A special thanks goes to Barry Brandon, Ken Brunson, and Larry Miller, who mailed me a complete list of what they collected and observed.

Reptiles and Amphibians Recorded in Barber County

Tiger salamander, Ambystoma tigrinum

Woodhouse's toad, Bufo woodhousii
Blanchard's cricket frog, Acris crepitans blanchardi
Spotted chorus frog, Pseudacris clarkii
Plains leopard frog, Rana blairi

Ornate box turtle, Terrapene ornata ornata
Red-eared slider, Chrysemys scripta elegans

Eastern collared lizard, Crotaphytus collaris collaris
Eastern fence lizard, Sceloporus undulatus
Texas horned lizard, Phrynosoma cornutum
Prairie-lined racerunner, Cnemidophorus sexlineatus viridis
Western slender glass lizard, Ophisaurus attenuatus attenuatus

Western hognose snake, Heterodon nasicus nasicus
Prairie ringneck snake, Diadophis punctatus arnyi
Plains blackhead snake, Tantilla nigriceps
Eastern yellowbelly racer, Coluber constrictor flaviventris
Western coachwhip snake, Masticophis flagellum testaceus
Great plains rat snake, Elaphe guttata emoryi
Bullsnake, Pituophis melanoleucus sayi
Prairie kingsnake, Lampropeltis calligaster calligaster
Common kingsnake, Lampropeltis getulus
Ground snake, Sonora semiannulata
Red-sided garter snake, Thamnophis sirtalis parietalis
Texas brown snake, Storeria dekayi texana
Massasauga, Sistrurus catenatus

Reptiles and Amphibians Recorded in Harper County

Woodhouse's toad, Bufo woodhousii
Plains leopard frog, Rana blairi
Bullfrog, Rana catesbeiana

Ornate box turtle, Terrapene ornata ornata
Western painted turtle, Chrysemys picta bellii
Red-eared slider, Chrysemys scripta elegans

Texas horned lizard, Phrynosoma cornutum

Eastern yellowbelly racer, Coluber constrictor flaviventris
Bullsnake, Pituophis melanoleucus sayi
Red-sided garter snake, Thamnophis sirtalis parietalis

Reptiles and Amphibians Recorded in Comanche County

Ornate box turtle, Terrapene ornata ornata

Western coachwhip, Masticophis flagellum testaceus

Reptiles and Amphibians Recorded in Kiowa County

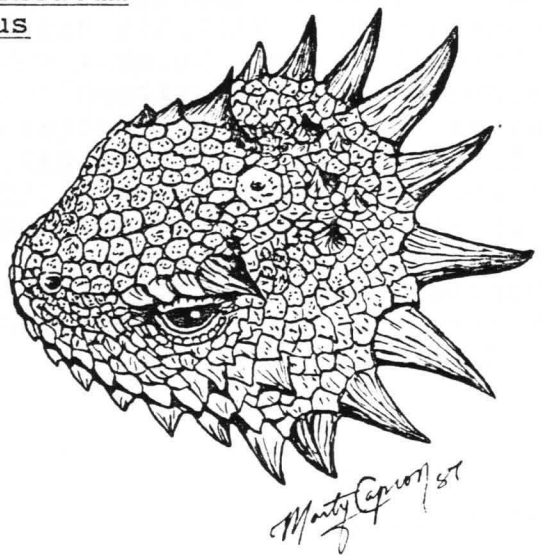
Tiger salamander, Ambystoma tigrinum

Woodhouse's toad, Bufo woodhousii
Blanchard's cricket frog, Acris crepitans blanchardi
Plains leopard frog, Rana blairi
Bullfrog, Rana catesbeiana

Red-eared slider, Chrysemys scripta elegans

Eastern collared lizard, Crotaphytus collaris collaris

Plains blackhead snake, Tantilla nigriceps
Great plains rat snake, Elaphe guttata emoryi
Kansas glossy snake, Arizona elegans elegans
Bullsnake, Pituophis melanoleucus sayi
Red-sided garter snake, Thamnophis sirtalis parietalis
Lined snake, Tropidoclonian lineatum
Massasauga, Sistrurus catenatus



Oklahoma Herpetological Society Meeting

The Oklahoma Herpetological Society will hold its annual meeting on Saturday, 21 November 1987, from 9 to 5 in the Education Building of the Oklahoma City Zoo in Oklahoma City. The talks will include David Grow the herp program at the Oklahoma City Zoo, George Pisani on rattlesnake roundups, Lynette Sievert on temperature and reptiles, David Blody on herp propagation at the Fort Worth Zoo, Greg Seivert on herps of Oklahoma, Tim Tytle on calcium metabolism in geckos, Darell Pickering on the herp program at the Tulsa Zoo, Nancy Hegar on habitat and activity of Sceloporus undulatus, and a tour of the OKC Zoo Herpetarium.

