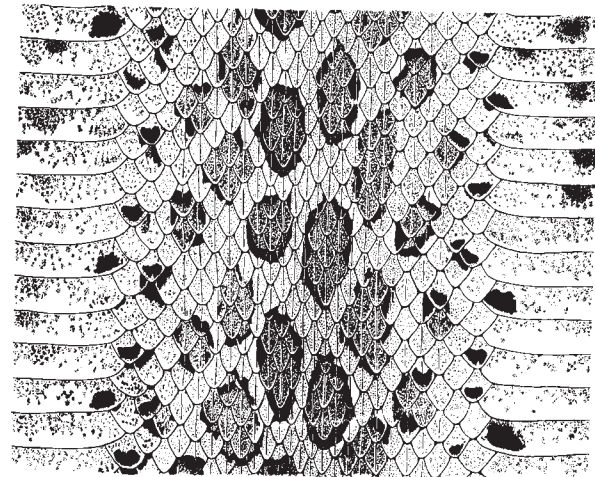
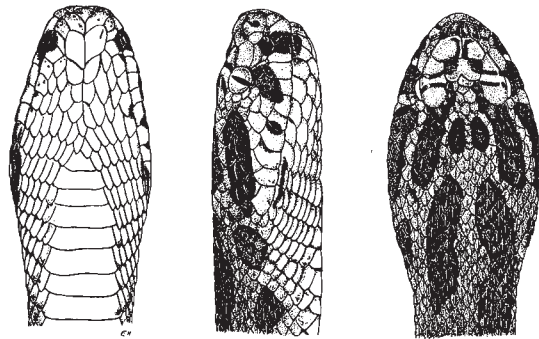


# Kansas Herpetological Society



## Newsletter



SEPTEMBER 1998

NUMBER 113

# KANSAS HERPETOLOGICAL SOCIETY OFFICERS FOR 1998

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HENRY S. FITCH

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DWIGHT R. PLATT

Bethel College, North Newton

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Oklahoma Herpetological Society

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The front cover illustration is a scan of a plate from Howard Gloyd's seminal monograph on rattlesnakes. It represents the rare Mexican Lancehead Rattlesnake, *Crotalus polystictus*

# KANSAS HERPETOLOGICAL SOCIETY



## NEWSLETTER No. 113



SEPTEMBER 1998

### ANNOUNCEMENTS

## Kansas Herpetological Society Silver Anniversary Meeting 5–8 November 1998

Honorary Chairpersons of the Meeting &  
Distinguished Life Members of the  
Kansas Herpetological Society

ROBERT F. CLARKE  
*Emporia State University*

HENRY S. FITCH  
*The University of Kansas*

DWIGHT R. PLATT  
*Bethel College*

HOBART M. SMITH  
*The University of Colorado*

### Theme

### GREAT PLAINS HERPETOLOGY

With the exception of the Evening Social on Thursday, the entire program for the KHS Silver Anniversary Meeting will be held in the Lawrence Holidome. The KHS has obtained a special room rate of \$67.00 per night (1 to 4 persons per room), making it quite inexpensive for four participants to attend and stay in the same room. You are strongly urged to call and make your reservations at the Lawrence Holidome. Their number is (785) 841-7077. Lodging arrangements will not be included on your registration form; please contact the Lawrence Holidome directly. Registration fees are \$20 for KHS members and \$30 for non-members. *Please note that the registration form is included with this issue of the Newsletter. You are strongly urged to register as soon as possible.*

Thursday, 5 November 1998

KHS Executive Council Meeting (TBA)

Registration: *Karen Toepfer* (KHS Treasurer) at Union Pacific Depot, 402 North Second Street 6:30-7:30 pm

7:00 to 10:00 pm Evening Social at Union Pacific Depot, 402 North 2nd Street, Lawrence. Refreshments, Snacks, Music & Announcements. Greetings from KHS President *John Lokke*.

Friday, 6 November 1998

8:00 am Registration: *Karen Toepfer* (KHS Treasurer) Lawrence Holidome, 200 McDonald Drive

Scientific Paper Session 1 at Lawrence Holidome

Moderator: *Nancy Schwarting* (Animal Care Unit, University of Kansas)

8:30 am Keynote Speaker: *Andrew Holycross* (Arizona State University) Topic: Prescribed Fire and Ridgenose Rattlesnakes: Ecosystem Restoration and Endangered Species.

*John Lokke* (University of Nebraska at Omaha) An Artist/Naturalist's Search for the Timber Rattlesnake on the Missouri River in Southeastern Nebraska.

*Chris Sheil* (University of Kansas Natural History Museum) Phylogenetics and Biogeography of the Snakes of the Tribe Nothopsinae (Colubridae).

*Nicole Gerlanc* (Kansas State University) KS-GAP: Progress on the Amphibian and Reptilian Layers in Kansas. CC  
*Dwight R. Platt* (Bethel College, North Newton, Kansas) Population Trends in the Assemblage of Snakes on Sand Prairies in Western Harvey County, Kansas, Over a Forty Year Period. CC

*J. Daren Riedle & Paul A. Shipman* (Oklahoma State University, Stillwater) Aquatic Turtle Communities in Eastern Oklahoma with Notes on the Demographics and Status of the Alligator Snapping Turtle (*Macrochelys temminckii*).

*Joseph Slowinski* (California Academy of Sciences) Preliminary Surveys of the Burmese Herpetofauna.

Lunch: Noon to 1:00 pm

Scientific Paper Session 2 at Lawrence Holidome

Moderator: *David R. Edds* (Emporia State University)

1:30 pm Keynote Speaker: *David Chiszar* (University of Colorado) Topic: Perspectives of Cultural Anthropology: Beliefs, Artifacts and Herpetological Money.

*Calvin Cink* (Baker University, Baldwin) Snakes of the Baker Wetlands, Douglas County, Kansas. CC

*David L. Hardy, Sr.* (Tucson Herpetological Society) Predators of Silent Beauty: The Blacktail Rattlesnakes of the Chiricahua Mountains.

*Katrina Brown* (Emporia State University) Hematological Changes in Hibernating Common Musk Turtles (*Sternotherus odoratus*).

KHS General Business Meeting

KHS President *John Lokke* presiding

Introduction of current KHS officers

Introduction of all former Presidents of the KHS

Election of KHS Officers for 1999

Presentation of the *Howard Kay Gloyd-Edward Harrison Taylor Scholarship* by *John Lokke* (KHS President)

Presentation of two *KHS Bronze Salamander Awards* by *Joseph T. Collins* (The Center for North American Amphibians and Reptiles)

Report on Plans for the 26th Annual KHS Meeting at Pratt in 1999 by KHS President-Elect *Chris Mammoliti* (Kansas Department of Wildlife & Parks)

7:00–11:00 pm Evening Program

Refreshments, Snacks, Music & Announcements.

*Larry L. Miller* (Kansas Heritage Photography, Wakarusa) A History of the Kansas Herpetological Society With Color Slides: A Candid Look at the KHS Rite of Passage.

*Olin Karch* (Lawrence, Kansas) A History of the Kansas Herpetological Society With Video Tape: A Candid Look at the KHS Rite of Passage in Motion.

*Eric Thiss & John P. Levell* (The Serpent's Tale & ZooBooks) Featured Booksellers at the KHS Silver Anniversary Meeting, Eric and John will display their incredibly diverse selection of books throughout the evening.

