

# KANSAS HERPETOLOGICAL SOCIETY

## NEWSLETTER NO. 91

FEBRUARY 1992

### ANNOUNCEMENTS

#### TOPEKA COLLEGIATE SCHOOL T-SHIRTS AVAILABLE

For the miniscule price of \$10 or \$12, you can be the proud owner of a great-looking herp T-shirt and support a good cause at the same time. The eighth grade class at Topeka Collegiate School is offering you a choice of one (or more) of three different subjects: Ornate Box Turtle, Tiger Salamander, and Tokay Gecko. All shirts were designed by KHS' own resident artiste, Marty Capron, and are absolutely beautiful. The turtle and salamander shirts are white with a two-color imprint and cost \$10 and the gecko shirt is light gray with a two-color imprint and costs \$12. Shipping is \$2 per shirt. All styles are available in adult sizes: small, medium, large, and extra large. Contact Larry Miller at Science Department, Topeka Collegiate School, 201 SE 59<sup>th</sup> Street, Topeka, Kansas 66619.

#### CHICKADEE CHECKOFF

As most of us are aware, the dreaded tax season is upon us. However, there is a way to guarantee that at least some of your hard-earned money will go to the agency that you want it to go to. The program is the Chickadee Checkoff of the Kansas Department of Wildlife and Parks. There is a little box on your state tax form that allows you to designate any portion of your refund (if you are among the lucky few) or X amount above your tax obligation to the Chickadee Checkoff. Money from this program is used to fund various non-game species programs here in Kansas. A number of KHS members have been the recipients of these funds to conduct research on our native herps and the information from this research has helped to determine proper conservation methods for such species. Projects funded have included work on the Spring Peeper, Red-spotted Toad, Alligator Snapping Turtle, and turtle communities in south-east Kansas.

Wildlife and Parks has established a new goal for the Chickadee Checkoff for this year. They would like to raise the amount of donations by one-third. That is, they would like to raise the total fund to a quarter of a million dollars rather than the measly 170 grand they have been getting in past. If you have contributed in the past, try to raise this year's contribution by a third. If you haven't contributed, this is a good time to start. Remember that donation of \$25 or more entitles you to a free subscription to *Kansas Wildlife and Parks Magazine*.

The Non-game Section of Wildlife and Parks also wants you to know that the old *Kansas Nongame Newsletter* has been dressed up and is now titled *The Field Glass*. This publication is free and is available from Chickadee Checkoff, Kansas Department of Wildlife and Parks, Box 54A, Route 2, Pratt, Kansas 67124.

#### TORTOISE CONFERENCE

The Turtle Recovery Program announces a symposium entitled *Conservation, Restoration, and Management of Tortoises and Turtles—An International Conference* that will be held 11-16 July 1993 at the State University of New York. This important conference will provide a forum for a wide variety of persons concerned with the conservation of these creatures, nearly half of which species are now imperiled, to critically assess current efforts and develop strategies for the future. Participants will include representatives from the academic, government, zoo, and private sectors. Those wanting more information should contact: Turtle Recovery Program—Conference Coordinator, American Museum of Natural History, 79th Street and Central Park West, New York, New York 10024-5192.

#### EARTHWATCH NEEDS VOLUNTEERS FOR WORLDWIDE HERPETOLOGICAL PROJECTS

Earthwatch, a non-profit organization that provides funding to field scientists worldwide, is recruiting volunteers who would like to assist in a number of herpetologically-oriented field projects. These projects are as follows: *Saving the Leatherback Turtle—St. Croix, U.S. Virgin Islands* (teams depart April-July 1993); *Baja Island Lizard/Spider Communities—Baja California, México* (teams depart June-August 1993); *Island Rain Forest Communities—Brazil* (teams depart January-July 1993); *Madagascar Herp Survey* (teams depart October 1993).

All projects are ten days to three weeks in length. Volunteers are trained in the field and anyone 16 or older is eligible to apply. Project contributions are \$800-\$2200 and are tax deductible. These contributions cover the cost of food, lodging, and field equipment. Travel fare to and from site is additional.

Anyone with a few extra bucks, a yearning for knowledge, and a desire to make valuable contributions to worldwide conservation efforts should call Andy Hudson

at (800)776-0188, extension 182 or write Earthwatch, P.O. Box 403HP, Watertown, Massachusetts 02272.

## NEW BOOKS

Sterling Publishing Company, Inc. announces publication of a new children's book titled *Snakes* by Erik Stoops and Annette Wright. This tome lists for \$14.95 and those wanting further information should contact Sterling at 387 Park Avenue South, New York, New York 10016-8810.

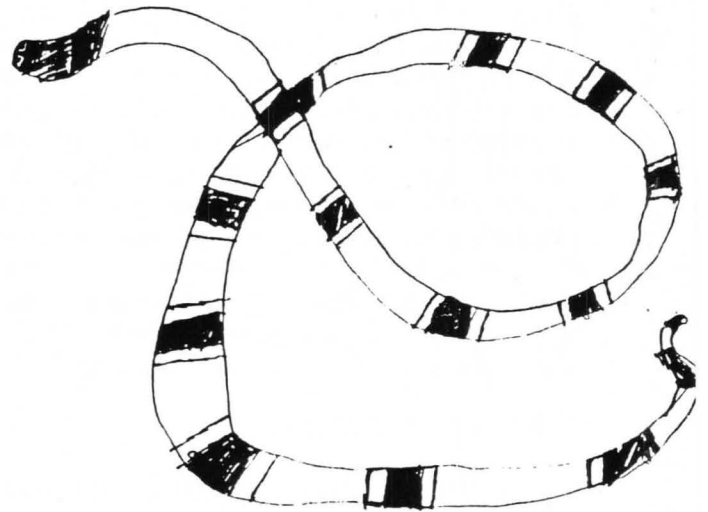
Also available are two volumes addressing African herps. This first is *A Complete Guide to Snakes of Southern Africa* by Johan Marais. This book contains 210 color photographs, line drawings, and distribution maps, and covers all taxa of snakes in South Africa, Mozambique, Zimbabwe, Botswana, and Namibia. The book is available from Krieger Publishing Company, Malabar, Florida 32950; no U.S. price given. Also available from the Crocodilian Study Group of Southern Africa is *Conservation and Utilization of the Nile Crocodile in South Africa—Handbook on Crocodile Farming*. The book is a compilation of a number of papers that address the major aspects of croc farming and can be ordered from the Crocodilian Study Group of Southern Africa, Department of Animal Science, Faculty of Agriculture, University of Pretoria, Pretoria 0002, SOUTH AFRICA. The price is 75 Rand plus 5 Rand shipping, bank draft or international money order only.

Boyd's Mills Press announces a pre-publication offer of a new book title *Sea Snakes* by Sneed B. Collard III (I did not make that up) and illustrated by John Rice. This press is offering a special signed edition for \$12.95 prior to March 1993. Those wanting more information should contact Pamela F. Sadler, Boyd's Mills Press, 910 Church Street, Honesdale, Pennsylvania 18431 or call (717)253-1164.

## 1992 IHS TAPES AVAILABLE

Mark Silver Productions announces that tapes from the 1992 International Herpetological Symposium are now available. These tapes cover a variety of herpetocultural, veterinary, and natural history topics and list for \$24.95 for standard VHS tapes and \$29.95 for S-VHS tapes. For more information write to Mark Silver Productions, P.O. Box 15731, Seattle, Washington 98115-0231 or call (206)527-0135.

EASTERN CORAL SNAKE



NEWBORN LEON KING SNAKE



# KHS BUSINESS

## KHS FIELD TRIPS

The first of two KHS field trips will be held on 24-25 April 1993 in beautiful Chautauqua County, Kansas.

The meeting/camping site will be at the City Park of Elgin, Kansas, a small town situated on the Kansas/Oklahoma border in the heart of the Chautauqua Hills. Maps of public lands and landowners in the campsite in the campsite vicinity who will allow collecting will be available at the campsite. Lodging and gas are available in Sedan (12 miles) or Caney (20 miles) and fine dining can be had at Margaret's Cafe in downtown Elgin. Motels in the area are the Ranch Motel (\$36 double occupancy) 316-725-3163 in Sedan and Bed & Breakfast in Caney 316-879-5777.

