

JUNE, 1985

ANNOUNCEMENTS

New Australian Herp Book

The first major review of the biology of frogs and reptiles of Australia has now been published from the results of the 1984 Australasian Herpetological Conference held in Sydney in August, 1984. The book is divided into eight sections covering population ecology, physiological ecology, ecological biogeography, rare and endangered species, husbandry and captive breeding, reproductive biology, the phylogeny of elapid snakes, and chromosomes and evolution. Frogs and Reptiles will be about 600 pages with at least 8 pages of color plates. Price is \$Aus. 56.00 plus postage. Order from Surrey Beatty & Sons Pty. Ltd., 43-45 Rickard Road, Chipping Norton, New South Wales, 2170, Australia.

Photo Contest

Photographers can now add a little more challenge and possibly some money to their wildlife stalking efforts. The Nongame Wildlife Program is starting an annual photo contest. An 8 x 10 framable copy of the winning photograph will be available to those who contribute to the Nongame Program. This photo will also be used on large posters that will be displayed at various locations around the state to help publicize the Nongame Program.

The species in the winning photo will be designated as the featured nongame species of the year. The candidates for the 1986 nongame species as selected by the Education Committee of the Nongame Wildlife Citizens Advisory Council are the Meadowlark, Monarch Butterfly, and Ornate Box Turtle.

Contest rules are as follows:

1. Kodachrome color slides only.
2. Submit slides of one or more of the three candidates to Joe Schaefer.
3. Deadline for receiving slides is August 1, 1985.
4. Slides will be judged by the Education Committee, Joe Schaefer, Wayne van Zwoll (editor of Kansas Wildlife), and Gene Brehm (photographer for Kansas Wildlife).
5. All slides will be returned to owner.
6. We cannot be responsible for any damage to slides.
7. We reserve the right to copy and print slides for purposes of promoting the Nongame Program. Appropriate photo credit will be given in publications.
8. First prize--\$100, second prize--\$50, third prize--\$25.

Snake Venom Poisoning Wall Chart

The Arizona Poison Information Center has available a 20" x 24" chart detailing assessment, laboratory tests, first-aid and medical treatment of bites by venomous snakes in the U.S. The full-color poster shows 24 of the venomous snakes most often implicated in bites on humans. It was prepared by the American Association of Poison Control Centers' Scientific Review Subcommittee (A.L. Picchioni, F.E. Russell, D.H. Hardy, D.B. Kunkel) and the Arizona Poison and Drug Information Center. It can be ordered from: Wall Chart, Arizona Poison Information Center, Arizona Health Sciences Center, Room 320K, 1501 N. Campbell Avenue, Tucson, AZ 85724. Enclose check or money order for \$8.50 for each chart, made payable to Arizona Poison Information Center.

Zoo Research Expedition

The Zoo and Aquarium Travel Association (ZATA) is offering a unique travel program to San Esteban Island in the Sea of Cortez off the western coast of Mexico. Members of the Arizona-Sonora Desert Museum, along with members of the research team of ZATA travelers, will observe and capture the endangered giant chuckwalla that live on the island. This study is being conducted to study behavior and other aspects of the lizard's biology so that captive colonies of these animals can be maintained properly.

Come and join one of the 11 day expeditions if you would like to do more than just visit a place and would like to get involved with a real zoo research program. The tax deductible price for this expedition is \$1595, all inclusive, from Tucson. Departure dates are 31 May 1985, October 1985 (date to be announced), and 10 January 1986. From Tucson, after a training program, the group will travel by van to Kino Bay, Mexico, and board the comfortable 120 foot Baja Explorador, which will provide the accommodations during the stay. Side trips are planned for surrounding islands and there will be plenty of time for snorkeling, fishing and wildlife observation. Contact ZATA, 1776 Independence Court, Birmingham, AL 35216 for more information, or phone 1-800-633-4734.

Do Something Wild...In Your Backyard

If you "do something wild" in your backyard, the Kansas Fish and Game Commission would like to give you credit for it through the Backyard Wildlife Habitat Certification Program. This newly established program gives recognition to citizens who improve living conditions for wildlife on their property.

To receive a Backyard Wildlife Habitat Certificate and a colorful sign with the inscription "I DID SOMETHING WILD IN MY BACKYARD" on it, send the following information to Joe Schaefer, Urban Nongame Biologist, Kansas Fish and Game Commission, P.O. Box 4034, Wichita, KS 67204.

1. Name
2. Mailing address
3. Telephone number
4. Address of property to be certified
5. Property size

6. A description of the way food, water, and cover are provided for wildlife. Include a list of the plants, feeders, foods, artificial houses, and natural cover you have provided. Mention any plans you have for future improvements.
7. Photographs (slides preferred) and/or drawings of your backyard wildlife habitat improvements. Fish and Game will not be able to return slides or drawings, so be sure you have duplicates for your own use.

The Backyard Wildlife Habitat Certificate Program is not restricted to homeowners--wildlife requirements can be provided at many places, including high-rise apartment balconies and businesses.

New Book on Pennsylvania Biota

A new publication, Species of Special Concern in Pennsylvania, has recently been published by the Carnegie Museum of Natural History. It includes all of the endangered, threatened, and extirpated biota of the state, including 18 species of amphibians and reptiles. Each species account contains information on distribution, habitat and ecology, the basis for classification as a species of special concern, and recommendations for future action. There is a distribution map for each species, and most are illustrated with black and white photographs. Hard-bound, 430 pages, price \$30.00 plus \$1.00 shipping and handling from Publications Secretary, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213.

Zoological Catalogue of Australia

Volume 1, Amphibia and Reptilia, of the Zoological Catalogue is now available for US \$33.00 post paid. Ultimately, this fifty volume series will list every named species known from Australia, arranged taxonomically by family and genus, with synonymy, geographic distribution, ecological attributes, and references to literature on ecology, physiology, and genetics. The Amphibia and Reptilia volume may be ordered from AGPS Mail Order Sales, G.P.O. Box 84, Canberra, A.C.T. 2601, Australia.