The *University Press of Kansas* (Lawrence, Kansas) will display a wide array of books and field guides on Kansas wildlife throughout the evening.

Saturday, 7 November 1998

8:00 am Registration: *Karen Toepfer* (KHS Treasurer) Lawrence Holidome, 200 McDonald Drive. A limited edition of the KHS Silver Anniversary T-Shirt, designed and produced by Errol D. Hooper, Jr., will be available for sale at the registration table.

Scientific Paper Session 3 at Lawrence Holidome

Moderator: *Karen Graham* (Sedgwick County Zoo)

8:30 am Keynote Speaker: *Aaron M. Bauer* (Villanova University) Topic: The Reptiles of New Caledonia: Evolution of an Highly Endemic Herpetofauna.

*Travis W. Taggart* (University of Kansas Medical Center) A Re-analysis of the Systematics of the *Plethodon glutinosus* Complex.

*Emily Moriarty* (Saint Mary's College, Notre Dame, Indiana) A Morphometric and Molecular Comparison of *Pseudacris triseriata* and *Pseudacris maculata* from Sympatric Populations in Douglas County, Kansas. CC

*Kelly J. Irwin* (University of Georgia, Athens) Herpetofaunal Community Response to Timber Harvest Practices in an East Texas Bottomland Hardwood Forest.

*Lisa K. Irwin* (University of Georgia, Athens) Reproductive Ecology of *Pseudemys concinna* in Southwestern Missouri.

*Amy L. Sproston* (Natural History Museum, University of Kansas) Ultrastructure of Gymnophione Scales and Their Utility as Phylogenetic Characters.

KHS Group Photograph at 11:45 am, taken by *Larry L. Miller* (Kansas Heritage Photography, Wakarusa)

Lunch: Noon to 1:00 pm

Scientific Paper Session 4 at Lawrence Holidome

Moderator: *George R. Pisani* (University of Kansas)

1:30 pm Keynote Speaker: *Richard A. Seigel* (Southeastern Louisiana University, Hammond) Topic: Effects of Floods on Massasaugas (*Sistrurus catenatus*) and Other Snakes.

*William Busby* (Kansas Biological Survey, Lawrence) The Crawfish Frog (*Rana areolata*) in Kansas. CC

*Eric M Rundquist* (Animal Care Unit, University of Kansas) A Walk in Beauty: Observations of a Kansas Herpetologist. CC

*Walter Meshaka* (Everglades National Park, Florida) Exotic Herpetofauna on the Florida Landscape.

*Randy Reiserer* (University of California, Berkeley) A Rapid Evolutionary Change in the Stimulus Control of Caudal Luring in the Massasauga.

*Jennifer B. Pramuk* (Natural History Museum, University of Kansas) A Preliminary Phylogenetic Analysis of the Native West Indian Toads (Anura: Bufonidae).

*Robert Powell* (Avila College, Kansas City, Missouri) Herpetology of Navassa Island.

*Jeffrey R. Parmelee* (Natural History Museum, University of Kansas) Feeding Ecology of Kansas Anurans: Our State of Knowledge and Some Predictions. CC

Banquet 5:30 pm Lawrence Holidome

Introduction of KHS Distinguished Life Members

ROBERT F. CLARKE

(introduced by *Stanley D. Roth, Jr.*)

HENRY S. FITCH

(introduced by *John E. Simmons*)

DWIGHT R. PLATT

(introduced by *Robert Powell*)

HOBART M. SMITH

(introduced by *Eric M Rundquist*)

Presentation of *The Suzanne L. & Joseph T. Collins Award* by *James L. Knight* (South Carolina State Museum)

Banquet Keynote Speaker: *David Grow* (Oklahoma City Zoo)

7:30 pmish KHS Auction conducted by *Joseph T. Collins*, KHS Treasurer *Karen Toepfer*, *Suzanne L. Collins*, *Ann Rundquist*, and *Carolyn Moriarty* assisting

Sunday, 8 November 1998

Scientific Paper Session 5 at Lawrence Holidome

Moderator: *William Busby* (Kansas Biological Survey)

9:00 am Keynote Speaker: *Christopher J. Raxworthy* (KU Natural History Museum) Topic: Great Plains and Pains: Herpetology of Madagascar.

*Allan Volkman* (Wichita, Kansas) A Flint Hills Herpetological Survey in Cowley County, Kansas, Assessing a Decade (1989 to 1998). CC

*Tom R. Johnson* (Missouri Department of Conservation, Jefferson City) Rare and Endangered Amphibians and Reptiles in Missouri.

*Corey L. Fincher* (Oklahoma State University) The Effect of Hunting on Defensive Behavior in the Western Diamondback Rattlesnake in Western Oklahoma.

*Lani Buress & Lynnette Sievert* (Emporia State University) The Effect of Feeding on Thermoregulation in Woodhouse's Toad (*Bufo woodhousii*). CC

Post-meeting Reception at 3:00 pm at the residence of *Suzanne & Joe Collins*,  
1502 Medinah Circle, Lawrence

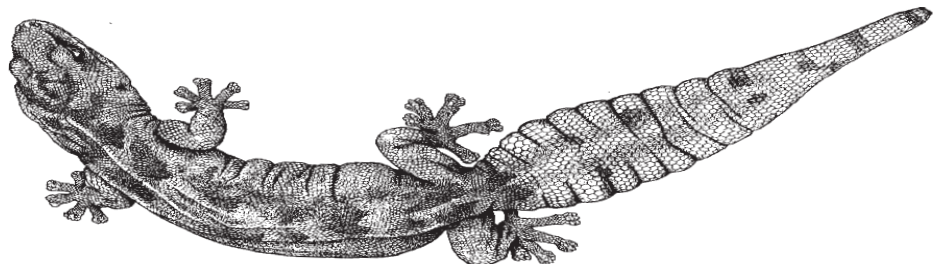
Silver Anniversary Meeting Committee

*Suzanne L. Collins, Ann Rundquist, Eric M. Rundquist, and Joseph T. Collins*

*Joseph T. Collins will serve as Master of Ceremonies for the meeting.*

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Note: CC behind a title indicates that the *individual making the presentation* is eligible for *The Collins Award* in the year 2000.



## KHS BUSINESS

### FOUNDING KHS MEMBER IN NEED OF GOOD WISHES

One of the members of the original Ad Hoc Constitution Committee, Al Kamb, who helped lay the foundation for the Kansas Herpetological Society more than 25 years ago, is seriously ill and could use your support. Al is currently fighting for his life from an extremely dangerous form of cancer. If you could take a little time out of your schedules to call Al or send him a note of support, it would be deeply appreciated. He may be reached at (785) 843-3963 or you can write to him at 2619 Missouri, Lawrence, Kansas 66046. I and the rest of the KHS Executive Council wish Al God's grace and help in his struggle.

— EMR

### KHS SILVER ANNIVERSARY FALL FIELD TRIP

The Fall Silver Anniversary KHS Field Trip will be held up on the Nebraska border in Marshall County, Kansas on 9–11 October 1998. KHS members will gather as early as Friday night (9 October) at the Big Indian Lake Recreation Area in Gage County, Nebraska, to camp and enjoy the evening.

Those seeking motels should contact the chambers of commerce in Fairbury (Jefferson County, Nebraska) or Marysville (Marshall County, Kansas).

Field herp counts will officially begin at 9:00 am on Saturday (10 October), and continue until noon on Sunday (11 October).