A number of interesting and rare species have already been taken within the county and possibilities exist for several other forms that range close to Kansas in Oklahoma. In addition, *Necturus louisianensis*, *Spea bombifrons*, *Scaphiopus holbrookii*, *Bufo woodhousii*, *Pseudacris streckeri*, *Rana areolata*, *Rana clamitans*, *Macroclmys temminckii*, *Sternotherus odoratus*, *Kinosternon flavescens*, *Graptemys geographica*, *Graptemys kohnii*, *Apalone mutica*, *Holbrookia maculata*, *Eumeces laticeps*, *E. septentrionalis*, *Ophisaurus attenuatus*, *Heterodon platirhinos*, *Tantilla nigriceps*, *Elaphe guttata*, *Pituophis catenifer*, *Thamnophis radix*, *Tropidoclonion lineatum*, *Virginia striatula*, *Storeria occipitomaculata*, and *Sistrurus catenatus* are all possible county records. If you have never been to the Chautauqua Hills, this is a must-do field trip. The beauty of the oak and sandstone hillsides is yet another testament to the tremendous diversity within this great state.

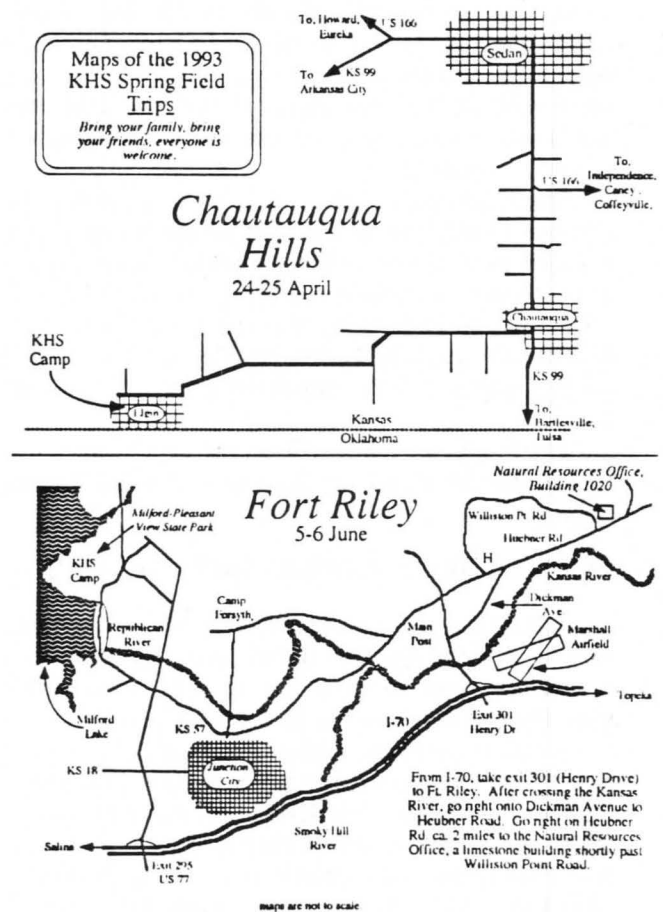
The second field trip will be held in conjunction with the Kansas biological Survey on *World Environment Day* Saturday, 5 June 1993. The Survey will be conducting an environmental assessment of the Fort Riley Military Reservation this summer and Bill Busby, zoologist at the Survey in Lawrence, will lead the field trip with principle investigators for the study, Joseph T. Collins and Kelly J. Irwin. Participants will be allowed to collect and gather data at previously unstudied sites to aid researchers in determining what impact the military reservation activities has on the natural flora and fauna, especially herps. Maps of the area will also be available at the campsite and Natural Resources Office.

The KHS campsite will be at Milford-Pleasant View State Park on Milford Lake beginning early Friday evening. Each car staying in the park will need a state park permit, \$3 daily. For those staying at motels, the field trip on the base will begin at 9:00 A.M. on Saturday at the Natural Resources Office, shown on the accompanying map. The

list of county records is small, but there is a lot of information to be gained and one last trip into the Flint Hills before the heat of summer should be welcomed by all. Some motels in Junction City are the Best Western Jayhawk Motel (\$40)800-528-1234, Days Inn (\$37)800-325-2525, EconoLodge (\$42.50)800-424-4777, and Harvest Inn (\$28)800-762-0270. Prices are for double occupancy.

If you have any questions, please contact me at 1358 West Highway 40, Apt. 3, Hays, Kansas 67601, 913-625-2857.

—Travis W. Taggart  
KHS Field Trip Chairperson



## UPDATE ON SHARON SPRINGS RATTLESNAKE ROUNDUP EVENTS

On 21 January of this year, KHS president David Edds and seven other KHS members made presentations regarding the Sharon Springs rattlesnake roundup to a meeting of the Kansas Wildlife and Parks Commission in Topeka. Other KHS speakers were Joseph T. Collins, Randy Reiserer, Henry Fitch, David Reber, Paul Shipman, Lenn Shipman, and Daren Riedle. Two members of the Sharon Springs organizers also made presentations. After considerable discussion, the Commission took no further action on existing state laws and regulations that affect the roundup but decided to make their final decision on the matter at the next Commission meeting on 4 March in Wichita.

Please read President Edds' presentation in the Feature Articles section of this Newsletter. As I said in the last Newsletter, we would advise you as to what the next course of action should be regarding this event. It is important that as many KHS members as possible attend the next Commission meeting in Wichita and state their positions on this matter, particularly that *no* change be made in current wildlife law and regulations in regards to the take of non-game wildlife. It is also important that you make your statements in as unemotional and non-confrontational a manner as possible.

The exact time and place of the Wichita Commission meeting are unknown at this time but the *Wichita Eagle* regularly publishes this information in their sports section and other state newspapers may do the same. You may also call the Kansas Department of Wildlife and Parks at 316-672-5911 for details of the meeting. You may also call me at 316-942-2213 Tuesday-Saturday for additional information.

Oh, by the way, the next Sharon Springs roundup will be 1-2 May of this year, a good time to avoid Wallace County.

## GLOYD-TAYLOR SCHOLARSHIP AVAILABLE

KHS is soliciting nominations for its new scholarship, the Gloyd-Taylor Award in Herpetology. The scholarship is named in honor of two of Kansas' greatest herpetologists, Howard K. Gloyd and Edward Harrison Taylor.

Nominations for this award are open to any individual and any student enrolled in an accredited educational institution in Kansas or any KHS member enrolled in any accredited educational institution outside of Kansas. Students from primary through university are eligible. Nominations should include typewritten details, not to exceed two pages, of the nominee's qualifications, plus name and address of the nominee and nominator. Qualifications include, but are not limited to, academic record, herpetological activities, and future plans in herpetology. Self-

nomination is excluded.

All nominations should be submitted to KHS President Dr. David Edds, Department of Biology, Box 50, Emporia State University, Emporia, Kansas 66801 no later than 1 June of this year. The KHS Executive Council will make the final decision and announce the scholarship winner at the KHS annual meeting, at which time all nominees and nominators will be recognized. If no qualified students are nominated, no award will be made.

Those wishing to contribute to the scholarship fund should send their contributions to KHS Secretary/Treasurer Karen Toepfer and note that the contribution is specifically for the Gloyd-Taylor scholarship fund. All contributions are tax-deductible.

## REPORT FROM THE CONSERVATION COMMITTEE

### Threatened and endangered species list modified

The Kansas wildlife and Parks Commission has passed several changes for Kansas' endangered, threatened, and species-in-need-of-conservation (SINC) lists. The previous listings had 17 endangered (three herps), 29 threatened (17 herp herps) and 58 SINC (four herps) species. The new list has 24 endangered (three herps), 33 threatened (15 herps), and 70 SINC (eight herps) species. A list of state-protected amphibians and reptiles can be found at the end of this report.