Tampa to be Scene of Next Herp Meetings

The combined meeting of the Society for the Study of Amphibians and Reptiles and the Herpetologists' League is set for Tampa, Florida, from 4-9 August 1985, at the University of South Florida. In addition to the usual papers and such, this meeting will feature a Herpetology Exam with prizes, tour of Bush Gardens, updated Herpetologists, Past and Present slide show, field trip to Archbold Biological Station, HL Distinguished Herpetologist lecture by Dr. Carl Gans, a special presentation on "Natural Diversity and Progress: Amphibians and Reptiles in Florida" by Dr. Steven P. Christman, a workshop on Gopherus polyphemus, and the 9th Annual Regional Herpetological Societies Conference (this year focusing on "Methods to Enhance the Regional Herpetological Society"). Deadline for pre-registration is 10 June. For more information, contact Mary Ann

Solic, Continuing Education, CEB 012, University of South Florida,
Tampa, FL 33620, telephone (813)974-2403.

Zoo Keeper Training Program Announced

The Dallas Zoo has begun a "Basic Keeper Training Program" for its mammal, bird and herp departments. The courses are based on assigned reading that is self-administered, and keepers are tested at the end of each month-long section. Passage will be mandatory for all newly hired keepers and must be completed prior to the end of their probationary period. The zoo is also hoping to establish an additional nonsupervisory animal-keeping position for those employees that currently have limited career advancement opportunities. It is anticipated that the new position will place an emphasis on research and publications, require passage of an advanced course and participation in professional and biological societies. For further information, contact Warren Iliff, Director, Dallas Zoo, 621 East Clarendon, Dallas, TX 75203. [From AAZPA Newsletter 26(6):16].

LATE NEWS BULLETIN

Five snakes were stolen from the Sedgwick County Zoo on the night of May 24-25. The animals taken were 1 boa constrictor, 1 ball python and 3 Sinaloan milksnakes. Anyone with information regarding these animals or the theft should contact the zoo. Positive identifications can be made of the milksnakes.

James H. Marlett
Curator I
Sedgwick County Zoo
(316) 942-2213

KHS BRINGS YOU NEWS OF THE WORLD AND BEYOND...

Papuan Pythons Hatch

The Knoxville Zoological Park successfully hatched the Papuan python (Liasis papuanus) in February. The zoo houses one female, on loan from the San Antonio Zoo, and two males, on loan from Herpetofauna International of Horsham, Pennsylvania; and these are the only known specimens in the United States. In addition only one other specimen is known outside of its native country. Two cycles of copulation were recorded; and on 12 November 1984, the female was found coiled around a clutch of 22 eggs. On 7 February 1985, the first hatchling emerged. Of a total of 22 eggs laid, 10 young survived and range in weight from 70 to 115 grams and measure 22 to 26 inches in length, with dispositions

alert and aggressive. In addition to being a first captive-breeding, this hatching is important, in that it ensures the continued existence of this species in U.S. collections. One male was not involved in this breeding, so an additional bloodline may eventually be established.

--AAZPA Newsletter 26(3):17

(submitted by Ruth Gennrich, Lawrence)

The Salamanders' Awful Fate

Although not as sleek as the mountain lion, nor as regal as the peregrine falcon, the slithery black and yellow northern long-toed salamander is nonetheless another of Alberta's rarest fauna. Groups numbering between 20 and 500 of the slender, four-inch-long, mountain-dwelling amphibians inhabit 16 known locations scattered randomly along the eastern slope of the Rockies, with Jasper the most northern outpost in a domain that stretches as far south as California. And nowhere in the world outside the shallow sloughs bordering the upper extremities of Bow Valley Provincial Park, about 50 miles due west of Calgary, does the long-toed salamander co-exist with its more common and bulkier prairie cousin, the striped tiger salamander. Naturalists were therefore aghast last week when they discovered nearby Canada Cement Lafarge Ltd. was pressuring Improvement District 8 to rezone the land containing the unique grounds so the company can expand the adjacent gravel and shale quarrying operation it has carried on there for decades.

The implications, says University of Alberta Department of Forest Science associate professor James Butler, "are absolutely frightening. The population of this critical wildlife species must not be harmed or disturbed under any conditions."

Like any true wildlife advocate, Professor Butler argues that because the salamanders were there first, they have the more legitimate claim. They are believed to have survived in protected pockets in the Rockies during glacier times 10,000 years ago, in isolated areas that didn't get covered by ice. As the glaciers receded, they moved into the Bow Valley because of the unusual "ecotone," or mixing area, that exists between the mountains and the plain, with no intervening foothills. Their special flatland colony, about one-quarter of a mile long and 400 feet wide, is tucked into the western corner of an ecologically sensitive area some 10 times larger. Bordered on three sides by the provincial park, the site is separated from the cement company's present quarry by a railroad track.

The salamanders' swampy home, itself the result of gravel excavation for railway construction in the 1900s, is strewn with abandoned wooden ties, ideal for the slippery silver-specked, yellow-backed salamanders to hide under. The absence of outflowing water seepage helps the species proliferate by eliminating trout fingerlings, one of its worst predators. As well, contends the professor, the entire region is important for other wildlife, especially the elk which winter and calve in its meadows, and nighthawks which nest in open areas between the ridges of pine and spruce trees. Long-toed salamanders were discovered there in 1977 by a naturalist, and the U of A started monitoring the site two years later.

The improvement district held a public hearing on the proposed zoning change on February 26, and received only two objecting submis-

sions. However, Professor Butler believes the quiet (albeit legal) manner in which the hearing was announced--via a newspaper ad--did not adequately inform people of the proposal, and certainly omitted any mention of the consequences to the salamanders. The district's six-member advisory council, which reports directly to Municipal Affairs Minister Julian Koziak, will meet soon to discuss the matter.

--Alberta Report, 25 March 1985
(submitted by Kate Shaw, Lawrence)

Rare Salamanders Win Reprieve from Demolition

A colony of rare long-toed salamanders 80 km west of Calgary has won a reprieve from a threat of having their home destroyed by a cement company.

The colony is the only known location where mountain-dwelling long-toed salamanders co-exist with tiger salamanders, their more common prairie-dwelling cousins.

Canada Cement has agreed to withdraw 24 to 28 hectares, including the pond, from a rezoning application, but will keep its lease on the land because in 30 to 40 years the shale will be needed to make cement, said company vice-president Bernard Bonneau, of Calgary.

Jim Butler, a University of Alberta forest recreation professor who championed the cause of the salamanders, was elated by the cement company's decision which may allow time for a land swap.