Any questions about this KHS field trip should be directed to Larry Miller. Enquiries may be in the form of email, a telephone call, or U.S. mail.

Larry L. Miller  
Field Trip Chairperson  
840 SW 97th Street  
Wakarusa, Kansas 66546  
Telephone 785-836-2119  
Email: wakarusa@cjnetworks.com

### GLOYD-TAYLOR SCHOLARSHIP

Nominations are now due for the annual KHS Howard K. Gloyd-Edward H. Taylor Scholarship in Herpetology. Nominations for this award are open to any student enrolled in any accredited educational institution in Kansas or any KHS member enrolled in any accredited educational institution outside of Kansas. Students from primary school 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. Self-nomination is excluded.

All nominations should be sent to KHS President John Lokke at the address listed on the inside front cover of this Newsletter. The KHS Executive Council makes the final decision and announces the scholarship winner at the KHS annual meeting.

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

### KHS NOMINEES

This year's nominees for office on the KHS Executive Council are as follows:

For President – Robert Powell and Travis W. Taggart  
For Secretary – Daren Riedle (unopposed)  
For Treasurer – Karen Toepfer (unopposed).

Robert Powell is a biology professor at Avila College in Kansas City and is a long-time KHS member. He has conducted extensive herpetological research in the Dominican Republic and uses the herpetofauna of the Great Plains as training material for his students.

Travis Taggart is also a longtime and active member of the Society. He has done extensive field work in Kansas, and is currently pursuing his doctoral degree at the University of Kansas Medical Center, specializing in molecular systematics of amphibians and reptiles.

The KHS Nominating Committee for 1998 consisted of Al Kamb, Eric M Rundquist, and Suzanne L. Collins (chairperson).

### VOLUNTEERS NEEDED

Volunteers are needed for various tasks associated with the upcoming Silver Anniversary Meeting. We need people to do such things as run audio-visual equipment, pick up speakers from KCI Airport, deliver messages and equipment, etc. All persons serving as volunteers will have their registration fee waived. If you are interested in volunteering for the meeting, contact Joe Collins at (785) 749-3467 or Eric Rundquist at (785) 832-9093.



## KHS BRINGS YOU NEWS OF THE GREAT WORLD

### MOTHER NATURE IS ALWAYS AN INTERESTING SHOW

It was a quiet evening last week when Susan Neuschafer passed up a chance to meet a prince.

Her mother, Jane Bean, explains: "We were sitting in Susan's back yard by the little pond she and her husband built," Bean said. "It's not a very big pond but it has a dozen or so fish in it."

It is also home to a medium-sized (in Bean's words) Bullfrog that has been affectionately named "Big Daddy." The other evening Big Daddy was in trouble.

"We could see him struggling in the water," Bean said. "He'd go underwater and then come to the surface, kinda flailing around."

After a few unsuccessful attempts to net it, Neuschafer shined a flashlight in the frog's eyes and caught him by hand. The trouble with Big Daddy was soon apparent.

The glutton had caught a bluebird (that's right!) and was choking on it. Emergency measures were called for.

"Susan cut off the bird's wings and kind of shoved the rest of the bird down Big Daddy's throat," said Bean. "The frog appeared to be dead, but Susan gave it heart massage and it came to. I told her she should have given it CPR and maybe we' have had a prince in the backyard."

A lot of people watch birds and wildlife, but there aren't many who look at the ground at their feet. I happen to do so. In the most scientific of terms, I am what is known as "Snake Bait" (not to be confused with Stink Bait).

If there is a snake in the vicinity, it will stick its scent-gathering tongue out and head in my direction. I have had harrowing experiences in Africa (cobras, a Black Mamba) and Asia (cobras, python, something in the dark that hissed at me and slithered away). Pass the toilet paper, please.

Give me something that moves slowly like turtles, though, and I turn into an interested observer. This happened when we were building our house back in 1989.

It was mid-September, and the nights were chilly. A couple of days before, a friend and I had used a trencher to put in 300 yards of water line. The trench was still open and I was walking it to make sure there weren't any rocks. There weren't, but there was about a dozen box turtles stranded in the trench.

The trench was in the path of their migration from a field uphill to the stream below. I rescued them all.

The past few weeks, I've been studying lizards. I do this by watching the back porch (temperature 95°) from inside the house (temperature 75°),

Talk about your bug catchers! I don't know how many of them there are, but they played havoc on the grasshoppers this year, not to mention any moths or butterflies that

landed near them. I personally saw four incidents of ambush on moths and watched several more struggles with prey that didn't want to be eaten.

There are some things I've been missing. For several years, we had a couple of toads that would come to the garage door at night when the overhead light was on. They'd gorge themselves on June bugs until they had to waddle, not jump, back to their hiding places.

I haven't seen any toads for the last several years, not a good sign. It also isn't a good sign when amphibians like Bullfrogs seem to be disappearing. Some people blame drought, the ozone layer, pesticides, etc. My barber, Dean Rothlisberger, blames blue herons.

"I've got this little pond in back of the house," he said. "I had a huge Bullfrog in it. I liked to hear it at nights. One morning, I stepped out on the back porch and this damn heron had it in its mouth and swallowed it."

Bluebirds and great blue herons. The circle is complete. There was a common saying in Viet Nam that applies here: "Some days you count the meat, some days the meat counts you."

— Jim Ramberg

Topeka Capitol-Journal, 23 August, 1998  
(Submitted by Ralph Black, Lawrence)

### POACHING FOR SMALL CRITTERS INCREASES

It took three years, but the sting sure stung when the undercover investigation was over.

The U. S. Fish and Wildlife Service and the Kansas Department of Wildlife and Parks worked together from 1995-97 on an operation that brought substantial fines and probation to several Kansans and a few nonresidents.

Not for deer poaching. The individuals were busted for wildlife violations that involved snakes, amphibians, and the familiar box turtle.

Why box turtles? Who would pay for one?

"Well, dealers pay \$2-3 apiece for box turtles," said Richard Harrold, chief of special operations for the law enforcement division of KDWP. "The wholesaler will get \$4-7 for them. Eventually, the box turtles will be sold for anywhere from \$50-150, sometimes \$300."

Harrold said the high prices are paid in the Orient, principally Japan, for the turtles. Again, why?

"The Japanese have a ritual over there," he said. "They writer their troubles on the back of a turtle and then turn it loose. They believe that the troubles will depart with turtle."

"The demand (for box turtles) in that country is unbe-



lievable.”

Here in the United States, especially in the big cities, there is also a demand for Milk Snakes, a fairly common snake in Kansas. At least it used to be.

“The Milk Snake is in big demand because they’re colorful, docile, and make good pets,” said Harrold. “They’ll bring up to \$250 in the big cities. Other species that bring top dollar are the Texas Night Snake and the Eastern Hognose Snake.”

As in many cases, it wasn’t until lately that poaching business became big business.

“In 1987, our uniformed officers noticed that there was a lot of out-of-staters catching snakes,” Harrold said. “They’d write citations, but they weren’t felony busts. In recent years, we have gone covert, and that’s a new angle.”

The recent busts added up. A Louisiana man was found guilty in Federal court and fined \$13,500 and given one year of probation and four months of home detention.

Some judges get tough, some go easy,” commented Harrold. “Naturally, we like the tough judges.”