Of note, the Crawfish Frog (*Rana areolata*) was downgraded from threatened to SINC based on petitions and evidence of more populations. Legal habitat protection for this frog (*e.g.* silty clay loam soils near rivers and streams with crawfish burrows) is now lost. However, the Crawfish Frog is still protected from "taking," which includes killing. Other taxa reclassified from threatened to SINC were the Glossy Snake (*Arizona elegans*) and the Eastern Hognose Snake (*Heterodon platirhinos*).

The Common Map Turtle (*Graptemys geographica*) and Timber Rattlesnake (*Crotalus horridus*) were added to the lists for the first time, as threatened and SINC taxa, respectively. These reptiles were listed largely due to the efforts of KHS members David Edds and Joe Collins.

### Environmental Services chooses new mascot

The Environmental Services Section (ESS) of the Kansas Department of Wildlife and Parks (KDWP) has chosen the Alligator Snapping Turtle as its new mascot. The turtle is generally known to be tough, long-lived, and usually moving upstream against the current, trying to get upstream. Eric Schenck, ESS chief, came up with the idea



and hopes to promote it in many of the Section's activities. The Alligator Snapping Turtle symbolizes ESS' fight to conserve wildlife habitat and species, especially rare ones, and is already showing up on ESS letterhead. Perhaps the lure on the turtle's tongue is out there for potential polluters and habitat destroyers.

#### Wildlife and Parks initiates Outdoor Alert

The Law Enforcement Division of the KDWP has begun a new program, Outdoor Alert, to replace Operation Game Thief, the Department's previous program to catch poachers and other wildlife violators. Outdoor Alert is broader in scope and violations that can now be reported include sale of nongame and protected wildlife, poaching, polluting, and public land vandalization. Callers can remain confidential and a reward system is being developed. This new program reflects the broader interests of KDWP, which includes nongame wildlife such as amphibians and reptiles. KHS members are encouraged to call in and report violators. Remember, do not try to stop a wildlife criminal, just record details such a vehicle description (including tag number and state), violators descriptions (including name and address, if known), place and time of violation, what the apparent violation was, and what the perpetrators actions were. Then call the information in. Law enforcement personnel will follow up calls as they come in. The number for Outdoor Alert is (800)228-4263. Remember to take this number with you in the field and be especially alert now that the active herp season is approaching.

This program will only work if herpers and other citizens participate. Maybe we can stop some of the pillaging of our state's herps and their habitats by illegal collectors and sellers (keep an eye on your local pet shop). Take a moment and help out.

—Larry Zuckerman, chairman  
KHS Conservation Committee

#### Kansas Endangered, Threatened, and SINC Species

##### ENDANGERED

Cave Salamander  
(*Eurycea lucifuga*)  
Many-ribbed Salamander  
(*Eurycea multiplicata*)  
Grotto Salamander  
(*Typhlotriton spelaeus*)

##### THREATENED

Eastern Newt  
(*Notophthalmus viridescens*)  
Longtail Salamander  
(*Eurycea longicauda*)

Eastern Narrowmouth Toad  
(*Gastrophryne carolinensis*)  
Green Toad  
(*Bufo debilis*)  
Spring Peeper  
(*Pseudacris crucifer*)  
Strecker's Chorus Frog  
(*Pseudacris streckeri*)  
Green Frog  
(*Rana clamitans*)  
Common Map Turtle  
(*Graptemys geographica*)

##### SINC

Red-spotted Toad  
(*Bufo punctatus*)  
Crawfish Frog  
(*Rana areolata*)  
Alligator Snapping Turtle  
(*Macrolemys temminckii*)  
Glossy Snake  
(*Arizona elegans*)  
Timber Rattlesnake  
(*Crotalus horridus*)  
Western Hognose Snake  
(*Heterodon nasicus*)  
Eastern Hognose Snake  
(*Heterodon platirhinos*)  
Smooth Earth Snake  
(*Virginia valeriae*)

#### ENCLOSED FORMS

As you have for the past couple of years, you will find a separate copy (make as many as you wish) of the Amphibian Census Form for Kansas enclosed. I urge all of you to make an effort this year and try to send me a few completed forms. We now have a database of a few hundred records (the largest for any state participating in this project) and this data will be forwarded to the Diminishing Amphibian Population Task Force North Central Region coordinator at Creighton University. Remember that each form does have to be filled out completely, but the more complete the data, the more useful it will be to evaluate the status of amphibian populations in Kansas. There is already a slight indication that at least one species in Kansas may be in decline, but we need more information before that determination can be made. Please try to take these forms along with you in your travels and excursions around the state. I would also welcome any input you have to make these forms more useful and usable to you.

The second form enclosed is a sighting report form for herps list as endangered, threatened, or species in need of

conservation in Kansas. This data is collected by the Kansas Department of Wildlife and Parks and is vitally important to them in formulating their plans to conserve and reestablish healthy populations of these animals here. Again, take a moment out of your travels to collect the information on the form and send it to Kansas Department of Wildlife and Parks, Threatened/Endangered Species Specialist, P.O. Box 1525, Emporia, Kansas 66801. A list of these species is included on the back of the form.

#### EDITOR'S THANKS

Due to a severe case of cephalic buttock syndrome, I was remiss in the last edition of this Newsletter in extending my gratitude to all those who toiled so hard in getting out last year's numbers to our membership. Therefore, the following persons have my heartfelt gratitude: Jeff (Semi-Stamplicker) Whipple, Joseph T. (MacWizard) Collins, Karen (MathWizard) Toepfer, and Marty Capron. Joe and Karen were able, after many hours and much frustration, to finally wheedle a bulk mailing permit out of our friendly Postal Service, for which Jeff's tongue thanks you enormously. Jeff, as always, did a masterful job of actually getting the beast put together, sorted, and mailed. No more odious task exists for this Newsletter.

Finally, I thank all of you who submitted news articles, feature articles, letters, gripes, etc. Without you, this Newsletter truly would not exist. I'm just the keystroker; you folks make it happen.

—EMR

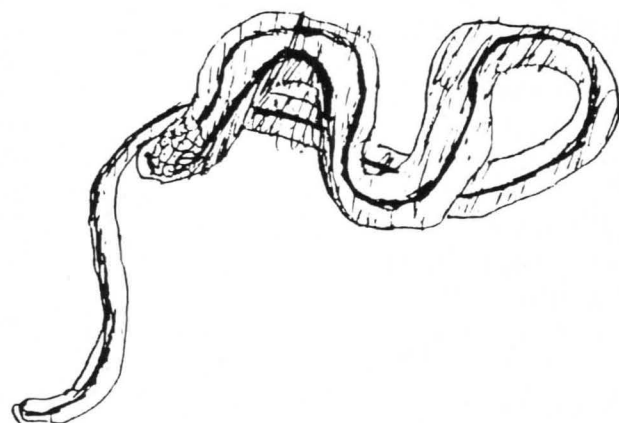
#### ARTWORK NOTE

The artwork for this issue of the KHS Newsletter was provided by 12-year-old KHS member Brian Nodle of Olathe, Kansas. I am sure you all will agree that Brian shows great promise in the field of herpetological art. Better watch your back, Marty.

LONG NOSED VIPER



SLOW WORM



# KHS BRINGS YOU GREAT NEWS OF THE WORLD

## CAN THIS BE KANSAS, TOTO?

Just when you thought it was safe to travel through western Kansas, news has reached this desk that the Jaycees of Sharon Springs, in far remote Wallace Co., have planned a rattlesnake roundup against the fearsome Prairie Rattler on September 5-6 [1992]. This is the first such activity officially sponsored by the Jaycees in the Sunflower State. We received word of the roundup through the Reptile Protection Trust of Worcester, England. My favorite quote in the letter from the Olde Country is this: "State authorities are reported to propose monitoring the event for violations. However, those of us who are familiar with round-up organisation (!) and practices, together with local political inertia, may rightly derive little comfort from 'local monitoring' and enforcement."

Are local economies in such destitute straits that the chambers of commerce are compelled to resort to the slaughter of snakes to fill their tills?