All the Zoos That's Fit to Print

The following news items are all from the American Association of Zoological Parks and Aquariums Newsletter, and were supplied by Ruth Gennrich (Lawrence).

From AAZPZ Newsletter 28(8), August 1987:

Zoo Reports Second Breeding Success with Puerto Rican Crested Toads

For the second year in a row, the Metro Toronto Zoo has successfully bred the Puerto Rican crested toad. In 1986, the zoo received the Canadian Association of Zoological Parks and Aquariums' Award for being the first zoo in the world to breed this species naturally. Through a cooperative breeding program with the Buffalo Zoological Gardens and the Puerto Rican Department of Natural Resources, 350 specimens have been returned to Puerto Rico.

From AAZPZ Newsletter 28(9), September, 1987:

Changes to the List of Endangered and Threatened Species

Effective 17 July, the Fish and Wildlife Service reclassified ranched populations of the Nile crocodile (Crocodylus niloticus) in Zimbabwe from endangered to threatened status. This change is supported by biological information on the status of the population and changes in the Nile crocodile's status from Appendix I to II at the 1983 CITES Conference. Reclassification would allow for importation of live Nile crocodiles ranched in Zimbabwe into the U.S. provided that all requirements of CITES and the laws of Zimbabwe are met.

Effective 3 September, FWS listed the Puerto Rican crested toad (Peltophryne lemur) as a threatened species. The species is endemic to two islands on the Puerto Rican Shelf but is presently thought to exist only on the main island of Puerto Rico. There is a single large population on the southwest coast and several small populations on the north coast. The species is threatened

by filling and drainage of its breeding sites, habitat development and loss of adults.

Current List of Endangered and Threatened Wildlife and Plants Available

The List of Endangered and Threatened Wildlife and Plants has been updated. The republished list contains all changes through 10 April 1987. Requests for copies should be addressed to: Publications Unit, 148 Matomic, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

Zoo Reports Notable Reptile Hatchings

Over a ten-day period, beginning 29 May, 22 flap-necked chameleons hatched at the Oklahoma City Zoological Park after 221 days of incubation. Although a variety of substrate was provided, the female refused to oviposit. Forty-one eggs, averaging 14 mm in length, were removed from the female after her death. The eggs were placed in two one-gallon jars with moist vermiculite as a medium. The jars were covered with plastic wrap and placed in a water bath. Temperature was maintained within 1 degree of 22 degrees C.

Eight ringed pythons hatched at the zoo on 30 June after 64 days of incubation at 32-33 degrees C. Temperature or photoperiod manipulation were not employed to stimulate reproduction. However, observation of physiological changes in the female played an important role. Both parents were wild caught. The hatch represents a cooperative effort between the zoo and the Reptile Breeding Foundation in Picton, Ontario, Canada, the owner of the female.

Two Dabb spiny-tailed lizards hatched on 4 August after 84 days of incubation at 32 degrees C. Due to an incubation problem, 10 of the 12 eggs failed to hatch. The young averaged 73 mm in length and 6.6 grams in weight. This is the second time this species has reproduced at the zoo, the first occurring on 1 August 1986 with the hatching of eight young. The 1986 hatching is believed to be the first successful reproduction of the genus in in North America.

Green Sea Turtles Hatched at Sea Life Park

Thirteen green sea turtles hatched at Sea Life Park, Waimanalo, Hawaii on 18 July, representing the first clutch to hatch in 1987. The turtles emerged from an artificial beach located adjacent to the Turtle Lagoon. Over the past ten years, 873 captive-bred specimens have been released into the wild, with a record set last year of 432 for a single season. A number of these recent hatchlings are available for loan to qualified institutions on a short-term basis.