— Topeka Capitol-Journal, 23 August 1998  
(Submitted by Ralph Black, Lawrence)

## EVIDENCE GROWS, SUSPECTS ELUSIVE IN FROGS’ DISAPPEARANCE

For a long time, biologists literally could not believe their eyes. It appeared that frogs and other amphibians were disappearing around the world. But findings from several “hot spots” during the past year have persuaded most scientists that the declines are indeed real.

“I think we’re close to consensus now,” said David Wake of the University of California at Berkeley.

No one knows how many of the world’s approximately 4,000 amphibian species may be affected, and some areas rich in amphibian life — notably Mexico and Africa — have yet to be evaluated. There are also vexing inconsistencies. Some species continue to thrive in highly polluted, densely populated areas, while other populations crash in faraway places side-by-side with species that are apparently unperturbed.

Nor do scientists yet have conclusive proof as to what may be causing any of the declines. But there are four prime suspects: increasing ultraviolet radiation resulting from ozone depletion, global climate change, pesticides and new diseases — including a recently discovered skin infection caused by a class of aquatic fungi not previously known to affect vertebrates.

Scientists are concerned by amphibian declines for several reasons. Sometimes described as sensitive “sentinels” because of their permeable skin, variable diets and a life cycle that is partly aquatic and partly terrestrial, amphibians are without question vulnerable to environmental insult.

Scientists have long known that habitat loss through human encroachment—road building, suburban sprawl, logging, agriculture, mining and fisheries management practices—is the leading cause of amphibian disappearance.

But beginning in the late 1970s, field herpetologists started noticing that amphibians were becoming less abundant even in areas that seemed unaffected by human activity. The mysterious losses from supposedly pristine habitats continued through the 1980s, a decade that produced several extinctions, including the disappearance of the rare and beautiful Golden Toad (*Bufo periglenes*), which vanished shortly after it was discovered in a remote nature preserve high in the mountains of Costa Rica. Other significant declines were reported from mainly mountainous regions in Australia, much of Central America, parts of South America and in the western United States and Canada.

But many scientists remained dubious. Through the mid-1990s, the scientific literature contained more sniping than hard data. Skeptics, who saw the decline reports as alarmist, argued that amphibian populations have such large natural fluctuations that no short-term study could show a long-term trend. And they pointed out that the historical prevalence of amphibians was largely unknown in most places.

But the evidence for widespread, unexplained declines mounted.

J. Alan Pounds and his colleagues in Costa Rica answered many of the skeptics late last year with a statistical study of amphibian declines in the same mountain region that was formerly home to the Golden Toad. Pounds’s five-year survey showed that natural population fluctuations could not explain the disappearance of species of frogs and toads — about 40 percent of the local total.

This spring, researcher Karen Lips reported still more amphibian declines in highland regions of Costa Rica and Panama. Lips established a correlation between more aquatic species and the probability of decline—a finding that she said argues for disease or chemical contamination as probable causes. Lips’s work attracted attention for an additional observation: She actually found large numbers of dead and dying frogs in the jungle, in itself a startling finding.

“No dead or disabled frog can last long in the rain forest,” Wake said. “Finding any at all suggests to me that there must have been many, many more that were not seen.”

Necropsies performed on frogs recovered by Lips showed their skin was infected by a parasitic fungus called a chytrid, which researchers now believe may be associated with amphibian declines in Australia and Central America. Chytrid fungi, which also have infected captive amphibians in several zoos, are believed to impair respiration because many frogs and toads breathe through their

skins. But it remains unclear whether the fungus is the primary cause of death or a secondary effect of some other environmental problem. In California, Gary Fellers of the U.S. Geological Survey documented significant declines in several frog and toad species in seemingly pristine areas along the spine of the Sierra Nevada Mountains, including inside the protected confines of Yosemite National Park, where amphibian records go back 75 years.

Fellers's work, which is being done under arduous, high-altitude conditions at 4,000 remote sites, is one of the most ambitious monitoring efforts underway anywhere. What alarms scientists most about his preliminary findings is that the declines are all occurring on the western slopes of the mountains — the side facing California's heavily agricultural central valley. Fellers believes pesticides atmospherically transported to the mountains are a likely cause of the declines.

David Green, a herpetologist at McGill University in Montreal, at first suspected at least some initial reports reflected only temporary local shifts in amphibian populations and not larger changes. Now, he said, he is surprised and distressed by the complete disappearance of the Leopard Frog (*Rana pipiens*) from British Columbia.

The leopard frog is one of perhaps 10 species that Green now believes are in decline in his country, where he heads the endangered species program. "And this is happening in Canada," Green said, "which for the most part is pristine compared to the U.S."

At a world herpetology conference last summer in Prague, Wake and George Rabb, longtime head of the international Species Survival Commission, decided to seek federal assistance in creating a more centralized U.S. research effort.

Interior Secretary Bruce Babbitt last March requested a briefing by scientists studying amphibian population declines as well as the outbreak of leg deformities occurring in frogs and toads across the United States and Canada. "What these scientists told me," Babbitt said, "hit like a flash of light in the night. They illuminated a landscape of potential extinction that extends all the way around the world."

Babbitt arranged a second briefing in May for himself, Health and Human Services Secretary Donna E. Shalala and Environmental Protection Agency Administrator Carol M. Browner. The group, which also included Neal Lane, then of the National Science Foundation, and Kathleen A. McGinty, chair of the White House Council on Environmental Quality, agreed that it didn't want to create a big "Apollo Mission" type of program, but recognized that there was a pressing need for centralized coordination of the many scientists and research programs involved, Babbitt said.

Wake said the comparison some people have made between amphibians and the canaries that once warned

coal miners of danger isn't quite right. "If a canary died," Wake said, "the miners got out of the mine. We don't have that option. We don't have any place to go."

— Herpdigest, Vol. 1, No. , July 25, 1998  
(Submitted by Alan Salzberg, New York)

## "SOMETHING" IS KILLING ALLIGATORS IN CENTRAL FLORIDA

The mystery began in the spring, while a state biologist was out at night counting glowing red gator eyes.

He found four dead gators floating in Lake Griffin. At first, officials chalked it up to poachers. But more gators went belly up, sometimes several in a week. Now, the tally from the Central Florida lake stands at 54.

"Obviously, something is killing them that's abnormal," said Dennis David, a researcher with the Florida Game and Fresh Water Fish Commission.

It may be pesticides. Or toxic algae. Or some unknown alligator disease. Nobody really knows, and that's what is troubling state wildlife investigators.

Researchers can remember only one alligator die-off this big. That was in 1980 when nearby Lake Apopka, already badly polluted by development and farming, collapsed after a massive pesticide spill. In the years after, Lake Apopka's alligator population plunged.

So far the numbers for Lake Griffin, part of a chain of lakes between Orlando and Ocala that forms the headwaters of the Oklawaha River, aren't that bad. In fact, there are probably more than 3,000 alligators in the lake. But researchers fear it is the beginning of a downhill slide.

"One of the things that alarms us at Lake Griffin is there are some similarities to Lake Apopka," David said.

Lake Apopka's pollution drew worldwide attention when researchers discovered baby male alligators had depressed testosterone and underdeveloped genitalia. The culprit, they suspected, was so-called "gender bending," man-made chemicals that mimic hormones and wreak havoc on wildlife.

But now, said UF researcher Louis Guillette, the phenomenon is turning up elsewhere — in South Florida's Lake Okeechobee and in Lake Griffin.