Stopping these misguided Jaycees from these activities may ultimately take the combined efforts of several groups working to promote wildlife in several states. As long as the national Jaycee organization continues to "honor" and promote these events and their local sponsors, it will take such a combined effort to educate the general public and put some muscle into the game regulations of a number of states.

—New Mexico Herpetological Society Newsletter,  
August-October 1992  
(submitted by Karen Toepfer, Hays)

## TOPEKA ZOO DIRECTOR TO SERVE ON NATIONAL BOARD

Dr. Hugh Quinn, director of the Topeka Zoo [and KHS member], was sworn in recently as a director on the board of the American Association of Zoological Parks and Aquariums.

The AAZPA represents 158 professionally operated zoos and aquariums in North America. Quinn joined the board at the organization's annual conference 17 September 1992 in Toronto.

Quinn began his zoo career as education supervisor at the Fort Worth Zoo in 1970 and became zoological curator at the Oklahoma City Zoo in 1975. He became the curator of herpetology at the Houston Zoo in 1977, and he earned his doctorate in biology in 1987. He has directed the Topeka Zoo since 1990.

Quinn has been an AAZPA member since 1975 and

serves on several committees and groups. He is a consulting editor for the journal *Zoo Biology*.

—Topeka Capital-Journal, 23 September 1992  
(submitted by Suzanne L. Collins, Lawrence)

## WATER MONITORS HATCH AT THE SEDGWICK COUNTY ZOO & BOTANICAL GARDEN

Four Water Monitors (*Varanus salvator*) hatched at the Sedgwick County Zoo and Botanical Garden between 2-11 May 1992 after nearly eight months of incubation. Thirteen eggs were laid 10 September 1991 with five proving fertile. The eggs were incubated on a vermiculite medium (1:1 water/vermiculite ratio) at 82-84°F. The success of this breeding is thought to be attributed to seasonal photoperiods, availability of daily and seasonal temperature fluctuations, provision of thermal gradients via the use of basking lights, and separation/reintroduction. Two notable observations were made: 1) nest excavation and, 2) post-oviposition defensive behavior towards anyone approaching the nest site. It is believed that this represents the fifth captive breeding of this taxon in the Western Hemisphere.

—AAZPA Communiqué, September 1992  
(submitted by Ralph Black, Wichita)

## SNAKE LADY PUTS ROAD KILL TO GOOD USE

Pat Lindquist is known as "Granny Pat" to many children.

But the 82-year-old Brookville resident is no ordinary granny.

Why, she's got lizard eggs in her incubator and "road kill" snakes in her deep freeze. She spends time judging bugs and likes to go hunting for rocks.

It's all because of the 33 years she's spent as a leader for the Cardinal 4-H Club.

She has about 27 other adult leaders to help her with the club, but she serves as the leader for many projects and is the overall director of the club.

With 58 members, the club is Saline County's largest.

"Most people think to be in 4-H you have to have a registered cow or a registered horse," she said. "That's not so. We have over 100 different projects for children wherever they live."

Those projects include things such as wildlife, for which Lindquist serves as project leader. She focuses on birds, reptiles, and amphibians, and has earned the title of

"Snake Lady."

Club members find snakes, turtles, toads, frogs, and lizards. She takes club members and their animals to the Salina Parks and Recreation Department's Tot Lot program.

"And the youngsters explain their animals to the tots," she said. "They stand up in front of a group they don't know and practice public speaking."

She teaches the 4-Hers safety and respect for what some consider lowly animals. She makes the youngsters do research about the animals at the library to learn more about them.

"When we are through using them we let them go and release them," Lindquist said. "We don't keep them and let them die."

She considers herself a naturalist and loves to teach children about nature.

That reputation has spread. People call her when they find a snake or other reptile. Sometimes people call when they find what she considers a "good road kill", when a snake killed on the road isn't too squashed.

She puts those snakes in her freezer. When frozen, the snakes maintain their color and can be kept for months. She takes the frozen reptiles to schools where children can touch them, compare the patterns of their skin, and learn how to tell if a snake is male or female.

Then she packs up the snakes in her ice bucket and takes them back to her freezer.

"I have had 13 different snakes in my freezer at one time," she said.

When the snakes start to get old and she decides to discard them, she takes them out and leaves them on the road for the buzzards (sic).

She wants children to learn to recognize which snakes are beneficial and which ones can be harmful.

"When kids go to the lake or out for a picnic, they need to be aware if they come upon a snake, when to be careful and when not to throw rocks or sticks at it," she said.

Lindquist has also helped 4-Hers in geology and entomology. She's gone on state geology field hunts and now judges entomology at other county 4-H fairs. She captures insects in a jar, freezes them, and displays them.

Her 4-H entomology members read about which insects are beneficial and which are destructive.

"It's not just catching them and sticking them on a board," she said.

How does she know so much about these creatures? During the 43 years she taught school, she took courses during the summer to learn more about birds and reptiles.

She's not really a retired teacher, but a "retreaded teacher," she said.

Because of her teaching and substituting experiences, she knows the children in her club and their families. She's worked with three generations of kids in the area.

Working with kids, crawling with them over boulders in search of rocks, and wading through streams have kept her agile.

"All this has made me feel young," she said.

—Topeka Capital-Journal, 29 August 1992  
(submitted by Suzanne L. Collins, Lawrence)

## 98 GATORS TURN UP IN OMAHA

Nearly 100 young Alligators were found in a man's bedroom in a deal apparently gone awry between a Japanese buyer and a Florida reptile seller, authorities said.

The Alligators apparently wound up in the Omaha area when the customer didn't pay, said Lt. Tom Quinn, an investigator for the Florida Game and Freshwater Fish Commission.

The man in possession of the 98 Alligators found Wednesday appeared to have been an innocent party who agreed to care for them for a friend, Quinn said Friday by telephone from Tallahassee, Florida.

It is legal for people to own Alligators in Nebraska, said Cleveland Vaughan, special agent for the U.S. Fish and Wildlife Service in Omaha.

The Alligators, between 13 inches and 21 inches long, lived in the bedroom for couple of weeks, Quinn said. They are one or two years old, he said.

The Florida attorney general's office is reviewing the case and charges could be filed next week.

Authorities wouldn't identify those involved or discuss alleged illegal acts until any charges are filed.

The Alligators were flown from Florida to Kansas City International Airport for shipment to Japan, Quinn said. The dealer apparently halted the shipment, he said.

The Alligators will be sent to the game and fish commission in Florida, Quinn said. Three have died, authorities said.

—Kansas City Star, 11 October 1992  
(submitted by Suzanne L. Collins, Lawrence)

## FROGS HOPPING AWAY

Mike Sredl wanted to save the lives of a few friends so he took them to see a tattoo artist named "Cookie".

They all croaked.

They're OK, though. As Lowland Leopard Frogs (*Rana chiricauhensis*), Sredl's friends do that from time to time.

But the state Game and Fish Department herpetologist is still looking for a way to save their lives.

Populations of amphibians, like Arizona's Leopard Frogs, are suffering dramatic declines around the world. In some cases, species of frogs once considered so plentiful as



to be a nuisance are disappearing.

The declines and extinctions have baffled scientists. But one thing is clear: the disappearance of environmentally sensitive frogs may be a harbinger of bad times for other species of plants and animals—and humans.

“As the amphibian population goes, so goes the planet,” Sredl said recently, while bouncing a Game and Fish pickup over rocks and brush toward a remote Leopard Frog hideout.

“It really does reflect how we’re taking care of the planet.”

Sredl, 39, is pretty much a one-man operation in Game and Fish’s amphibian and reptile division. There are four of them in the office, but that includes a boss and a summer intern from Northern Arizona University.

The dark-haired, soft-spoken scientist doesn’t mind the workload, the days and nights away from his wife and home and the time he spends looking for frogs in dank ponds that dot forgotten corners of Arizona.

But he is frustrated that there isn’t more money to spend researching amphibians, especially when they are considered indicators of the state of the environment.