From AAZPZ Newsletter 28(10), October, 1987:

Cuban Ground Iguana Hatchlings Reported

The Indianapolis Zoo recorded what is believed to be the first one-half second generation captive hatching of the Cuban ground boa on 21 July. The female was hatched at the zoo on 9 October 1982, and the male was wild caught on Magueyes Island, Puerto Rico and is on loan from the Jardin Zoological Park of Puerto Rico. This year's clutch of three eggs was the female's first, and two hatchlings emerged after 81 and 84 days' incubation. This event is unique in that all breeding took place in an indoor exhibit.

Significant Reptile Hatching Occurs at the Ellen Trout Zoo

On 14 July, after an incubation period of 58 days, a male Louisiana pine snake hatched at the Ellen Trout Zoo, Lufkin, Texas. The male parent hatched at the zoo on 24 July 1984 and the female was wild caught in Sabine County. It is believed that this represents the first second-generation breeding of this species to occur in captivity.

Golden Arrow Poison Frogs Reproduced at the Buffalo Zoo

Between April and June 1987, the Buffalo Zoological Gardens sucessfully reproduced on exhibit golden arrow poison frogs [=dart poison frogs]. The second zoo in North America to reproduce this anuran, Buffalo has metamorphosed 16 since January.

The Dallas Zoo Reports the Hatching of Bushmasters

Nine bushmasters hatched at the Dallas Zoo in August, culminating a 20-year effort to reproduce the reptiles. Evidence of activity was noted during April and May; and thereafter, courtship was observed between a male and female weighing 4 and 3.5 kilos, respectively. Oviposition occurred on 15 June, with 10 eggs laid. After a 60-day incubation, six eggs hatched on 15 August; and the remaining four were manually slit on 18 August. Of those four, one young had already died. It is believed that this is the first successful captive breeding of the species. Those having additional information may contact the Herp Department, Dallas Zoo, 621 East Clarendon, Dallas, TX 75203 (214) 946-5155.

KHS BRINGS YOU NEWS OF THE WORLD

Two KHS Members Singled Out for Wild Life

At the 23rd Annual Kansas Wildlife Federation Conservation Achievement Program Awards for 1987, two renown KHS members received recognition for their contributions to conservation in the state of Kansas.

Ken Brunson (Pratt) was named Water Conservationist of the year for his "intense efforts in protecting Kansas' streams," especially his work on minimum stream flow. He has worked in the Fisheries Division of the Kansas Department of Wildlife and Parks for 15 years. His recent article, "When Water Won't Flow," in Kansas Wildlife magazine is highly recommended.

Larry Miller (Caldwell), the sixth grade teacher at Caldwell Elementary School, was named Conservation Educator of the year, because of his successful efforts to have the ornate box turtle declared the official state reptile. The award also recognizes his long-term efforts to teach people to be sensitive to their environment. He became involved in environmental work in 1976 when massive aerial spraying killed millions of fish and other wildlife in the state.

The Kansas Herpetological Society salutes these two individuals for their countless hours spent working to protect and enrich the natural beauty of Kansas.

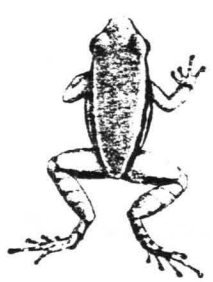
Forever Amber

How about a 40-million-year-old frog with several broken limbs? Scientists from the University of California at Berkeley [most notably KHS member David Cannatella] have found this remarkably well-preserved creature encased in amber, which is a fossilized form of tree resin.

As an explanation for the frog's trauma, the researchers suggest that some predator, possibly a bird, caught the frog and stashed it in a nest in a resin-producing tree. Then before the predator could feast, resin seeped out of the tree and covered the frog.

Discovered in am amber mine on the island of Hispaniola, the frog will help resolve a debate over the origin of the island's fauna, say the Berkeley researchers in the Sept. 4 issue of Science. According to early theories, animals from the North American continent established themselves quite recently (geologically speaking) on the islands of the West Indies by swimming, flying or floating on debris. However, say the researchers, the great age of the frog fossil supports a rival theory--that animals were carried along by the islands themselves when these land masses broke off from the mainland.

--Science News 132(13), 26 September 1987
(submitted by Suzanne Collins, Lawrence)



It's Just Not It

Hillsboro--*Crotalus viridus* is used to a humdrum life.

For 27 years, the prairie rattler has coiled and uncoiled in a glass cage in the basement of the Tabor College administration building. It sleeps a lot. Eats two mice a week. And lives contentedly with the name *Crotalus viridis*. Or, more often, "It."