Lake Griffin's alligators are having problems reproducing. Only 4 percent of the eggs there hatched, compared to the 80 percent hatch rate in a healthy lake.

Other species in the lake chain are suffering, too. Scientists say populations of speckled perch and largemouth bass are dropping.

"If these alligator deaths were to continue, and the reproductive problems were to continue, eventually, you'd have an alligator-free lake," David said.

That might sound fine to some gator-hating Floridians.

But researchers warn that alligators tip us to pollution we can't see.

"When there are problems with wildlife, I think it behooves us to say, 'Hey — wait a minute. Let's take a look at this,'" said Guillette. "The miners didn't all die when the canary fell over, but it sure was a wake-up call."

Like humans, alligators live long enough to respond to decades of environmental changes, and their position at the top of the food chain makes them a bellwether for contamination.

"Alligators are doing things that people don't do," said Perran Ross, a University of Florida scientist who is studying the problem. "I don't know anyone who has been sitting in the bottom of a lake eating fish for 20 years."

Autopsies of the dead alligators showed no signs of disease, deepening the mystery. The state has put together a team of scientists to look into the problem. They will seek grants, coordinate research and study aspects of Lake Griffin, from toxic algae to pollution from farms. For years, farmers drained lakeside swamps, then planted row crops in the rich muck. When the fields were reflooded, fertilizers and pesticides washed into the lake.

The St. Johns River Water Management District has bought up most of the lakeside farms and is restoring the marshes.

Lake Griffin connects to three other large lakes: Lake Harris, Lake Eustis and Lake Yale. They all feed the Oklawaha River. So far researchers haven't seen problems in alligators downstream of Lake Griffin, David said.

"We want to be able to determine the cause so we can correct it on Lake Griffin, or at least prevent it elsewhere," he said.

— St. Petersburg Times, 14 Jun 1998  
(Submitted by Terry Shistar, Lawrence)

## U.S. REPTILE DEALER FACES WILDLIFE SMUGGLING AND CONSPIRACY CHARGES

A five-year investigation by U.S. fish and Wildlife Service special agents of illegal international trade in reptiles resulted in the August 6 arrest of Tommy Edward Crutchfield. Crutchfield, a U.S. reptile dealer, is charged with wildlife smuggling, conspiracy, and money laundering. He is the 18th person charged to date in this wide-reaching case involving wildlife trafficking that spans six continents. Crutchfield was apprehended by Federal authorities in Miami as he returned to the United States after being expelled from Belize. The former Florida businessman has spent the last five months in jail in Belize fighting that country's February 28 expulsion order. He now faces U.S. charges based on his alleged involvement in a major international reptile smuggling ring.

Last October, a Federal grand jury in Orlando, Florida,

returned a multi-count indictment against Crutchfield, his wife, two former employees, and two other individuals based on the Service's ongoing scrutiny of the highly lucrative black market reptile trade. The indictment alleges that the six were part of an international smuggling ring that is believed to have brought hundreds of rare and endangered snakes and tortoises out of Madagascar into Germany. From there, the animals, worth hundreds of thousands of dollars, were smuggled into the United States and Canada where they were sold to wildlife dealers and private collectors. Protected reptiles from Australia, Indonesia, and various South American and Caribbean countries were also traded.

The smuggled reptiles, which were typically concealed in suitcases and transported aboard commercial airline flights, include highly prized Madagascar Tree and Ground Boas (*Sanzinia* and *Boa* spp.), Radiated Tortoises (*Geochelone radiata*), and Spider Tortoises (*Pyxis* spp.) — species that occur naturally only in Madagascar, an island off the southeastern coast of Africa. These animals, and the other reptiles allegedly smuggled, purchased, and sold, are protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)—a global agreement that regulates world wildlife trade.

Crutchfield, who was named in all 10 counts of the indictment returned by the grand jury in October, is charged with multiple offenses of smuggling, violations of the Lacey Act (a Federal statute that allows the United States to prosecute individuals for violating international wildlife protection laws, including CITES), conspiracy, and money laundering.

If found guilty, Crutchfield could be sentenced to up to five years in prison and fined as much as \$250,000 on each smuggling and Lacey Act count. Conviction on the money laundering charges could result in prison terms of up to 20 years and penalties as high as \$500,000 per count.

Crutchfield, formerly the president of Tom Crutchfield's Reptile Enterprises, Inc., located in Lake Panasoffkee, Florida, was generally considered one of the largest reptile importer/exporters in the United States before he left the country in the spring of 1997. He was on supervised release following completion of a five-month prison sentence for a 1995 conviction for smuggling endangered Fiji Island Iguanas (*Brachylophus* spp.) when he fled to Belize after being notified by the Justice Department that he was under investigation. He also faces potential penalties for violating the supervised release.

The reptile investigation has already produced significant results, according to Service law enforcement officials. In addition to the charges against Crutchfield and his associates, four individuals from Germany, South Africa, Canada, and Japan have been arrested and successfully prosecuted in the United States. Of these, German citizen Wolfgang Michael Kloe received the stiffest sentence—a \$10,000

fine and 46-month prison term— after pleading guilty to six counts including conspiracy, smuggling, money laundering, attempted escape, and Lacey Act violations. Three other Germans charged in the case remain at large.

The Service's investigation of the illegal reptile trade has also led to charges in the United States against three Florida residents and a European for dealing in reptiles. One of the Florida residents, Matthew Lerer, was sentenced June 25 to six months electronically monitored home detention, 100 hours of community service, and three years' probation. Friedrich Karl Artur Postma of The Netherlands, who was stopped at Orlando International Airport last August when he tried to smuggle in 13 Radiated Tortoises stuffed inside 5 socks, was sentenced to one year in jail and a \$3,000 fine.

In addition to these charges in the U.S., authorities in Germany and Canada have taken legal action against two Germans, a South African, and a Canadian for their involvement in illegal reptile trade.

"As the world's largest importer of wildlife, the United States has a special responsibility to prevent the illegal exploitation of all imperiled species," Clark said. "The record of indictments, arrests, and prosecutions for reptile smuggling from the past 2 years shows that the Service, the Department of Justice, and many of our international counterparts are committed to finding and stopping those who try to profit from protected wildlife. I would like to thank law enforcement authorities in Canada, Germany, The Netherlands, and now Belize for their assistance in and support of this investigation.

"This case should send a clear message to those who traffic in rare and endangered reptiles that profiteering at the expense of wildlife will not be tolerated by the United States or by the world community."

—U.S. Fish & Wildlife Service Press Release  
7 August 1998

## NEW JERSEY MAN INVESTIGATED FOR REPTILE CRUELTY

State wildlife officials are investigating whether a 48-year-old man who kept dozens of large and exotic snakes in his house [in Pompton Lakes, New Jersey] was doing black-market business, or simply owned the serpents for his own enjoyment.

The cache of snakes, which included boa constrictors and pythons but no poisonous species, was discovered by firefighters on Wednesday after a small blaze broke out in the basement of Jack Sangle Jr.'s house on Jefferson Avenue. Experts say illicit trade in rare and exotic reptiles is booming in the United States, and New Jersey is no exception. Experts describe the trade as a "million-dollar business," where some animals fetch \$10,000 or more.

Whether or not Sangle was part of that illicit market, he faces hefty fines for simply owning some of the snakes found at his house without having proper state permits, officials said.

Fines range from \$250 to \$5,000 per snake, depending on its type and classification on endangered or protected species lists.