“A lot of it reflects our bias,” Sredl said. “People have an aversion to slimy things. As a kid I liked to go out and chase snakes and catch frogs. I guess I never grew out of it.”

A lack of resources is what sent Sredl to Cookie, one of the artists at the Electrick Needle, a tattoo parlor at Interstate 17 and Dunlap Avenue, not far from the Game and Fish offices.

Without money to purchase a \$1200 electronic tagging machine, Sredl is forced to clip off a toe of each frog he catches. The tip can be studied to determine the frog’s age and helps identify the animal when Sredl returns months later.

Although it doesn’t hurt the frogs, Sredl has sought a way of identifying each individual that wouldn’t require such cutting.

“I went down there and had Cookie mark three frogs,” he said. “But their skin is just too permeable. The ink bled out too quickly. It just didn’t work.”

Sredl thinks money from the Heritage Fund, which provides about \$10 million annually to Game and Fish, may help him get his electronic tagging machine. But for now, it’s back to clipping toes.

The permeability of frog skin and the fact that the amphibians are exposed to two environments during their life cycles—underwater as tadpoles and on the surface as adults—is what makes them so sensitive to their surroundings.

When the frogs’ numbers started declining during the 1980s, scientists naturally wondered if water and air pollution were to blame. Other possible culprits were the introduction of non-native fish and animals that prey on frogs, habitat destruction by man, and even the gastronomic value

of frog legs in France.

One eight-year study by John Harte, a scientist at the University of California at Berkeley, found salamander populations in the Colorado Rockies were affected by acid deposits blown in from Arizona copper smelters and California smog.

Scientists also have noted the marked decline of the Mountain Yellow-legged Frog (*Rana muscosa*), the Yosemite Toad (*Bufo canorus*), and the Foothill Yellow-legged Frog (*Rana boylei*) in California, the disappearance of the Red-legged Frog (*Rana aurora*) in Oregon, and the extinction of Costa Rica’s Golden Toad (*Bufo perigrinus*).

Scientists still wonder what happened to the Gastric-Brooding Frog (*Rheobatrachus silus*), a creature discovered 19 years ago in the rain forests of southeastern Australia.

The frog swallowed its own eggs and somehow halted stomach acid production until the hatchlings jumped out of its mouth weeks later.

“Perhaps a cure to peptic ulcers was lost,” Sredl said. “Who knows?”

Meanwhile, Arizona’s four native Leopard Frog species have fared better, but still have suffered some declines in certain areas. Because of the lack of concentrated study, exact population counts are hard to come by.

The Lowland Leopard Frog, a small greenish-brown creature with a spotted back, is thought to exist in about 200 areas throughout its multistate range.

The range includes Tule Creek, a perennial stream northwest of Lake Pleasant.

For now, scientists aren’t sure what’s causing the frog problem. Because of a lack of funding, many of the world’s 5130 amphibian species have yet to attract much study.

Sredl said the lack of solid information on frogs is one of the reasons why many have yet to be listed as threatened or endangered under the federal Endangered Species Act.

During the next several years, scientists hope to collect enough information on frog populations and their habitats to determine the cause of their declines and ensure the problem isn’t just a natural occurrence beyond man’s influence.

Sredl and his assistant, NAU biology major Bruce Pavlik, hope to add to that pool of information. They plan to spend a lot of time wading into dark desert pools, sweeping their headlamps across the surface and looking for pairs of bright eyes that signal new friends to study.

“We’ll be out here catching and marking frogs until 3 in the morning. It’s long hours,” he said recently. “It’s a shame people don’t appreciate them more.”

—The Phoenix Gazette, 3 August 1992  
(submitted by Bob Johnson, Toronto, Canada)

## CAPTIVE BREEDING MAY SAVE RARE TOAD

Wild populations of the rare Wyoming Toad (*Bufo baxteri*) are declining, but the captive breeding program may save the species yet.

A fungus disease and red-leg, a bacterial disease that kills toads in the wild, are killing off some of the toads.

"We are concerned about the continued decline of the wild population. But we are very happy about our success with captive breeding of the Wyoming Toad," said Art Anderson, wildlife biologist with the U.S. Fish and Wildlife Service.

The only known wild population of the Wyoming Toads is at Mortenson Lake near Laramie, and state Game and Fish agents have been working with the federal agency to introduce captive-born toads.

Domestic-born (sic) toads have been introduced to Lake George in the Hutton National Wildlife Refuge 10 miles south of Laramie.

The toad project is Wyoming's second captive-breeding program, coming on the heels of the highly successful project with endangered black-footed ferrets.

Those were released to the wild for the first time last fall in the Shirley Basin near Medicine Bow.

At Lake George, adult toads were transferred from the Sybille Wildlife Research Center near Wheatland to cages at the lake.

The toads bred and laid eggs, which hatched in cages. The tadpoles then dispersed through Lake George.

"We are very happy about our success with captive breeding the Wyoming Toad in the wild," Anderson said.

Some 35 toads are at Sybille, and 45 young toads will be captured this year from Lake George.

Now the state agency is working with the Cheyenne Mountain Zoo in Colorado Springs to establish a second site for captive breeding of the Wyoming Toad.

—The Denver Post, 4 October 1992  
(submitted by Warren Voorhees, Gering, Nebraska)

## CROCODILE COMEBACK

The Orinoco Crocodile (*Crocodylus intermedius*), once on the road to extinction, is making a bit of a comeback in Venezuela. For many years, the species was hunted to supply the booming international market in reptile leather. In 1984, IUCN (The World Conservation Union) placed the Orinoco croc on its list of the world's 12 most endangered animals.

With support from the New York zoological Society, John Thorbjarnson has been working with several Venezuelan government agencies and private conservation organizations to estimate the number of remaining wild Orinoco

Crocodiles and study their ecology. Recently, he has concentrated on what is perhaps the largest remaining population, in the Capanaparo River. As part of the project, more than 400 captive-reared youngsters have been released since 1990 into Santos Luzardo National Park. Eight of these animals were equipped with small radio transmitters and followed by Venezuelan student Maria Muñoz. She reports that most of the crocodiles stayed in the general vicinity or moved upstream of the release site and have done quite well.

Crocodiles are generally viewed with great animosity by the locals, but Thorbjarnson and Muñoz are continuing their study and education efforts. The Orinoco Crocodile already faces a brighter future than it did a few years ago.

—Wildlife Conservation, January/February 1993  
(submitted by C. Hooke, Little River)

## SNAKE MAKES INSIDE NEWS

A Brown Snake (*Pseudonaja* sp.) that met an unfortunate end under car became a posthumous star in the reptile world when the contents of its stomach revealed a Pygmy Bluetongue [Skink] (*Tiliqua adelaidensis*), a species that scientists thought was extinct. It had last been seen in 1959.

An amateur herpetologist found the squashed snake on a road near Burra, 100 miles north of Adelaide, in late October and made the discovery after slicing open its innards. Scientist subsequently located a colony of the lizards living under grass tussocks.

—Wichita Eagle, 28 December 1992  
(submitted by Dan Schupp, Wichita)

## UNCLE VIPER AND AUNT SNAKE

Each year thousands of North Americans are bitten by rattlesnakes. Most of these bites are not fatal—about 25 people die from snakebites in the U.S and Canada each year. In México, where the...Mojave rattler (*Crotalus scutulatus*) ranges, it's a different situation—more like 1000 deaths a year. Says David Morafka, an herpetologist with California State University at Dominguez Hills, "Drop for drop, the Mojave Rattlesnake's venom is twice as potent as that of the Indian Cobra."

But no matter what North American pit viper you're bitten by, the antivenin is the same. Moreover, it is all made with serum taken from horses injected with snake venom. Horse serum, however, has a broad spectrum of [proteins] that can cause severe allergic reactions, from hives to lethal shock.

Morafka, in conjunction with Canadian and Mexican biologists, and funded by the National Institutes of Health, is working on a family tree of not only Rattlesnakes, but

also Moccasins, Copperheads, and other pitvipers in North and South America. That family tree will be useful in helping biologists come up with antivenins that are species specific. Eppie Rael, a molecular biologist at the University of Texas-El Paso has already developed an antibody specific to the neurotoxin in Mojave rattler venom. He hopes to combine it with those being developed in other labs to provide a "cocktail" that will work for each branch of the pitviper family (sic) without side effects.