But now It is the talk of the town. The snake with no name happens to be the oldest prairie rattler in captivity in the world, and students at the college have decided to give It a new name for its 30th birthday.

Already, dozens of people have entered a name-the-snake contest.

Will it be Buford or Butterscotch or Billy Jo Jim Bob?

Toto, maybe?

Or Sir Rodney or Sting?

How about Jake (rhymes with you-guessed-it)?

Or Dusty Bottoms?

Magnolia? or Juniper?

Then again, maybe the grand old snake should go by Grand Old Codger?

Many of the names sound tough: Arnold, short for the movie muscle man, the Terminator. "Danger." "Julius Squeezer." "Marvelous Marv."

Some suggest the wisdom of age: Methusaleh, the biblical patriarch who lived 969 years. Confucious.

And then there are students who are stumped. People have people names. Dogs have dog names. But, "I don't know what kind of name I'd name a snake." said sophomore Suzanne Loewen.

Members of the Student Activites Board will announce the winning nickname during the school's homecoming weekend, October 29-31. The prize is potluck: Contest sponsors joked on Wednesday that the winner might receive a year's subscription to Arizona Highways or a chance to pet the prairie rattler for five minutes.

Meanwhile, old It sleeps.

--Wichita Eagle-Beacon, 22 October 1987
(submitted by The Sixth Grade Class, Caldwell Schools)

Two, Four, Six Reptiles a Dollar?

Plastic money is now common--but making change in reptiles? In the South Pacific, drug dealers are allegedly using smuggled tuataras (*Sphenodon puncatus*) as barter to pay off their drug shipments. And because of the protected tuatara's rarity, it can command black market prices of about US $6,800.

The tuatara is the single surviving species of a reptilian order that otherwise died off about 65 million years ago. It is only found on some of the samll islands and rocks of New Zealand. This two-foot long, lizard-like link to the dinosaurs is protected from trade both nationally, by the New Zealand Wildlife Protection Act, and internationally, by a CITES Appendix I listing.

Although Interpol and U.S. agencies have joined forces with Australian and New Zealand offcials to find the drug dealers turned poachers, no arrests have yet been made.

--Traffic (World Wildlife Fund) 7(4), July 1987
(submitted by Ruth Gennrich, Lawrence)

Pet Shop Python has Light Touch

It sounds almost like an excerpt from a grocery store tabloid: "Seven-foot snake causes blazing inferno in pet shop." Said one sobbing turtle, "I thought my goose was cooked." Sssssstrange, but nearly true.

About 9:30 Tuesday morning, nine firefighters answered a call at the Animal House pet shop in Hutchinson.

"When we got there, there was just a little smoldering fire. So we just traced the fire to the box," said Mike Miller, firefighter.

But unknown to Miller et al, the innocent-looking burning box was actually the quaint, but smoky home of an extremely irritated 7-foot-long python.

Jim Sewell, co-owner of the pet shop, said the fire started when the python slithered up the side of its plywood cage and wrapped its huge body around the heat lamp that hung above it.

"He normally doesn't touch it," said Sewell. "Anyway, his weight made it fall."

Within minutes, the corncob bedding material at the bottom of the cage started smoking.

"Nobody wanted to get close to the snake to make sure the fire was out," said Miller. "So we made the owner of the pet shop do it."

--Wichita Eagle-Beacon, 21 October 1987
(submitted by Jack Shumard)

Turtle Sets Record for Deepest Dive

A leatherback turtle has set a new record for the deepest known dive by an air-breathing animal, descending almost three-quarters of a mile below the ocean surface.

The exact depth is unknown, because the recording device attached to the animal was calibrated only to about 1,000 feet, says University of Georgia biologist Scott Eckert, who monitored the dive. The turtle disappeared off the scale for more than half an hour, leading Eckert to conclude that she dived to about 1,200 meters, about 4,000 feet. The previous record of 3,740 feet was held by a sperm whale.

Because of the speed and depth of the turtle's descent, Eckert speculates that she may have been escaping from a predator.