Butler, who commissioned special "save the salamanders" lapel buttons, said the agreement shows that even lowly pond dwellers have their place.

"It's probably symbolic of the growing concern for wildlife in general. All of our wildlife is important, whether it be habitat for the long-toed salamander or habitat for the bighorn sheep."

What of the salamanders, dug into the mud at the bottom of the pond?

"I think they've been hibernating quietly, unaware that their destiny was in question and that they...could have ended up in cement," he said.

--The Edmonton Journal, 28 March 1985
(submitted by David McLeod, Fort Saskatchewan)

Docs Remove Live Frog From Boy's Stomach

Kids delight in the song about the old woman who swallowed a fly--but one little boy who swallowed a tadpole only to have it mature into a frog inside his stomach was not at all thrilled.

Rene Desouttier, 12, apparently sucked in a tiny tadpole while swimming and weeks later he had a powerful stomachache.

Surgeon Rous Beloit said in astonishment: "I have removed all kinds of things from children's stomachs--safety pins, bottle caps, corks, erasers, bits of wood and metal--but a live frog? Never!"

Rene began his bid for a place in the medical record books by swimming in the Kempisch Canal near his home in Bouwel, Belgium.

One of the youngest members of his school swimming team, he trained

by putting in at least an hour of crawl, backstroke and breaststroke in the canal after school.

"Swallowing a fish hook from the canal I could understand," said Dr. Beloit. "Kids often step on them while swimming."

Rene says he had no idea he swallowed the tadpole, yet that is the only explanation for what happened.

"It must've been a very small one. I always swallow some water, especially when I do the breaststroke."

But several weeks after it got too cold to swim, early last October, Rene had his first stomach pain.

"I thought it was just an excuse to avoid going to school," his mother Melisande Desouttier said.

"But when he came home that day with his lunch in his lunch box, uneaten, I realized he might be sick."

The next afternoon, Rene was sent home from school early, doubled up in pain. His mother took him to the doctor.

"Because of the way the pains recurred, I suspected appendicitis," said Dr. Beloit. "But I decided to wait and see."

A week later, Rene's pains were continuing and he was running a small temperature. The surgeon ordered X-rays, which revealed a very small, dark mass in the boy's stomach.

The 12-year-old was given anesthesia and a thin, fiber-optic probe was threaded down his throat and into his stomach so the surgeon could examine the foreign body.

"I could hardly believe my eyes! Staring back at me from the stomach was a frog's eye. What's more, it blinked!" the astonished doctor remembers.

Rene was immediately operated on. When the surgeon opened him up, he found a living baby frog, about two inches long. Dr. Beloit carefully lifted it out and placed it on an instrument tray.

It blinked once, startled by the light, then hopped. The scrub nurse made a grab for it and missed as it hopped again, this time onto the floor.

"I am certain this was the first time in the history of medicine that an entire operating team was distracted by a baby frog jumping around after being removed from someone's stomach!" the surgeon concluded.

Rene was released from the hospital a week later--and presented with the still-hopping frog to take home. After showing it off at school, he released it back into the canal.

"The most amazing thing about Rene's frog," the doctor said afterward, "was that it survived the powerful acids inside his stomach."

--The Sun, 7 May 1985

(submitted by Thomas Moore, Lawrence)

Species Survival Plan Report -- Puerto Rican Crested Toad

The Puerto Rican crested toad (Bufo lemur) was designated as the first amphibian SSP (Species Survival Plan) species in February 1984. This program will serve as a model for the formulation of other future amphibian SSP's.

Currently, there are ten institutions worldwide holding a total of 32/33/34 specimens [males/females/juveniles]: Brookfield Zoo, Bufalo

Zoo, Cincinnati Zoo, Columbus Zoo, Frankfurt Zoo, Fort Worth Zoo, Indianapolis Zoo, Mayaguez Zoo, Toledo Zoo, and Metro Toronto Zoo. The eight AAZPA institutions are participating in the SSP.

A preliminary Studbook representing 126 living and dead specimens has been assembled with all holding institutions having received a copy of their data for correction. Only two institutions have not responded with their feedback. It is anticipated that a final draft will be available in the next 4-6 weeks.

A Husbandry/Management Manual was prepared and distributed to all holding institutions in July 1984. Although specific to the Puerto Rican crested toad, this manual can be utilized for the basic management of a number of anuran species. The management manual was presented as a paper at the 1984 International Herpetological Symposium - (Columbus, Ohio) and will be published in the proceedings of such.

Genetic management for this species is complicated by the fact that virtually all captive toads derive from only four founders. Currently, the only exceptions are three new wild-caught males obtained in late August 1984. These males were collected at Guanica in the south of Puerto Rico. Our original four founders were collected at Quebradillas in the north of Puerto Rico. Differentiation has been noted in northern versus southern populations and a lack of genetic flow between the two populations has been contended. Therefore, karyotyping and electrophoretic analysis will be employed to investigate what genetic differentiation might exist between the northern and southern region toads, before these are incorporated into the breeding project. A 1985 collection permit for the Guanica site has been granted which will allow procurement of up to five adults from the wild for captive propagation.

Part of the SSP program is to release captive-bred toads back into suitable sites in the natural range. A total of 806 captive-bred toadlets were transported to Puerto Rico in 1984; and of this number, 792 were successfully released. Each individual was toe clipped for identification. A release site was selected so that it fell within the historic range of the species yet did not contain any known wild population. This, in effect, would help to insure survivability of the released toadlets and yet, avoid genetic contamination of any free-ranging population. Subsequent visits to the release site by Department of Natural Resources (DNR) personnel have revealed appreciable survivorship of these toadlets.

Finally, there is more good news from the wild. Until recently, the wild population was believed extremely diminished and declining. However, a new population has recently been discovered at Guanica. Recent work conducted by the Puerto Rican DNR has discovered a substantial population at this site. The sex ratio of males to females appears to be skewed, favoring males 4:1. The toads appear to migrate over great distances to reach a single pond site (one tagged female was recaptured 4 km from the pond site). It is now felt that these toads do not breed on an annual basis and require specific climatic conditions to trigger reproduction.

A Propagation Group meeting will be conducted at the 1985 AAZPA Annual Conference, Columbus, Ohio.