Morafka hopes his research will also help scientists studying the therapeutic benefits of pitviper venoms. At the University of Southern California Medical School, Frank Markland is finding snake venom to be a cornucopia of medicines. The same mechanism in venom that keeps blood from coagulating can dissolve blood clots in heart patients, he says. He's also discovered proteins with the venom that inhibit cancer cells from metastasizing, or moving throughout the body. With a proper family tree, snake venom may prove to be far more than just another snake oil.

—Wildlife Conservation, January/February 1993  
(submitted by N. Paine, Gas)

#### **NATIONAL ZOO ANNOUNCES HATCHING OF KOMODO MONITORS**

The National Zoological Park hatched 13 Komodo Monitors (*Varanus komodoensis*) between 13 September and 9 October 1992, and two additional eggs may be viable. courtship by the parents, each estimated to be about ten years of age, was first observed on 7 December 1991, and frequent matings were recorded through 29 December. A clutch of 26 eggs was recovered on 23 January 1992, following six days of burrow digging by the female. The incubation period for the first hatchling was 237 days. The offspring weigh about 100 grams each and are approximately 41 centimeters in length.

—AAZPA Communiqué, December 1992  
(submitted by A. Flores, Lesser Sunda)

#### **THE RUBBISH BIRD**

Scientists recently announced the discovery of the world's first known toxic bird. Called the "rubbish bird" by New Guinean hunters because it is inedible, the hooded pitohui is a nine-inch member of the thrush family that looks something like a robin. Working with colleagues at the National Institutes of Health, John Dumbacher, at the University of Chicago, and Bruce Beehler, with the New York Zoological Society, found that the skin and feathers of the hooded pitohui contain a substance called homobatrachotoxin. This compound, which presumably is

used as a chemical defense against predators such as snakes and hawks, is identical to the toxin found in the skins of neotropical Poison-dart Frogs of South America.

The research team has since discovered homobatrachotoxin in two other species of pitohui: the variable and the rusty. Though separated by the Pacific Ocean, pitohui and Poison-dart Frogs are the only known organisms to contain this toxin in their tissues. It is not known whether the animals manufacture the toxin internally or extract it from something in their diets.

—Wildlife Conservation, January/February 1993  
(submitted by I. B. Spittin, Mount Hope)

#### **AGREEMENT SETS TIMEFRAME FOR PROTECTING RARE PLANTS AND ANIMALS**

The Interior Department's U.S. Fish and Wildlife Service today announced it has reached out-of-court settlement of a case involving the agency's procedures to reduce the backlog of plants and animals awaiting listing decisions under the Endangered Species Act. The settlement agreement was reached with The Fund for Animals, Defenders of Wildlife, In Defense of Endangered Species, and other individuals.

The agreement supports the Service's existing priority system which ranks at-risk candidate species based on the degree of threat faced by each candidate, as well as the taxonomic rarity of a species.

"This agreement essentially gives a seal of approval to the Service's existing method for settling priorities for these species in need of protection," said John Turner, Service Director.

Under the agreement, and based on the existing priority system, the Service will decide whether to propose for listing approximately 400 "Category 1" candidate plants and animals over the next four years. Category 1 species are those for which the best scientific information supports listing but, due to other demands, the Service has been unable to develop a listing proposal. Those species with the highest priority will be proposed first.

The Service has agreed to decide whether to propose for listing approximately 95 Category 1 candidate species each year through 1 September 1996, a commitment comparable with the past two years, when the Service proposed 215 species and listed 144. In addition, the Service is to report annually on its progress through 1997.

The agreement formalizes a Service commitment to emphasize, where possible, multiple species listings or proposals that address entire ecosystems, instead of a species-by-species approach. In addition to being more cost-effective, these methods allow the Service to focus on the needs of plant and animal communities as a whole, not individually.



Species petitioned for listing that are determined by the Service to be warranted for listing, but precluded by species currently of higher priority, will be classified only as Category 1 species, instead of Category 1 or 2. Category 2 candidates are those for which insufficient information exists to conclude that listing is warranted but continued monitoring will be carried out.

—The Osprey's Nest, 15 December 1992  
(submitted by John Simmons, Lawrence)

## THE KILLING MACHINE

*Tyrannosaurus rex* is every seven-year-old's favorite monster, famed as the biggest, meanest predator to ever walk on land, but the tyrant reptile's reputation has been challenged. Last July, paleontologists announced the discovery of a new dinosaur: a 20-foot-long, 1500 pound killer known provisionally (and prosaically) as *Utahraptor*. Judging from the bones now being unearthed in eastern Utah, *Utahraptor* was even more of a terror than *Tyrannosaurus*.

"This animal was equipped to do extraordinarily severe damage to its prey," says James Kirkland, a paleontologist with the Dinamation International Society, who first identified the dinosaur. "It was literally armed to the teeth. Its disposition is a little more difficult to assess, but you've got to figure that nature is pretty conservative, and if *Utahraptor* developed the equipment, it was probably out to use it. The animal was built as a fairly rapid runner. It would have been very formidable."

The first bone that Kirkland and his colleagues removed from the ground is *Utahraptor*'s most distinguishing and frightening feature: the 9-inch core of a 12-inch-long, sickle-shaped killing claw that graced the end of one toe on each hind foot. With it, *Utahraptor* would have been able to disembowel other dinosaurs, even much larger ones, with a single bloody kick. And unlike tyrannosaurs, which had surprisingly small forelimbs, utahraptors had large, powerful arms, with ten-inch claws on their hands for grasping and wounding struggling prey while simultaneously delivering fatal kicks.

If one *Utahraptor* was bad news, a pack of them must have been a Mesozoic nightmare. And Kirkland thinks that they were pack hunters. *Utahraptor* was a dromaeosaur, one of a family of highly efficient killing machines that included the velociraptors of *Jurassic Park* fame. The dromaeosaurs all seem to have been built for speed and to have possessed killing claws like *Utahraptor*'s (albeit smaller ones), and there is good evidence they hunted in packs. At one site, three skeletons of a dromaeosaur called *Deinonychus* were found with the skeleton of an herbivorous dinosaur that they had apparently just hunted down. "*Utahraptor* is the type of dinosaur you would expect to be

a pack animal," says Kirkland. "it's not a very remote possibility at all."

Of all the dromaeosaurs, though, *Utahraptor* was by far the largest; it's also the oldest yet found. The Utah fossil dates from the early Cretaceous period, roughly 125 million years ago, a period about which paleontologists know very little. "For North America we knew virtually nothing about fossils of 125 million years ago," says Kirkland. "Virtually every animal we're finding at our site is either new to science or related to things that are very poorly known."

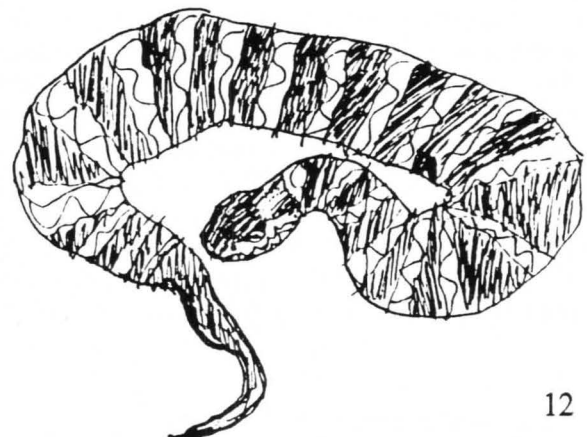
Interestingly enough, the Utah fossils seem to be most closely related to specimens found on the Isle of Wight, off the southern coast of England. At the time of the utahraptors, North America and Europe were still connected via Greenland, and the seaway that later flooded what is now the Great Plains had not yet cut off dinosaur migration routes. "This was one of the last times in the reign of dinosaurs that you could walk from Utah to England without getting your feet wet," says Kirkland.