--International Wildlife, 17(5):32, Sep-Oct 1987
(submitted by Olin Karch, Emporia)

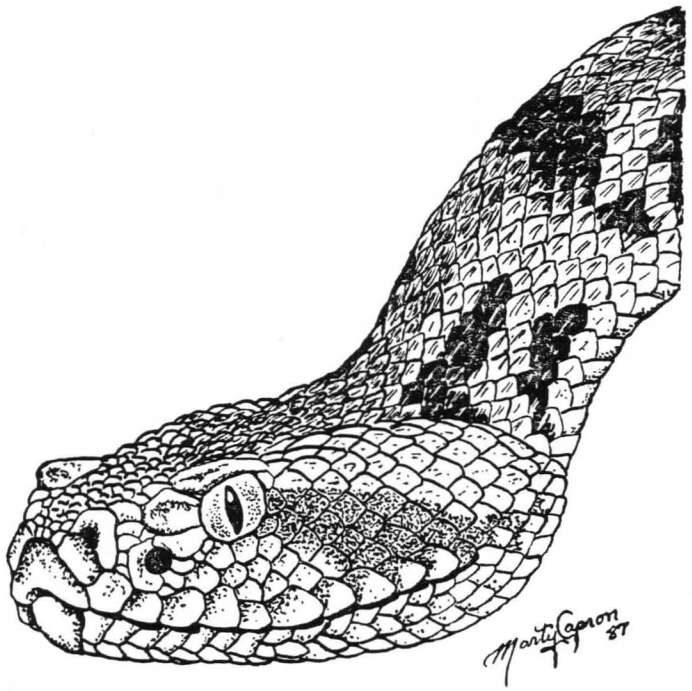
Owls Import Snakes for Cleaning Chores

It's tough to find good household help these days--even for owls. But Texas screech owls appear to be taking matters into their own talons, seizing blind snakes from the ground and carrying them to their nests to control insects.

Baylor University biologists Fred Gelbach and Bob Baldridge found live snakes in 13 of 77 screech owl nests with young. In most cases, there was a single resident snake, but one fastidious owl had drafted 15 reptilian helpers. The snakes, which normally live underground and feed on termite larvae, help rid the nests of maggots that parasitize the young birds.

Apparently, the housecleaning pays off. The biologists found that young owls in nests with snakes grew faster and had a lower mortality rate than those in snakeless nests.

--International Wildlife, 17(5):32, Sep-Oct 1987
(submitted by Olin Karch, Emporia)



From the Jungles of Wichita

Greetings from the herpetologically sparse sand prairie of Sedgwick County. Heeding the call for more contributions from KHS members and realizing that there has not been an update on Sedgwick County Zoo (SCZ) herpetology in some years, I am responding. Further, Sedgwick County does not lend itself easily to fascinating local herpetology (unless collecting Madagascan tree boas in midtown Wichita qualifies, but that's another story). So, herewith, the latest poop (ahem) from the SCZ Herpetarium.

The SCZ Herpetarium first opened in 1974 and was quickly recognized as a state-of-the-art exhibit. There is even a plaque from an official organization in the lobby that says so. Actually, our herpetarium is still in many ways quite advanced over the basic run-of-the-mill herpetarium. I also know this to be true for I have visited many of the former and used to work in one less than run-of-the-mill herpetarium. Believe me, you've never realized what luxuries slop sinks, floor drains, and real air-conditioning are until you don't or can't have them. Our place isn't perfect, but its certainly better than the majority.

SCZ quickly established itself in the world of zoo herpetology by receiving two Edward H. Bean Awards from the American Association of Zoological Parks and Aquariums. This award is widely regarded as one of the most prestigious in the zoo field and we remain the only herpetarium to ever win two such awards in one year. These awards were given for breeding the green-and-black poison dart frog and the green tree python. These breedings were accomplished by KHS members David Grow, Peter Gray, and Ed Stegall. Grow has since moved on to Oklahoma City Zoo as curator of herpetology, Gray went to KU and secured a master's degree in systematics and ecology and Stegall is supervisor of the Herpetarium at SCZ.