Sangle also faces animal-cruelty charges for keeping the snakes in unsanitary, cramped conditions in bins lacking proper ventilation, said Debbie Hoskins, the borough's animal control officer.

Hoskins confiscated the snakes along with several trash cans containing rats and mice — apparently kept as food for the snakes. She immediately called in a specialist to help clean and care for the animals.

Hoskins said five of the snakes found in the house were dead and many others appeared malnourished or ill. Several dead rabbits and rodents were discovered, along with a dead turtle and seven dead lizards, Hoskins said.

Sangle, who is unemployed and lives with his parents, could not be reached for comment. It was

unclear how he acquired the snakes, although Hoskins said Sangle told her that he was "sitting" some of them for friends.

"There's been a huge explosion in what we call 'herpetoculture' in the last five to 10 years," said John Thorbjarnson, a herpetologist at the Bronx Zoo. Herpetology is the study of reptiles and amphibians.

"A lot of people make a lot of money out of breeding these snakes, and there are huge conventions all over the country where they are traded," Thorbjarnson said. "The real nut cases are the ones who deal only in venomous snakes."

An albino reticulated python can sell for \$7,000 to \$12,000, said Bill Holmstrom, collections manager at the Bronx Zoo's herpetology department. "Our impression is that illegal sale and trade is going on constantly."

Hoskins had a reticulated python in his collection, along with Florida king snakes and corn snakes, which are protected in New Jersey, Hoskins said. "The corn snakes are of particular interest to us," said Larry Herrigty, supervising wildlife biologist at the state Division of Fish, Game, and Wildlife. "Some types of Corn Snakes are not allowed to be owned unless you have a proper permit, because they are endangered in this state."

Herrigty added that Sangle called him on Thursday and told him that he "didn't know" he was required to purchase permits for the snakes he owned.

Fish and Game officials were sent to the Bloomingdale Animal Shelter on Thursday to identify and examine the snakes. They also will ask Sangle to produce receipts to show whether he acquired them legally, Herrigty said.

"We sometimes find people who are black-marketing these rare reptiles. It's a million-dollar business in the

U.S.," Herrightly said.

For now, Sangle's snakes remain at the shelter in Bloomingdale.

"We are cleaning them up," Hoskins said. "A lot of them are very sick. Two of the large boas were being kept together in a sweater bin. It's taking us a long time to get to each one of them, to give them proper care."

—Herpdigest, Vol. 1, July 25, 1998  
(Submitted by Alan Salzberg, New York)

## RECORD NUMBER OF ATLANTIC RIDLEYS NESTS THIS YEAR A TRIBUTE TO PARTNERSHIPS AND INTERNATIONAL COOPERATION

More than 3,600 nests have been recorded so far this year for the world's most endangered sea turtle, the Atlantic Ridley, on Mexico's Gulf Coast south of Brownsville, Texas. The total—more than 1,000 higher than last year's 2,384 nests (an increase of 50 percent)—is the highest recorded since the late 1960s.

This modern-day record is providing biologists with hope that the Atlantic Ridley is continuing to recover from the brink of extinction. It is also a testament to the species' tenacity and longevity, plus the work of government agencies, support from nearby residents, and participation from a variety of other partners in Mexico and the United States.

"Thanks to longstanding partnerships between U.S. and Mexican wildlife agencies and more recent involvement of conservation and industry groups, we're beginning to see real progress in restoring these ancient marine creatures to their rightful place in the Gulf of Mexico," said Nancy Kaufman, Regional Director of the Fish and Wildlife Service's Southwest Region.

The Service has led turtle recovery efforts for the United States since 1978, funding research, monitoring and hatchling release programs.

"We applaud the efforts of all partners working to restore the Atlantic Ridley," said Dr. Rene Marquez, national sea turtle coordinator for the Instituto Nacional de la Pesca in Mexico. "Protection afforded the species by our government, combined with increased research, monitoring and educational efforts, is starting to show significant results."

As of June 29, more than 2250 nests have been laid at Rancho Nuevo, the species' main nesting beach, about 230 miles south of Brownsville, Texas. Other nesting areas, on a stretch of beach ranging 80 miles north of Tampico, Mexico, with Rancho Nuevo at its center, recorded the following numbers of nests so far this year: Playa Dos 450, La Pesca 41, Tepehuajes 609, Altamira 175, Miramar 11 and Lechugillas 70. A total of 13 nests have also been found this year on Padre Island, Texas, including nine on Padre Island National Seashore, a record for the United States as well.

"The Mexican government has provided crucial support for the recovery process," said Rollie Schmitten, Assistant Administrator for the National Marine Fisheries Service. "It has encouraged us to participate in recovery efforts with the Instituto Nacional de la Pesca, the State of Tamaulipas and a variety of other partners. This shared commitment has resulted in new hope for this tenacious survivor."

This year, the National Fisheries Institute, representing the shrimping and commercial fishing industry in Mexico and the United States, constructed a new monitoring camp for the turtle at Tepehuajes, a nesting beach about 50 miles north of Rancho Nuevo. The National Marine Fisheries Service has committed funding since 1996 to support enhanced monitoring of nesting activities in Mexico, improvements to a research compound at Rancho Nuevo, and expanded educational programs.

In 1947, biologists documented an estimated 40,000 Atlantic Ridleys arriving in one arribada [a term used to denote a mass nesting 'arrival'] during the species' nesting season. By the mid-1980s, nesting numbers declined to about 700 per year.

Nesting began early this year, raising a crucial question for sea turtle biologists: was the early start a sign that the Atlantic Ridley was continuing its recovery, or was it an El Nino phenomenon related to warmer ocean temperatures in the Gulf of Mexico?

"We've finally been able to answer this question, and it's good news for the turtle," said Pat Burchfield, sea turtle program coordinator for the Gladys Porter Zoo in Brownsville. "Even though nesting began in March, it's still under way and could continue until late July, when we hope to reach a total of more than 4,000 nests."

The Atlantic Ridley was listed as endangered throughout its range on December 2, 1970. The decline of the species was primarily due to collection of eggs and killing of adults for meat and other products. The turtle was also subject to high levels of mortality from shrimp trawlers, which inadvertently catch turtles in their nets.

The [Atlantic Ridley] is the smallest of eight species of sea turtles, with adults generally weighing less than 100 pounds (45 kg). Females lay 80 to 140 eggs in nests dug in the sand each year. Atlantic Ridleys are found in coastal areas of the Gulf of Mexico, but are sometimes seen off the eastern seaboard of the United States.

The National Marine Fisheries Service and the U.S. Fish and Wildlife Service are cautiously optimistic about the upward trend in nesting females. However, the number of juvenile Atlantic Ridleys found stranded each year on coastal beaches remains at a high level, indicating a source of mortality that could ultimately impact overall numbers of nesting turtles. Thus, recovery efforts for the Atlantic Ridley include continued protection of known nesting beaches and adjacent waters, plus further reductions in mortality from incidental catch of turtles in commercial

shrimping operations in the U.S. and Mexico. Biologists have a goal of ensuring a nesting population of 10,000 turtles per year before considering upgrading the status of the species to “threatened” under the Endangered Species Act.