It was also about 50 million years before tyrannosaurs made their appearance. So the two killers never got a chance to go toe-to-toe. Had they met, the result would most likely have been a Mexican standoff. Although the tyrannosaurs would have been protected by a weight and size advantage—*T. rex* weighed in at five tons and reached 50 feet in length—they lacked *Utahraptor*'s long claws and speed. "The big tyrannosaurs wouldn't have touched *Utahraptor*," says Kirkland—and *Utahraptor* would have been smart enough not to get smart with *T. rex*.

If it was so smart and such a hot predator, why did it go extinct? "In a lot of respects these animals were probably more adapted for hunting than modern mammals," says Kirkland. "There is probably nothing today that would have been quite such an effective killing machine on land. Why something like that would go out is as big a mystery as why the dinosaurs as whole group disappeared."

—Discover, January 1993  
(submitted by Ron Miller, Wichita)

DEATH ADDER





## FEATURE ARTICLES

### PRESENTATION TO THE KANSAS WILDLIFE AND PARKS COMMISSION 21 JANUARY 1993

by

**David Edds, President  
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Emporia State University  
Emporia, Kansas 66801**

My name is David Edds and I am from Emporia. I am assistant professor of biological sciences at Emporia State University, and am president of the Kansas Herpetological Society for 1993. The Kansas Herpetological Society is a 200-member state association of amateur and professional herpetologists interested in conserving our wildlife resources, especially the amphibian and reptile fauna of our state. While I do not presume to speak for each member, based on discussions at our annual meeting last fall, I believe what I have to say here reflects the views of most of our membership. Other members of the Society are here today to express their opinions.

The Kansas Herpetological Society has been on record since 1974 as opposing the rattlesnake roundups that occur in some other states. We continue to oppose events of this type because they are environmentally destructive, because of their cruel and inhumane treatment of snakes, because of the danger to participants and spectators from careless snake handling, and because they present attitudes toward wildlife that encourage its commercialization, overexploitation, and destruction.

We support current statutes and regulations protecting against commercialization of reptiles and other wildlife in Kansas, including KSA 32-1002, which makes it unlawful to take wildlife, including reptiles, for sale, exchange, or other commercial purposes; KAR 115-20-2, which establishes a possession limit of five for reptile species; and KSA 32-919 and KSA 32-920, which establish hunting license and hunter education requirements for hunters. We feel it is important to protect against commercialization of wildlife. We do not want to see our wildlife resources turned into tourist curios—key rings, vests, hatbands, guitar straps, and paperweights.

I was one of five Kansas Herpetological Society members to attend the rattlesnake roundup in Wallace County last September. I recorded a videotape of the activities, through which you have had/will have the opportunity to

see for yourselves the daredevil show and butcher shop. The audience was told by an announcer that these are the biblical serpents cursed throughout the ages, and we were urged to exterminate these so-called pests. Snakes were teased and prodded in an attempt to get them in a showy striking position. Others were carried around for spectators to touch. Such sensationalism is common at rattlesnake roundups. Many roundups include "lifting" contests, to see how many live rattlers can be held in each hand; "sacking", where contestants compete to see who can stuff the most live rattlers into a burlap bag in the shortest time; and "stomping", to see who can stomp to death the most snakes.

This roundup was touted as educational, but what message do onlookers, especially younger ones, receive from handlers holding snakes inches from their face, walking through a row of coiled rattlers, or lying in a sleeping bag with a dozen snakes? Rather than instilling respect for natural species and ecosystems, such practices teach disrespect for nature. Rather than educating about safety or about the natural history of these snakes, we heard that their gall bladder is prized as an aphrodisiac, and that powdered rattlesnake meat is powerful "arthritis, bursitis, and rheumatism medicine."

Other declarations that rattlesnakes will never be endangered because there are tens of millions of them in Texas alone are unsubstantiated. On the contrary, Campbell *et al.* (1989) showed that Texas roundups have serious implications for rattlesnake populations due to cumulative loss of females and offspring. Research in Oklahoma by Warwick (1990) and Warwick *et al.* (1991) indicates dramatic reductions in the availability of snakes from areas where they were previously abundant. Claims of harvest sustainability are likely dependent upon the increase in the number of hunters and area hunted over the years.

Numbers of snakes available for roundups are often increased by stockpiling animals prior to the hunt, as was done in Wallace County (Edds 1992). Such snakes are

often kept under adverse conditions, including a lack of food and water (Williams 1990). In 1991, a KDWP conservation officer cited a Stevens County man for possession of 86 rattlesnakes he planned to take to Oklahoma to sell during their rattlesnake roundup (Shoup 1991). Hunting ranges often extend well beyond the advertised boundaries of these roundups. Though Kansas law prohibits transport of wildlife across state lines for purchase, sale, barter, or exchange (KSA-32-1002), a cash prize and trophy were offered in Sharon Springs for the largest Western Diamondback, even though the species is not native to that region. The ecological ramifications of exotic species introductions are well-documented.

According to Warwick *et al.* (1991), three main collecting methods are commonly used at rattlesnake roundups: 1) gassing of dens, using gasoline to drive snake to the surface; 2) probing crevices and searching under rocks and fallen trees; and 3) riding roads at night to gather snakes. The use of gas is particularly destructive, since it impacts other fauna that cohabit with rattlesnakes. While many snakes emerge as a result of fumigation and are then captured, additional snakes and other animals rapidly succumb to the gas and do not emerge. Numerous studies on both vertebrate and invertebrate species have revealed fatal consequences of gassing, with some mortalities occurring within minutes and others after several weeks (Speake and Mount 1973, Speake and McGlincy 1985, Campbell *et al.* 1989). Klauber (1972) reported that for every 100 rattlers killed by poisoning dens, about 40 harmless snakes were also killed.

Habitat disturbance from turning over rocks and fallen trees during searches for snakes is also substantial. Warwick *et al.* (1991) found that 92% of potential snake dwellings investigated by collectors were sufficiently misplaced so that they effectively lay flat on the ground and were thus unusable as snake abodes.

We commend your support of Dr. Henry Fitch's collection of biological data from the captured and butchered specimens. However, research is needed on the current status of Kansas rattlesnake populations before we allow their exploitation. Detailed studies of the effects of removal of rattlesnakes and habitat destruction are also critical.

Attitudes toward venomous snakes are often extremely negative, and many individuals seek the total elimination of snakes from their own and surrounding land. One of the co-organizers of the event said that "Their [local farmers and ranchers] attitude is that the only good snake is a dead snake" (Harper 1992). However, rattlesnakes are an important component of local ecosystems, being major predators of destructive rodent populations and important prey for many birds, as well as other snake species. There are numerous alternatives for economic benefit rather than to kill for the sake of killing, including arts and crafts shows,

live bands, stock car races, chili cookoffs, demolition derbies, road runs, horse shows, etc.

As a natural resource organization interested in conservation, we are not interested in confrontation and opposition, but rather in promoting the natural environment of Kansas. We realize that celebrative wildlife events can also make an important contribution to the economy of a region. Individual members of the Kansas Herpetological Society are willing to help with events that are nonconsumptive and nondestructive, that operate within the laws and regulations of the state of Kansas, that are done in a safe and humane manner, and that promote a healthy attitude toward natural Kansas.

Rattlesnake roundups result largely from erroneous perceptions concerning the need to control snakes, and from commercial incentives. If comparable exploitation of more popular animals were to occur, it would likely not be tolerated. We support current statutes and regulations protecting against commercialization of our reptile resources. History shows how destructive this practice has been to wildlife populations in the past.

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# A CRITIQUE OF FIREFLY'S "THE LONGEST ROAD COUNT"

by

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During the past fifteen or so years, there have been recurrent problems promulgated by the editorial staffs of various herpetological journals who publish their own work without benefit of outside review. A distressing case in point is the paper "The longest road count: a cladistic analysis or how I spent my summer vacation" (Kansas Herpetol. Soc. Newsl. 90: 16-19.).