But that's all old history. What's happening now? Well, quite a bit has happened in the past few years. We continue to crank out poison dart frogs, making this the longest term breeding program of its type in the country. We recently have been presented with our first clutch of viable green tree python eggs in eleven years and are expecting another clutch in the near future. First breedings for SCZ in the past three years include: red-eared slider, red-footed tortoise, yellow-footed tortoise, Gila monster, Brazilian rainbow boa, oriental firebelly frog, ornate horned frog, black tegu, ball python, aquatic caecilian, Australian bluetongue skink, and scheltopusik. We continue to breed reticulate pythons, common boas, and Praslin Island day geckos. We have re-established our leopard gecko and green basilisk breeding programs which had been somewhat dormant for a few years. Planned breeding programs have been established for rosy boas, Sinaloan milksnakes, grey-banded kingsnakes, and dyeing poison dart frogs. We are evaluating all our species for reproductive potential and value and making adjustments accordingly. Perhaps the most significant breeding we have had recently was that of the aquatic caecilian. As near as we can determine, this is a first for the western hemisphere and possibly is a world first. We have been nominated for the Bean Award again and are keeping our fingers crossed. With luck, we'll be able to expand our Bean Award exhibit later this year. The scheltopusik breeding is also highly significant. Although we don't have eggs from this legless lizard yet, the female appears to be gravid. Should we get eggs and babies, this will probably be the first breeding of this species in the U.S.

But of course, there is more to the modern herpetarium than eggs and babies (though that is certainly a benchmark by which to judge a facility). The collection has changed significantly over the past several years. We are concentrating now on spectacular, rare, or endangered species. As most of you are aware, zoos

worldwide are gearing up to be repositories for many endangered forms. We are no different here. We are currently working with the following endangered taxa: Puerto Rican crested toad, yellow-spotted sideneck turtle, and San Francisco garter snake.

The Puerto Rican crested toad is the only amphibian currently in the American Association of Zoological Parks and Aquariums' Species Survival Plan program.

The yellow-spotted sideneck turtle, although not in any official program as yet, is critically endangered in many parts of its range. Our animals were kindly loaned to us by the Dallas Zoo and are gleefully doing their thing in the lake of our jungle building. This pair has never bred successfully, and is unrelated to other stock in this country. Should successful reproduction occur here, it will represent an important bloodline for other breeding programs.

Ironically, our San Francisco garter snake program began as a result of thefts at the Abilene, Texas, zoo and here at SCZ. We recovered one of Abilene's garter snakes at a local pet shop and made arrangements with Abilene and the U.S. Fish & Wildlife Service to keep it. Consequently, we are enrolled in a cooperative propagation program with USFWS and are now the proud stewards of three pair of captive-bred San Francisco garter snakes. Be sure to check them out on your next trip to Wichita.

One thing that has not changed here over the years is the quality of exhibits. We continue to have some of the best-looking exhibits in the country. You will note on a trip through our building that virtually all exhibits have live plants and only one exhibit has plastic plants. This is almost unheard of in any herpetarium and reflects the high standards of husbandry we try to maintain. If one can propagate plants on exhibit, then maintenance of the animals is a snap. Perhaps the most impressive example of this is the new mixed species display where the water monitors used to be. This exhibit was built to represent a tropical rainforest or cloud forest herpetofaunal community and has full environmental controls. It even has a misting system that, when operational, makes the exhibit look almost exactly like a cloud forest. There are trees, vines, bromeliads, orchids, Philodendrons, etc., thickly planted throughout the exhibit and all are doing far better than previously hoped. Herp species in the exhibit so far include Australian snakeneck turtles, mata mata turtles, tomato frogs, Cuban treefrogs, green basilisks, and green tree pythons. We plan on adding poison dart frogs and other treefrogs once we learn how the exhibit and its occupants interact. One of the beauties of this unit is that it gives us a great deal more leeway in the numbers and kinds of species we can exhibit in the future without having to set up individual displays. It also will allow us to investigate the effects of certain physical parameters such as light cycles, humidity, temperature, and individual densities on reproduction and behavior. We think this unit has great experimental potential and could set a standard for herpetological exhibitry in this country.

We also have great hopes for the new water monitor display in the jungle building. The monitors are housed in the former Siamese crocodile exhibit. The former Siamese crocodiles exper-

ienced an extended period of domestic difficulties (your basic knock-down, drag-out, full-tilt incompatible marriage) and we have sent them to an institution in South Korea. With our sincere gratitude. Wrestling crocodiles on a weekly basis is definitely not fun and can be downright painful and bloody.