— Herpdigest, Vol. 1, No. , July 25, 1998  
(Submitted by Alan Salzberg, New York)

## REPORT ON THE INTERNATIONAL HERPETOLOGICAL SYMPOSIUM HELD 25–27 JUNE 1998 IN CINCINNATI, OHIO

On the last day of the International Herpetological Symposium, Joe and Suzanne Collins came up and ask if I would write up an article for the Kansas newsletter. I replied that I had never done anything like that before. Suzanne said sure you can, and Ruth can help. So when you read this *an if n it ain't quite right*, blame Joe and Suzanne. But here goes anyway we'll give it a try.

The International Herpetological Symposium, hereafter known as the IHS, was hosted by the Cincinnati Zoo and the Greater Cincinnati Herpetological Society. The IHS was held June 25 through June 27, 1998 in the Holiday Inn near the Greater Cincinnati Airport in northern Kentucky, just across the Ohio River from Cincinnati. The symposium had approximately 150 attendees. On a somber note, the meeting was dedicated to Mike Goode who passed away on March 20, 1998. Mike was Curator of the Department of Herpetology at the Columbus (Ohio) Zoo. He was scheduled to speak at this meeting. Mike was well known for his work with turtles, and was responsible for the captive breeding of numerous species at the zoo. He will be greatly missed by all of us at the meeting, and by his colleagues around the world.

The IHS meeting had a mixture of herpetologists and (we agonized over this word but there just isn't any other way to put it) herpetoculturists (face it, many of us are indeed herpetoculturists. Needless to say a good time was had by one and all.

There were many different vendors and one could choose to shop for books, tee-shirts, sculptures, jewelry, and many more items of interest. There seemed to be something for everyone.

The speakers were as diverse as their subjects. As usual the wealth of information that was shared was extensive. Also we must mention the years of experience gathered in one room was exceptional. Of special personal interest as speakers for us were Sherman and Madge Minton and also H. Bernard and Mrs. Bechtel. Sherman Minton spoke about rear-fanged snakes and their venom. A memorable remark was that a captive rear-fanged snake differs from a wild one in that it's more likely to bite someone. Also, another point of importance, since venom is present in at

least nine lineage's of colubrid snakes, is the legal definition of a venomous snake. Bernard Bechtel spoke about abnormal snake color patterns. The colors of snake skin are determined by many things and some like albinism are well understood. Some aberrations can be controlled by genetics, others are less known and some we know nothing about at all. Not only was KHS member Joseph T. Collins a guest speaker (on the beauty and diversity of North American snakes, with comments on their taxonomy) and (about the southwestern Ohio mafia: A dead poets herpetological club in the Queen City), but he also did dual rolls as Moderator and Auctioneer.

This brings us to another highlight of the IHS—the banquet and auction. The guest speaker was Kraig Adler from Cornell University. He spoke on the herpetofauna of China. There were some beautiful slides and amazing stories. Then, when he was about half way through his talk, the subject suddenly changed to “Jim Murphy This is Your Life,” starting with slides of Jim's baby pictures in diapers. It was announced that Jim came in second in a Gerber baby food contest. Later it was declared that Jim could not match socks or shoes. Then up went that slide of his feet and legs for proof positive. This led to a showing of a paper doll cut-out of Jim with matching clothes, socks, and shoes, so anyone could dress him. Actually, you may be able to own one of these valuable collectors' items for your very own. Look for it at the next auction you attend. You never know—it may show up there. After finishing the talk on China, and before Joe Collins started the auction, Jim Murphy announced a request for help in attaining Kraig Adler's life on slides.

With Joe Collins heading the auction, and a cash bar at hand, we really didn't have much of a chance. Whom else but Joe could sell an empty plastic container for \$15? Does it really matter that it had a label on it marked Alligator Sticks? It was empty! Who else could get John Arnet to raise his own bid several times? The auction was a tremendous success raising about \$2700, and the banquet a great time for all. (Joe really delights in getting more than retail for books.)

The finale of the IHS meeting was a Saturday evening trip to the Cincinnati Zoo and Botanical Garden. We had our choice of taking buses provided or driving. There was a barbecue cookout and tour of the zoo. The food was good, the weather very hot and humid, and the beer evaporated before our very eyes. The reptile building at the zoo is the oldest zoo building in the United States, having been built in 1875. It is now on the National Historical Register. The reptile exhibit was really great. Also, if you get a chance do not miss their insect collection, and I'm not partial to it because it was air-conditioned it was the best collection I have seen. This was just a great way to end a very successful symposium. It is always good to see fellow colleagues and friends, to meet new ones, and to share ideas and explore new possibilities.

Roy & Ruth Engeldorf  
*Scales & Tails*  
Lawrence, Kansas

## RATTLESNAKE BITES LOCAL MAN DURING HUNTING TRIP

By Wes Johnson  
The Hutchinson News

A rattlesnake sank a fang into Robert King's trigger finger on the opening day of dove season Tuesday, swelling the digit to twice its size.

In some respects he's a lucky guy.

The foot-long rattler just as easily could have bitten King's ring finger less than two weeks before his wedding day.

"My fiancée's got me on a tight leash right now," said King, a 28-year-old Hutchinson resident.

"She doesn't want me doing anything until after the wedding."

King spent Tuesday night and part of Wednesday at Hutchinson Hospital's intensive care unit, where doctors treated the bite with snake antivenin. He was released Wednesday evening but is on antibiotics and was told to keep an eye on his right index finger.

"I was out on opening day near Sylvia, sitting in a chair and looking up for birds, when I reached down for a Pepsi," King said.

"He must have been sitting there all the time. I didn't hear him rattle or anything. He got me on the finger with one fang."

King said the snake didn't let go, so he grabbed it with his left hand and pulled it off his finger. Then he killed the critter.

"The bite burned pretty good," he said.

"It was just a freak accident. They're more afraid of you than you are of them," he said.

King said he frequently sees rattlesnakes when he goes hunting but doesn't worry about them. It was the first time he had ever been bitten by a poisonous snake.

King, a builder who works at Eaton Corp., said his finger is still swollen and he's trying his best not to use it on the job.

Kayla Herbel, King's fiancée, said her husband-to-be actually kept hunting after the bite because he said there was 10 minutes' more daylight and he didn't want to miss getting his limit of doves.

She said he used his middle finger to pull the trigger on his shotgun and ended up getting 15 birds.

The rattler incident is the latest in some unusual pre-wedding twists for the couple. Their honeymoon plans were snake-bitten once already when the Ecstasy cruise ship they planned to take to the Bahamas caught fire several weeks ago.

"They rescheduled us for another cruise, but we got bumped from that, and now there's hurricanes down there," Herbel said. "So we don't know what's going to happen."

But Herbel is taking everything in stride.

Rather than having rice thrown at their wedding, she said she might have guests toss rubber snakes.

—Submitted by Suzanne L. Collins  
Lawrence, Kansas

*(Editors Note: The snake referred to in this article was probably a Massasauga, a small venomous rattlesnake known to inhabit Reno County. Available information indicates that no person in Kansas has ever died from the bite of this kind of rattlesnake.)*

## BOG TURTLE LISTED BY USFWS AS THREATENED SPECIES

Bog Turtles (*Clemmys muhlenbergii*) are known for the distinctive bright orange, yellow, or red blotch on either side of the neck. They inhabit wetland habitats and are distributed sparsely over a discontinuous geographic range extending from New England south to northern Georgia. A 250-mile (400-kilometer) gap separates the species into northern and southern populations.