Here is an article riddled with inconsistencies, inaccuracies, and inadequacies. The use of the name Rufus T. Firefly, instead of the author's true name, Rufus T. Barfly, constitutes a taxonomically inappropriate use of the pseudonym and creates a nomen pseudonym. Properly, the author should have selected a name and taped to the wall over his word processor. The paper should then have been written. Taxonomically and literarily, this is known as "writing under the name of...". Note that the nomen pseudonym should not be confused with the even more serious error of writing while naked, thus creating the nomen nudem.

The used of the nine-banded armadillo (*Dasyus novemcinctus mexicanus*) can be challenged as an appropriate outgroup comparison species as it possesses short, sparse hair. While this is a common trait among herpetologists, particularly in the more advanced age classes, it is a trait of almost no amphibian or reptile species (but, see Collins 1990. Premature balding in the furred frog: a social or environmental concern? J. of Cryptozoology. Vol. III or IV, no. 5 or 6, p. 213 or 406.). The armadillo can only be viewed as a pseudomorph (*i. e.* a mineral with the characteristic outward form of another species) for cladistic comparison with any reptile taxon.

According to the paper, the field team followed I-20 from Fort Worth, Texas to El Paso. This is clearly incorrect. I-20 ends at I-10 in Nowhere, Texas 100 miles to the east of El Paso. Following I-20 all the way may explain why Ruf' is now in Wau, New Guinea. Also U.S. rt. 90 does not run between White Sands National Monument (or anywhere near it) and Alpine, Texas (which may explain the amazingly few animals seen by the field team in the Big Bend; they were actually in New Hampshire).

When the author divided 56 armadillos by 52.25 hours, the result was 1.90909090 armadillos/hour and when he divided 56 herps by the same number of hours, the result was 1.07177703349. The latter figure is correct for both data sets. There is no way to arrive at 1.90909090 unless one makes it up or one's calculator came from the same Texas dump where one collected the armadillos. Perhaps the author should stop skipping the results sections (right to the funnies?) or paper from now on. This is the stuff called number crunching, and is performed with a multivariate nutcracker (not a multibarreled cannon) and results in variety of answers which can support any thesis or obfuscate woefully inadequate samples, which is, after all, the purpose of statistics.

Listing Pisani and Collins as standard deviates is hardly respectful or accurate. First, "standard deviate" is an oxymoron (G. Pisani, pers. comm.). Additionally, the results of my long-term research indicate that both of these specimens represent isolated populations and, despite the relatively recent (geologically) translocation from ranges far to the east, each should be elevated to specific status based on its geographic location. There is nothing standard about that and, in fact, they are quite unique (I also have some unbelievable data on diet and film of reproductive behavior in these two taxa. For reprints, phone 1-900-OOH-BABY; you must be over 17, costs are \$2.99 per minute).

The erection of O'Murphys seems singularly inappropriate in that Murphy has never actually been seen erect (Bacon, Slavens, Goellner, Porras, Tryon, Adler, Pfaff, Collins, Pisani, Behler, Fischer, Schultz, Mitchell, Smith, Perry-Richardson, McLain, Quinn, Blody, Ross, Hudson, Barker, Campbell, Brodie, Grow, Rundquist, Grimpe, Green, Pawley, Arnett, Odum, Conners, Lamoreux, Lamar, Bridegam, Peterson, Laszlo, Boyer, Hunt, Beck, Lawler, Johnson, Seifert, Chiszar, McDuffie, Groves, Pickering, M. Blakely, Juterbock, pers. comm.). The usual position is reclined or recumbent, with the most nearly vertical position best described as "relaxed".

In the Discussions and Conclusions sections of the

paper, the author notes "...the roadkill observed was found, for the most part, south of the Mason-Dixon line and therefore must be considered cousin taxa, at best." This is a gross distortion of the true biological meaning of the kinship anomalies noted by Mason and Dixon. The actual relationships described by Mason and Dixon were "cousin on both sides of the family" and clearly do apply to snakes and lizards, who preferentially copulate with one or the other hemipenis, but never both at the same time.

There are serious problems as well with the author's conclusion: "There is no such thing as a live armadillo." I am reminded of the scientist who was studying auditory response in crickets. After considerable effort, he managed to train a group of crickets to jump through a hoop on verbal command. He then removed the jumping legs of each animal, and each somehow managed to make it through the hoop in response to the command. The scientist then removed the middle pair of legs, and, incredibly, each of the crickets still dragged itself through the hoop when the command was given. Upon removing the final pair of legs, the scientist found that the crickets could no longer negotiate the hoop on command. His conclusion: removing the legs of crickets makes them deaf. The error made by the author was in neglecting a thorough survey of varied habitats within the expanding range of armadillos before drawing a conclusion. Had the author extended his survey to include any bar (and we are incredulous that he did not) in Texas, he would have found more live armadillos than could be counted.

Finally, a glance through the bibliography reveals some disturbing references. It should be noted at minimum that DC and Marvel comics are not usually recognized as scientific journals.

It is clear why this article was written under a pseudonym, though improperly, as noted. In fact, the author's choice of field associate was about the only thing done really well.

#### **The author replies (rather peevishly):**

Although I full admit that my paper was indeed riddled with numerous misconceptions, misapplications, and misguided notions, in no way should these be construed as inconsistencies, inaccuracies, and inadequacies. Indeed, Mr. Belcher's critique itself leaves something to be desired (although little to the imagination).

For example, how many Dale Belchers are there at the Rio Grande Zoo? The title A. Dale Belcher implies that the article was not written by *the* Dale Belcher. To whom should I address this reply, if I can only imagine that there is a whole pack of putative Belchers inhabiting the environs of Albuquerque (a frightening thought in itself)?

As to the charge that I have created a nomen pseudonym, I can only respond that Professor Belcher has

obviously confused me with my notorious and evil cousin, Mickey O'Rourke Barfly. A simple call to the Duchess of Freedonia is all that would have been necessary to verify my identity. Perhaps telephones have not made their way to New Mexico yet, so I am willing to forgive Master Belcher his inability to let his fingers do the walking.

The use of the nine-banded armadillo *is* an appropriate outgroup comparison species in that it *does not* possess "short, sparse hair". A close examination of any armadillo will quickly reveal that what the Grand Poobah Belcher calls hair is, in actuality, fungal hyphae. The fact that only the most dedicated field biologist will actually get close enough to days-old road pizza to confirm this fact leads to the common misperception that armadillos have hair.

As to the charge that the field team seemed to have no sense of direction in the environs of the Llano Estacado (Texican for "Oh, God! I've died and gone to Hell!"), so what? A road's a road, a car's a car, and roadkill is roadkill. So there, Archduke Belcher.

In regards to the designation of Pisani and Collins as "standard deviates", I can only say that it has been my observation for over 25 years now that this pair is standard by which all deviation is measured in herpetological circles in the U.S. By the way, the check's in the mail, first installment only.

The subject of erection of O'Murphys also deserves comment. Although the Dark Master Belcher's points are well-taken, the fact is the event has occurred, as the existence of his son attests (M. Murphy, pers. comm.). Therefore, erecting O'Murphys is perfectly appropriate.

As to the cricket nonsense, the Great Weasel Belcher states that we neglected to make "a thorough survey of varied habitats within the expanding range of armadillos". We admit that there was a remarkable dearth of surveyable roadkill for an approximately 150 stretch in the Staked Plains of west Texas (the only body observed was that of a pathetic green heron which had obviously committed suicide upon realizing that the Pecos Dribble, er, River outside of Waco was an obvious and terribly disappointing oxymoron). One cannot survey what does not exist (S. Lazel, sometime in his lifetime, in some journal of some kind). Believe me, we *tried* to find a bar, any bar. Do you think we drove all the way to El Paso because we wanted to?!

In summary, I can only say this to the Nattering Nabob of Negativity Belcher: if you have nothing better to do with your life than to write ridiculous responses to outrageous articles, well, buddy, there must be some university that is just drooling to add you to their faculty for a salary that you certainly don't deserve. Let me know when they call; I want to work there also. My fiance sends her best regards.