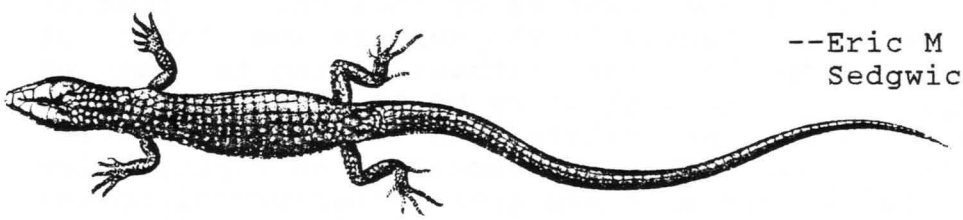
With the water monitors, the exhibit is also heavily planted and actually was the progenitor of the Herpetarium's mixed species display. The animals have approximately five times the room they previously had and now have a spacious pool in which to display their common name. They are considerably more active than at the Herpetarium and we are hoping for a fertile clutch of eggs later this year. Breeding any monitor in captivity is still a rare occurrence and we feel this exhibit will overcome certain reproductive problems we have had in the past. It is also a good looking exhibit and we have had many positive comments on that. Credit for this goes to the head monitor wrangler, Dan Schupp.

The other potential function of a herpetarium is research and, accordingly, we have a few projects operating or in the works. The major subject we are investigating at this time is a problem in metamorphosing frogs called Spindley Leg Syndrome (SLS). This is a deformation of front limbs at metamorphosis and has been a significant problem here and in many other captive collections throughout the world. We are currently working with Dr. Vic Eichler to assess the nature of the problem and to design a program to determine the causation and resolution of SLS. Results so far have been encouraging and we believe that we are beginning to get a handle on the problem. With luck, we'll be able to come up with a solution in a couple of years.

Other research at SCZ concerns dominance behavior systems in red-eared sliders, temperature-related sex determination in reptiles, and experimentation with various incubation media for reptile eggs. There are numerous other opportunities for research and we will tackle those as time permits (being public servants, we unfortunately do not have the luxury of spending extended periods of time on theoretical investigation).

So that, in brief, is what is happening at the Herpetarium of the Sedgwick County Zoo and Botanical Garden, located in the heart of the luscious sand prairie and killer tumbleweed country of south-central Kansas.

We wish more of you would come down so we can gloat and point out various marvelous points of herpetological husbandry. Give us a call beforehand and Eddie, Dan or I will be more than happy to give you the ten-cent tour.



--Eric M Rundquist
Sedgwick County Zoo

BOOK REVIEWS

Lowe, Charles H. Cecil R. Schwable, and Terry B. Johnson. 1987. **The Venomous Reptiles of Arizona.** Arizona Game & Fish Department, Phoenix. 115 pages, 50 color photographs, plus

line drawings and maps. 6 x 9 inches, paperback. Available for $7.50 from Information Branch, Arizona Game & Fish Department, 2222 W Greenway Road, Phoenix, Arizona 85023.

I'd heard quite a bit about this little book, most of it good, and had been planning on picking it up sometime, but despite information on it's cost and source [KHS Newsletter 67, page 5], I'd managed to keep putting it off. Somehow, I just never feel right about ordering a book I've never leafed through before, something I've never held in my hands and looked over. But perhaps that is a quirk of mine that goes back to the time that I ordered a copy of a book by John F. Breen--the title blissfully escapes me now. Allegedly about keeping captive herps, the absolute lack of any redeeming quality left a bad taste in my mouth that I have yet to get rid of.

Anyhow, I found myself in Tucson the other day and decided to find a copy to inspect and perhaps purchase. First off, even in the heart of the arid southwest, this book was not easy to find. Requests for it at most major bookstores in the Tucson area were usually met by blank, incredulous looks from store clerks. Finally I tracked a copy down at an Audubon Society bookstore. And I am truly glad that I did.

This book is a gem. I've read it cover-to-cover and try as I might, I cannot find one single fault of any consequence in it. The photographs are excellent, the maps are among the best I've ever seen. Even the line drawings are of the highest quality.

Perhaps Robert C. Stebbins said it best in the Foreward of this book: "You will not find in this book merely a rehashing of the words of other writers." Much of the information in this book was new to me and a good deal of it represents unpublished data and information that had never before appeared in print. Especially true in this regard is the chapter on Gila monsters.

The authors cover such often overlooked topics as "legal status" and protection. Then, too, they dare to venture into such treacherous, muddled waters as "The Bite and It's Treatment" and manage to come through all credibly and clear.

The style is delightful and easy to read. It cuts through to the important facts while still managing to be very entertaining. I've read and reread the chapter on helodermatids several times and cannot believe the amount of misinformation and confu-