--AAZPA Newsletter 26(6):5-6, June 1985
(submitted by Ruth Gennrich)

Thunder Snakes, Blow Vipers, and Others

"We're looking for Alligator Snappers as part of a Fish and Game Commission study, ever see any around here?" I asked from the john boat as Kelly Irwin manned the helm. The man on the river bank, half-obscured from view by the dense undergrowth, looked puzzled.

"You mean Mississippi Snappers?"

I thought for a moment, then agreed...sometimes it doesn't pay to get technical.

"Sure, there's one behind you right now," he went on. Sure enough, a snapping turtle floated to the surface ten feet behind us, snagged on the trotline we were just beginning to check. A feeling of stupidity was descending upon us. The snapper was, however, just a common snapper (Chelydra serpentina). Later, a fishing buddy of the man on the river bank assured us that there were plenty of "gator-backs" around...he saw them crossing the roads every spring. Another name but the same turtle, unfortunately, not the Macrochelys we were looking for.

This is illustrative of a habit people have of calling critters as they see them. Venacular names, common names...whatever you call them someone else is bound to call them something different.

Before our three weeks of river-running were done I heard the Alligator Snapping Turtles (as well as its smaller cousins) referred to as moss-backs, gator-backs, alligator turtles, loggerheads, and Mississippi snappers. As usual, the local folk referred to all painted, map and red-eared turtles as "mud turtles." Softshells were the ubiquitous "leatherbacks." Most people seemed capable of distinguishing one species from the next, it was just that the names were interchangeable.

Snakes get stuck with more misnomers than any other sort of herp. When I was a kid I caught a juvenile racer, (Coluber sp.) that was referred to by the local snake expert (an old man who loafed in front of the pool hall) as a "thunder snake." It is interesting that this particular name is noted by Conant (1975) as being applied to the common king snake, (Lampropeltis getulus).

I've rescued dozens of hognose snakes (Heterodon) that were being held at bay by hoe-wielding old women who proclaimed them to be hissing sand snakes, blow vipers, puff adders, spreading adders, and even cobras.

But when someone calls out "Cobra!" it never pays to jump to conclusions. Sherm Ketcham of the Milwaukee County Zoo told me of a call they received from a frantic woman who was being terrorized by a huge "cobra." Sherm, with his usual lack of rapidity, responded to the hognose call in due time. Arriving at the home, he saw that a crowd had gathered to watch the event, as they often times do. It was in the garage, he was told, brown in color and five feet long. The novice would have thought a record size eastern hognose lurked within, but Sherm put the great size down to the magnification that comes with a fear of snakes and an untrained observer, and assumed it was probably every bit of two feet long. Confidently, he rolled away the bushel baskets the snake had taken refuge behind and was somewhat startled by the aspiration of a full-grown Egyptian cobra, (Naja hajae), raising up and flaring a hood. Undaunted, Sherm secured the snake and emerged from the garage to a waiting and idolatrous public to whom he pronounced the serpent to be merely a hognose snake (in the interest of avoiding a

city-wide panic) and sped away to the zoo. Evidently the escapee of a reptile keeper, it added a new, if not somewhat hazardous, twist to the hognose snake legend.

Members of the Agkistrodon group seem to get tagged with a lot of peculiar names, including their standard common names, like cottonmouths, copperheads, water mocassins, highland mocassins, chunkheads, trap-jaws, water snakes and so on. Experiences in eastern Kansas and Missouri have lead me to believe that there are only two varieties of non-venomous snake in that region, "black snakes" and "grass snakes." If it isn't a rattler or a mocassin, and if it isn't black, then its just a "grass snake." That's generalizing things a bit.

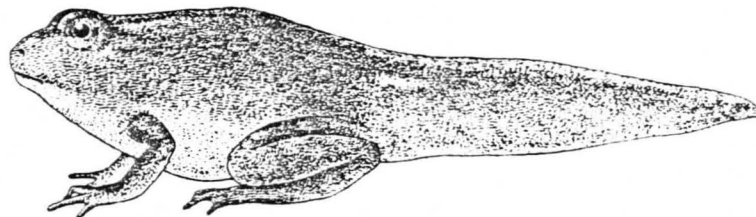
Blue racers are another thing. Although the term is usually applied to true racers (Coluber), a great many people consider ringneck snakes (Diadophis) to be baby "blue racers"! The logic escapes me.

In the Flint Hills of Kansas, ask anyone about rattlers and they'll tell you plenty, all of it about "prairie rattlers." The snake in question is, of course, the Massasauga (Sistrurus catenatus), but to those folks in the Tall Grass, they're prairie rattlers. People in Oklahoma, Texas, and extreme southwestern Kansas refer to the Massasauga as a sidewinder. The same folks usually call prairie rattlers (Crotalus viridis) just plain old "ground rattlers." Western diamondbacks (Crotalus atrox) are known as "coon tails."

Larval salanders, usually tiger salamanders or smallmouth salamanders, are invariably known as mud puppies or water dogs to avid bait seiners in Kansas, or for that matter, nearly anywhere. People who have used water dogs for bait all their lives and never came close to a real Necturus would be in catfish heaven if they should ever chance to seine up a batch of the real things!

It is little wonder that the general public and their numerous snake-tales and hometown experts do little to help the professional herper out to decipher the herpetofauna of a particular area. People love those names and half the time they do sound better than those "officially" given to the animals. So let 'em keep those names, I say. If you ever argued with the local 92-year-old snake expert in some dimly lit small town tavern about the true identity of a thunder snake, you'd know it isn't worth your breath to try and steer them towards enlightenment.

--Martin Capron
Box 542
Oxford, Kansas 67119



Sweetwater 30, Rattlesnakes 0

Having just moved to Texas, I figured that it was finally time to go to one of the rattlesnake roundups I had heard so much about. We were aware of their existence from television, wildlife publications, and of course, from all of the herp society newsletters we subscribe to. My wife, Karen, was not too enthused about going, so I found a fellow biker from work, and we headed to Sweetwater, Texas on the evening of 8 March.

Rick and I pulled into town at about midnight, with no idea of where we were going to stay, or where we needed to be the next morning. Driving down a main drag, we paused at a stop sign and a muddy 4-wheel drive Chevy pulled up along side of us. One of the three cowboys asked us if we knew where all of the rattlesnakes were. They were half lit, and completely hyped, bragging about how they were going to hunt rattlesnakes the next day. On leaving them, we found a convenience store about to close, and were told we could pitch our tent down the road at the park.

After a night's sleep that was interrupted by a noisy packing plant, loud party-types, and a main road that was about ten feet away from the tent, I awoke at 7:00 a.m. to find a wet, foggy morning trying to greet us. Getting out of the tent, it became apparent by the number of cars, trucks and campers that we were about a hundred yards from the main entrance and rally point for the roundup. I then convinced Rick that he'd had enough sleep and we drove around in the Texas-style dew, trying to find some place to eat.

While driving around, we spotted a glowing sign with the greeting. "Welcome Snake Hunters." A step-side pickup on the side of the road sported a sign reading "snake catching gear for rent." This "gear" was composed of garden-type sprayers filled with gasoline, pilsstrom tongs, and golf club-type snake hooks. A bank sign registered a temperature of 53 F. The Holiday Restaurant we finally found provided us with gawkers who didn't seem to like bikers, a head that was "out of order" where we tried to make ourselves presentable, and a waitress who couldn't have remembered her name with two hints.

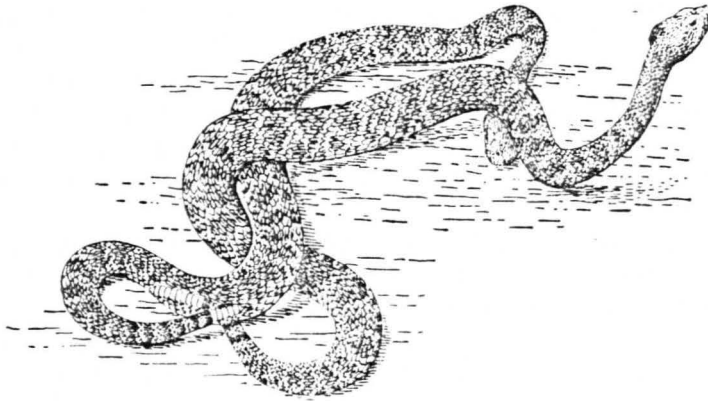
We got back to the rally point, which was some sort of big colosseum or gymnasium-type building, at about 9 a.m. As we walked in, I began to think of how I was supposed to act. I mean, after all, I was going to be the only one in there who knew that a rattlesnake has a purpose on this earth, and possesses beauty and a lot more brains than most of the people who were there trying to catch them.

The first thing that greeted us was a flea market atmosphere of booths, where you could buy snake covered belts, boots, belt buckles, ties, hats, vests, key chain ornaments, hat bands, and wallets. There were freeze-dried snakes, snakes in resin, full tanned skins, snakes in striking pose, snake heads to put on your cowboy hat, and stuffed snakes to hold while you got your picture taken.

Going to the center of the arena, we started to see the live, but sluggish cold rattlesnakes. The first "circus ring" we came to (sheet metal about four feet high and 15 feet across) had a "lecturer" in it with rattlesnakes all around his feet. He was telling everyone how they (the Jaycees) had been having the rattlesnake roundups for the past 30 years to "protect the species." The rattlesnake was a "bad snake" and they were "just trying to control it." The snakes at his feet were not

striking at him because they were "used to him." The temperature was still about 60 F.

The next area had bagged rattlesnakes, caught the day before, being milked and thrown into a 40-gallon plastic garbage can, to a depth of about two feet in each container. As they tried to crawl out they were beaten back in with a snake hook. From there, the rattlesnakes were taken to a booth where they were killed and decapitated and then, if the snake was a male, milked for sperm. The writhing snake bodies were hung in front of one of the five butchers in bloody white lab coats, who very quickly slit open the bellies and pulled the skin from the corpses. The skins went to a table where you could purchase them, and a "tanning kit," to make your very own snake skin.



Traveling on around the gym, we found several other arenas where snakes were being weighed and segregated by size. These tanks were crowded, and maybe up to one-foot deep in snakes that were not trying very hard to move around, let alone rattle or strike. We moved on and finally came to the ultimate snack booth, selling barbequed snake meat.

While talking to one group of snake hunters, we were told of how one individual was able to catch 200 pounds of rattlesnakes in the previous two days. He was a 76-year-old man.

Of all the Jaycees' "snake handlers" we never saw any machoism or any real harassment of the snakes. They all just seemed to have a job to do and would answer any questions that the public had. There was no screaming, or people joking or jeering, just a lot of open-mouthed people in awe.

We left the gym at about 3 p.m. and by then there was standing room only. As we were leaving, one fellow said to stick around because there would be twice as many people on Sunday.

I've always wanted to go to a roundup, and I'm glad I finally went. It satisfied my curiosity and made me more aware of the importance of my hobby. While I was there among the locals, I never had the urge to "open up" on them. It would have been like going to a football game and trying to convince everyone there to play golf instead. I didn't speak up when the lecturer gave some feeble explanation of why what his group was doing was in the snake's best interest. I didn't stuff snakes under my coat to save them from a senseless death. I didn't even get sick to my stomach as a young man handed a girl half a dozen freshly decapitated, writhing snakes, which she quickly strung up and gutted.

There were thousands of people there this year, and there have been thousands there each year for the 29 previous years. There's a very good chance that the number will increase next year, not only in

Sweetwater, but in all of the other towns that get themselves on the map with these events.

I'm home with my critters now, and have taken a closer look at what my hobby really means. There will be more effort to get those boas to breed. A lot more techniques will be tried to get that hatchling to eat. More medicines will be tried to save that sick "trash" snake. And, in the end, any knowledge that a fellow herper needs will be joyfully passed on.

We've got to stick together--we're behind:

Sweetwater - 30, Rattlesnakes - 0.

--Gary Schroeder
Abilene, Texas

Critical Habitats for Endangered and Threatened Herps of Kansas

I recently attended a nongame wildlife workshop in Emporia and had the opportunity to visit with a number of people interested in protecting threatened and endangered wildlife in Kansas. Most of the people at that meeting were not familiar with current regulations the Fish and Game Commission has in place to protect listed species. To help inform more people of how we are using our current regulatory authority to at least partially address protection of threatened and endangered species, I am providing the following information pertaining to amphibians and reptiles.

Kansas' Nongame and Endangered Species Conservation Act became effective in 1975 (K.S.A. 1975 Supp. 32-501 thru 32-510). That act placed the responsibility for undertaking appropriate conservation measures for threatened and endangered species upon the Fish and Game Commission. To implement this statutory directive, the Commission has promulgated two regulations which (1) identifies and protects those wildlife species considered to be threatened or endangered (K.A.R. 23-17-1) and (2) establishes a mechanism to address protection of habitats of listed threatened and endangered species (K.A.R. 23-17-2).

As with all wildlife, the key factor to consider when undertaking conservation measures is how to protect existing habitat. In that regard, regulation K.A.R. 23-17-2 was implemented in May, 1981. This regulation provides for a permit system applicable to development projects impacting listed species or their habitats. The regulation addresses two categories of activities for which a permit from the Fish and Game Commission is required.

Section (a) of the regulation applies to a sponsor of any project which involves public money, assistance from a public agency, or a permit from any state or federal agency. The sponsor of any such project which impacts any listed species or their habitats must obtain a permit from the Fish and Game Commission before any construction can start.

Section (b) of the regulation pertains to projects that are not covered by Section (a). In this case, a permit is required only if individual animals of listed species are directly harmed. Although this

section does not provide protection to habitats, neither does it apply to many projects since most land development activities require some type of permit or funding that will place them under Section (a).

As described in the Commission's publication, "A Plan for Kansas Wildlife," any habitat documented as providing the vital needs for any population of any species listed as threatened or endangered is considered critical habitat for such species. Utilizing that definition, we are administering the above permit system to determine when and where permits are required.

Of the 24 species included on the state's threatened and endangered lists, six are herptiles. Utilizing administrative procedures authorized under existing statutory requirements, the Commission has designated critical habitats for all six species. The reader is cautioned that designation of critical habitats is a dynamic process. As we gain information about each listed species and their habitat needs, modification of the designated areas will be made. For an up-to-the-minute listing of critical habitats, interested persons must contact the Commission's Environmental Services Section, Route 2, Box 54A, Pratt, KS 67124 (phone 316-672-5911 ext. 198). The current critical habitats for Kansas' listed herptiles are as follows:

Alligator Snapping Turtle (Macrolemys temmincki)

We have been unable to verify that a viable population of this threatened turtle exists in Kansas. However, due to past collections of skeletal remains, we feel a sparse population likely occurs in the Neosho and Cottonwood Rivers. There may also be a few animals in the lower Arkansas River, but no recent verified collections or sightings have been made. Critical habitats for alligator snapping turtles are currently listed as:

- (1) The main stem Cottonwood River from the Kansas Turnpike crossing to its confluence with the Neosho River, all in Lyon County, and
- (2) The main stem Neosho River from the I-35 crossing to the Lyon-Coffey county line, all in Lyon County.

Northern Crawfish Frog (Rana aerolata circulosa)

Collections of this threatened frog have been made in thirteen eastern Kansas counties since 1910, with most being made between 1920 and 1980. Unfortunately, the animal seems to have disappeared from many of the habitats where it formerly occurred. Currently, the only designated critical habitat for northern crawfish frog is:

All lowland wet meadow and wetland within Section 18, T13S, R20E, Douglas County. This area is commonly referred to as the Haskell Wetland.

Cave Salamander (Eurycea lucifuga)
Graybelly Salamander (Eurycea multiplicata)
Grotto Salamander (Typhlotriton spelaeus)

These three endangered cave-dwelling salamanders occur in the Ozark Plateau region of Cherokee County. The current designated critical habitat for all three salamanders includes:

All caves and associated spring flows within that portion of Chero-

kee County encircled by a line beginning on U.S. Highway 166 at the Kansas-Missouri border, then extending along U.S. 166 to Kansas Highway 26, then along K-26 to its junction with the half-section line near the center of Section 26, T34S, R25E, then directly east to the Kansas-Missouri border, then south along the border to its starting point on U.S. 166.

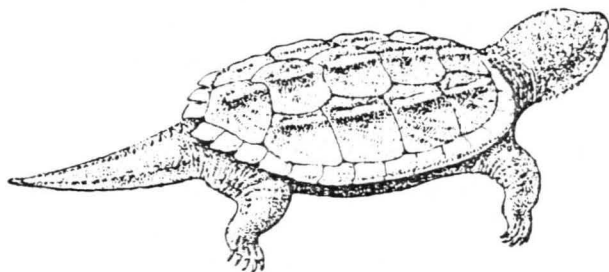
Central Newt (Notophthalmus viridescens louisianensis)

The only recent collections of this endangered salamander have been made in Cherokee County. The current critical habitat for the central newt is:

All moist wooded bottomlands occurring in that portion of Cherokee County lying south and east of a line starting on the Kansas-Missouri border at the NE corner of Section 36, T32S, R25E, then extending west along the section line to its junction with county road F.A.S. 1791, then along F.A.S. 1791 to its junction with U.S. Highway 69, then south along U.S. 69 to its junction with U.S. Highway 66, then along U.S. 66 to its junction with the Kansas-Oklahoma border.

Administration of the K.A.R. 23-17-2 permit program is handled by the Commission's Environmental Services Section. Persons interested in obtaining a copy of a pamphlet detailing the permit program should contact the ES Section at Route 2, Box 54A, Pratt, KS 67124, Phone 316-672-5911, Ext. 198.

--Robert D. Wood
Wildlife Ecologist
Environmental Services Section
Kansas Fish & Game
Box 54A, Rural Route 2
Pratt, Kansas 67124



BOOK REVIEWS

Palmer, Joan. 1983. Reptiles and Amphibians. Blandford Press, Dorset, England. 94 pp., black & white photos. Price: \$6.95 plus \$1.25 postage and handling. Available from Sterling Publishing Company, Inc., Two Park Avenue, New York, New York 10016.

This book is intended to be a guide for beginners, and it starts out with a wise caution not to run right out and buy the first snake you

see, but to approach the whole matter of herp keeping with thought and planning. The extremely short introduction to reptiles and amphibians contains several irritating errors (no mention of caecilians, says venomous snakes inject venom "into the victim's bloodstream," etc.) but the discussion of the preliminary considerations of housing, feeding, and caring for a captive animal that follows is excellent. Palmer mentions the importance of keeping written records and considering the long-term economic commitment you make to a captive animal.

The second chapter launches into keeping newts and salamanders. Her taxonomy is way out of date (Diemictylus viridescens instead of Notophthalmus viridescens, for instance), but she provides what seems to be good, solid, and specific information on temperature and food requirements for a variety of species. The chapter on frogs and toads is also quite good, again with information on a variety of species.

Chapter 4 deals with crocodilians, which Palmer points out are not suitable for beginners. She does give some information about them, however. The next chapter, dealing with chelonians, is very detailed, including a discussion on breeding captive turtles and caring for the young. The chapter on lizards follows the same pattern as the others, with a warning to "remember to study the natural history of your chosen pet before furnishing and planting its aquarium." The chapter on snakes is rather short, but contains more information on diseases than for the other animals. Chapter 8 is "Recording and Conserving in the Wild," and contains material rarely brought before the beginner in a book on keeping captive animals. Declining populations, protected species, and the ethics of taking animals from the wild are all discussed in a well-balanced presentation. The book concludes with short chapters on obtaining animals, herpetological societies, and legislation. There is a list of addresses of major societies and offices in the U.K. and the U.S., and a list of references.

For a book designed for beginners, a lot of information is packed into its 94 pages. Aside from some over-generalizations and errors in the introductory material to some chapters, the content is quite good, and I think most herp keepers would find it useful. It is excellent as a book for beginners, and one that anyone interested in captive herps should consider acquiring.

--John E. Simmons
Museum of Natural History
University of Kansas
Lawrence, Kansas, 66045

Phelps, Tony. 1981. Poisonous Snakes. Blandford Press, Dorset, England. 237 pp, color and black & white photographs, and line drawings. Price: \$9.95 plus \$1.25 postage and handling. Available from Sterling Publishing Company, Inc., Two Park Avenue, New York, New York 10016.

This well-illustrated book begins with an attempt to summarize prevalent opinions concerning the classification of venomous snakes. This can get to be a very sticky area, but the author does a reasonable job with his presentation, considering how confusing it can all become.

He provides a long listing of scientific names of venomous snakes with their known distributions.

Three chapters are devoted to discussion of the various venomous snakes by genus or group. The information provided is quite varied, ranging from distribution to reproduction to color patterns. Of special interest to North American readers will be the emphasis on Old World venomous snakes such as Atheris, Cerberus, or Malpolon that we do not hear much about. The author includes a lot of anecdotes from his own experience with various species.

Chapter 6, Habits and Behaviour, is definitely oriented towards European species, which again the North American reader will find interesting. This chapter is of broad enough coverage to be a good summary of the habits and behavior of most venomous snakes worldwide. It would have been nice if Phelps had included more references than he did for those who wish to do further reading on particular topics.

The chapter on snakebite includes information on venom extraction and venom content, with a brief explanation of what the various components of it do. The section dealing with snakebite and humans is very short, pointing out flaws in available snakebite statistics, and including some rather gory photos of the damage venomous snakes will do.

Chapter 8 is "Snakes and Man." A few of the more colorful figures in popular herpetology are mentioned, and such things as snake charming very briefly discussed. Chapter 9, "Poisonous Snakes in Captivity," begins with a discussion of antivenin which should really be in the chapter on snakebite. After stating that "I cannot appreciate why anyone should want to keep a rattlesnake or puff adder in a domestic situation," Phelps does provide a good overview of the process of obtaining venomous snakes for zoo and laboratory purposes, the importance of captive breeding, the basics of housing requirements for captive venomous snakes, and includes some tips on breeding and handling.

The last chapter, "In the Field," is the best. Phelps presents a good introduction to field study, gives an interesting list of "criteria for studying snake populations" in the field, describes field equipment and its uses, and then tells you how to catch some 15 specific kinds of snakes. Never having had the opportunity to field-collect a king cobra or a mamba, I can't comment on his technique for them, but for the Western diamondback rattlesnake he says "...wait until snake moves off then pin the neck region with stout L stick. Take the tail with the other hand, keeping the head at bay. Then lift the snake out at arm's length and drop into wire-ringed bag. Twist and tie..." Well, that's certainly not the way I do it... How to handle venomous snakes is one thing that really cannot be learned from reading. You must go out with someone who has the experience to explain why they do things the way they do them.

Appendix I contains a very useful table of principle sources of antivenin, which species they are good for, and where to buy them from. Appendix II is an "Emergency procedure for dealing with snakebite..." compiled by a physician with the Liverpool School of Tropical Medicine. It contains little useful information. Much better is Russel's Snake Venom Poisoning, if you can afford it.

There is also a glossary, short bibliography, and index.

The quality of the illustrations varies quite a bit. The line drawings are all very good, as are the black & white photographs. The color photos (33 on 16 pages) range from poor (Cottonmouth) to pretty good (Eyelash Viper).

All in all, this is a good introduction to venomous snakes, especially Old World species, especially those of Europe. It is well-written and often entertaining. My chief complaint is that some of the information presented is found in so many other sources that it is a pity the author didn't use that space to communicate something new.

If you need a good general reference work on venomous snakes, this is a bargain for the price.

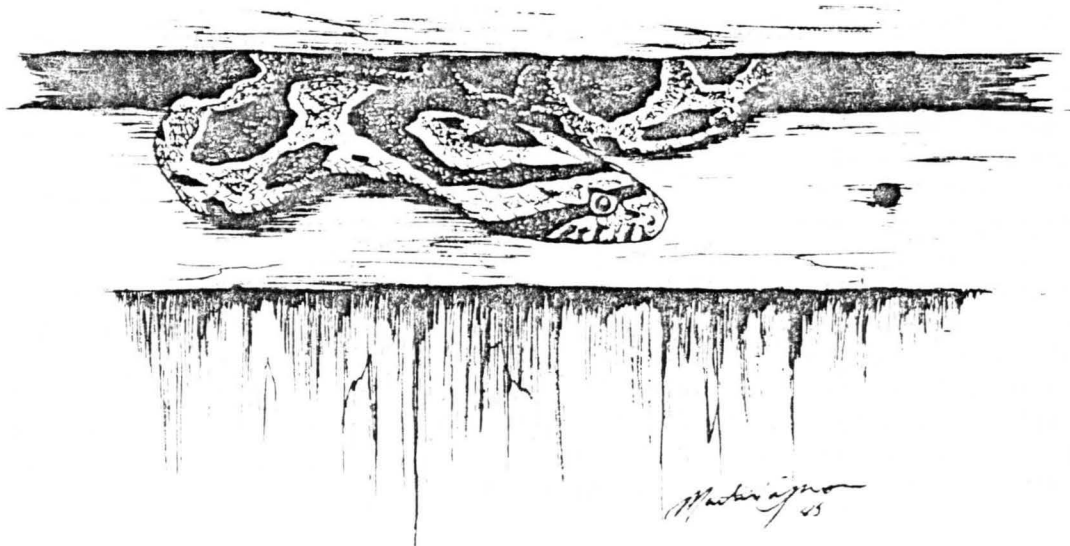
--John E. Simmons
Museum of Natural History
University of Kansas
Lawrence, Kansas 66045

Giant Snakes in the News

While keeping an eye out for herp-related news recently, I came across the June 1985 issue of Sports Afield. It is an issue worth checking out. Unlike the usual spring and early summer fare of snake articles that abound in magazines of this variety, this one deals with giant snakes, the boas and pythons. Normally, the outdoor magazines tell us all that we don't need to know about rattlers and moccasins fouling up fishing trips and such, along with helpful hints for home surgeons who wish to hack up snake-bitten hunting partners. Not so this time. The article is most outstanding for the illustrations it uses...tasteful pen and ink washes that are of amazingly good quality and style. Unfortunately, they are captioned with excerpts from the text and the one under the African Rock Python (Python sebae) is actually describing a Reticulated Python. The text itself is fairly run-of-the-mill giant snake information, most of it accurate except the part that says African Rock Pythons of 32 feet in length are not uncommon! I wish I knew where they were! I was especially drawn to this article by the mention of the maximum lengths and the reward (now \$50,000) offered by the New York Zoological Society for a 30-foot long specimen of any type. Since I was only boa-bait I have harbored a secret ambition to lead an expedition to the Amazon to capture the largest Anaconda of them all and I've spent many a night scheming as to how to accomplish this. Rolf Blomberg's book, Lost Gold and Anacondas, told of his similar ambitions, and I've read and reread my copy of this rare old text to tatters.

Well, back to the matter at hand. I found the entire article worth reading even if the information was very basic and only slightly out of focus now and then. If you find yourself lurking along Kansas streams imagining every water snake to be an Anaconda or if you just lurk about your home draped in boas you should grab a copy of the June issue of Sports Afield and enjoy it!

--Martin Capron
Box 542
Oxford, Kansas 67119



LETTERS TO THE EDITOR

Dear Editor,

I just finished reading the KHS Newsletter No. 59 for March, 1985. I read "Some Helpful Hints for Herp Keepers" with a great deal of interest. I was pleased to see your Editor's note following this article regarding your philosophy on keeping "hot" snakes in captivity in private collections.

I agree that there is no justification for private citizens maintaining dangerous animals, especially exotic venomous snakes in their homes. But I disagree with your assessment that should an individual be bitten the problem is their's and their's alone. As a member of the American Association of Zoological Parks and Aquariums Antivenin Index Committee and as an experienced Emergency Medical Technician, I am acutely aware of the processes involved in attempting to treat victims of venomous snakebites. The victim of an envenomation has not only a personal problem, but becomes an acute problem for those individuals and institutions who will be asked to respond to attempt to treat and perhaps save the life of the individual. In many cases, the victim of an exotic snake envenomation will enter into a medical care system which may call upon the resources of zoos and institutions who keep supplies of antivenin on hand for the protection of their staff. Those institutions may be asked to commit part or all of their antivenin supply for a given species to one individual that is not a part of the profession arena of keeping snakes in captivity. The acquisition and stocking of exotic antivenin comes at considerable expense and time for institutions, because as you are well aware, all such antivenins must be imported from foreign countries and there are numerous bureaucratic hurdles that must be surmounted. Each vial of antivenin may cost anywhere from ten to thirty or forty dollars, so the victim of an exotic envenomation may use up to several hundred dollars worth of antivenin from any given institution. In addition, the hospital staff will expend

a great deal of energy attempting to sort through the options for caring for this most unusual emergency situation, as will any of several consultants that may be called in to assist. The bitten individual will probably lose work time and will also be the subject of much anguish from friends and relatives during the recuperation period, if the patient survives at all.

So I think you can see that in addition to the danger to innocent bystanders and visitors to the citizen's home, there is a great deal of trouble and expense that comes from other people who may be asked to attend to the envenomated victim. It is well known in zoo circles that of those zoos which maintain stocks of exotic antivenin, the chances are quite high that the antivenin will be used not for a member of the zoo staff but rather for a private citizen who was accidentally or sometimes intentionally envenomated by one of his "pets."

Now let me step down from the soapbox. I enjoy reading the KHS Newsletter each time it makes its way around the Zoo office. It provides an interesting and concise format for keeping up to date on significant herp news. Keep up the good work.

Ron Kaufman
Zoo Education Coordinator
Topeka Zoological Park
Topeka, Kansas

A FINAL WORD FROM THE EDITOR...

Well, its that time again, the sure signs of summer are here. Just before this issue went to press, I received a clipping of an article from the Osawatomie Graphic. The photo shows a woman holding a huge bullsnake, and the article goes like this:

Even standing on tiptoe and reaching, Maxine Holderman of Parker wasn't tall enough to stretch out her treasure--a 7-foot-long, 6-pound bull snake. Mrs. Holderman killed the snake while mowing in a pasture near Parker. She said the gold and brown snake was glistening in the sun and attempted to kill it by running over it with the mower. When that failed, she stunned it by running over its head with a tractor wheel, got off the tractor and killed it with a piece of board. Before bringing the snake to Osawatomie to show it to her grandchildren, she frightened all her neighbors by driving through the streets of Parker on her mini-bike with the snake draped around her neck.

What can you say? I hope she enjoys poisoning mice and watching the rabbits eat her garden this summer.

Thanks for help with the last issue goes to Thomas Moore, Tim Noble, and Joe Collins.

IF YOU HAVE NOT PAID YOUR 1985 DUES you will be dropped from the mailing list before the next issue of the KHS Newsletter. Please, don't let that happen to you.