The northern population, consisting of those turtles found from New York and Massachusetts south to Maryland, has declined by one-half in the past 20 years. Much of its wetland habitat has been altered or destroyed. Bog turtle numbers in the northeast continue to fall as habitat is invaded by non-native plants, eggs are eaten by raccoons, and adults are illegally collected for the national and international pet trade. In light of the ongoing decline, FWS listed the northern population of the Bog Turtle as threatened on November 4.

At the same time, the southern population was listed as threatened because of its similarity in appearance to the less secure northern population. The FWS does not consider the southern population to be in danger of extinction, but regulating it under the ESA's similarity of appearance provision should help law enforcement officials eliminate the chances of northern Bog Turtles being represented in the pet trade as southern Bog Turtles.

U.S. Fish & Wildlife Service Newsletter  
—Submitted by Suzanne L. Collins  
Lawrence, Kansas

## HOGGING BOG TURTLES

... from Field Notes

By Wendy Smith

Several years ago, an undercover officer bought eight wild Bog Turtles from a person who had collected them from a bog near Lancaster, Pennsylvania. The World Wildlife Fund ranks Bog Turtles among the world's top-10 "most wanted" endangered species. Biologist Michael Klemens, of the Wildlife Conservation Society, says, "They

are a highly valued item, particularly in the overseas pet market—right up there with rhinoceros horns and leopard skins.”

Finding a Bog Turtle is like finding a diamond in the mud—if you know where to sell it. Sporting a shell that is only 3 to 4.5 inches long, this is one of the world’s tiniest turtles. The species is decorated with bright red or orange markings on each side of its head.

On the black market, Bog Turtles sell for several hundred dollars. Researchers from the Atlanta Zoo believe that at least 2,000 of the animals were illegally imported into Japan alone between 1989 and 1991.

The turtle is already in dire straits because of habitat loss. In the past two decades, its northern population—whose range extends from New York and Massachusetts to Maryland—has fallen by about 50 percent. Of the 200 known sites where northern Bog Turtles reside, as few as 30 may have enough turtles to be viable.

Last year, federal officials listed the [Bog Turtle] as threatened and substantially raised fines for illegal possession, from only a few hundred dollars to \$25,000 in some cases.

Audubon Vol. 100 No. 5 September-October 1998  
—Submitted by Suzanne L. Collins  
Lawrence, Kansas

#### THE WAY WE WERE (IT HAPPENED IN THE 1940s) —THE BIG TURTLE CAPTURE

D. D. Allen and Ralph George landed a 109-pounder of the snapping species in flood waters of Labette Creek, Monday afternoon.

D. D. Allen and Ralph George, of west of Oswego, were exhibiting a Snapping Turtle in the rear of the Jones Bros. Grocery Tuesday that was certainly a patriarch of the species. They had caught it on Monday afternoon in the backwaters of the Labette Creek, on the Condon farm, three miles west of the city. It tipped the scales at 109 pounds, was five feet in length from the tip of his nose to the tip of its tail, was three feet across its back and was as strong as an ordinary horse. From the number of wrinkles on its back County Treasurer, Geo. Columbia, with the aid of an adding machine estimated its age at about 310 years.

Its back is harder than a rock seemingly and is several inches thick. A man can stand on it and the turtle rears up and starts off across the landscape as though he were nothing more than a fly. These men experienced considerable trouble in landing him. When first sighted, they observed that he was no ordinary turtle and determined to catch him if possible. The turtle vanished in the water at once and when they sighted him again it was a half a mile away from the place where he was first seen, but they cornered him and with the aid of ropes and wires were able

to lasso him and after a hard struggle brought him to shore. With a wire around his neck they hitched him behind an iron wheeled farm wagon. The turtle started backing up and easily pulled the wagon with its neck. He was finally handled into a large wooden chute in which he was loaded into a car and brought to town.

His legs, while short, are massive and strong. His toes are equipped with heavy nails. His neck is quite a huge affair, with eyes set right close up on either side of the end of his sharp pointed nose. The eyes have a lot of meaty appearing substance around them and roll clear back out of sight. His jaws are akin to those of an alligator enabling him to grab a fish anywhere from ten to twenty pounds in size. The extreme ends of both the upper and lower jaws are equipped with a heavy, keen pointed tusk. These are what make him a dangerous critter and spell death to any fish, fowl or animal that is so unfortunate to get snapped. He is quick as lightning and the men who had him in charge gave him a wide berth when fooling around his front end. They stated that they had a pitchfork when they landed him and one of them allowed him to get the fork handle in his mouth. He snapped ten inches off the handle.

This is easily the oldest and largest turtle ever seen here. His head and back bear the marks of extreme age. The men are undetermined yet what they will finally do with him.

The Labette County Advisor, 12 March 1998  
—Submitted by Michael McCaffrey  
Lawrence, Kansas

#### INDONESIAN COBRA CARGO CONFISCATED

Something squirmed suspiciously inside 54 boxes being run through the X-ray machine at Jakarta’s international airport: 1,020 cobras.

Not that the live—and legal—eels listed on documents accompanying the boxes wouldn’t have wriggled a bit. But Lukas Tonga, head of the airport’s animal quarantine center, told The Jakarta Post that officers questioned the contents because they were more active than usual.

Police said the cobras were being smuggled to China, where the meat and skin of the probed snakes fetch high prices. They arrested the man handling the cargo’s documents; the snakes were taken to a Jakarta zoo for temporary care.

Eels, a popular menu item in parts of Asia, can be shipped, but cobras are protected in Indonesia and their export is forbidden.

Lawrence Journal World, 31 July 1998  
—Submitted by Suzanne Collins





## SHORT COMMUNICATIONS

### HERPETOLOGICAL OBSERVATIONS AT CHEYENNE BOTTOMS, BARTON COUNTY, KANSAS

On 25 April 1998, the ornithology class from Fort Hays State University took a birdwatching field trip to Cheyenne Bottoms. The weather was sunny and warm, with temperatures ranging from 75–80° F. A short period was allotted the class to walk away from the field vehicles. A stretch of roadside ditch, ca. 200 yards in length, provided an interesting observation on water snakes. Nearly every exposed branch, log, or rock held at least one Diamondback Water Snake (*Nerodia rhombifer*), an abundance documented by Collins and Collins (1993). I estimate the total number of specimens of this snake to have been at least 30. I was surprised to see three large individuals topple into the water as they competed for space onto one small branch. The snakes were piled on top of one another.

These observations were superseded by the following one. A few feet into a grassy area between road and water, we witnessed two large Massasaugas (*Sistrurus catenatus*) engaged in combat. The body of each snake was raised at least eight inches vertically above the grass. The behavior we observed approximated that described for Copperheads (*Agkistrodon contortrix*) in Collins (1993). A couple of classmates and I watched the fight as the snakes paid us little attention. At one point, I moved one of the snakes with a stick and the remaining snake merely followed the one that had been moved. It appeared that this movement stimulated the snakes to fight more aggressively. One snake rattled for a few seconds after being roughly disturbed. A few minutes later, another smaller Massasauga (possibly a female) emerged from the grass near the combatants and entered the water.

I do not know whether or not combat behavior has been observed or reported for Kansas Massasaugas, but I consider myself lucky to have been a witness to the above event. I hope my experience will interest and stimulate others.

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### RACER REPRODUCTION AND DIET OBSERVATION

I received a large female Racer (*Coluber constrictor*) from Joseph T. Collins on 5 June 1998. The exact provenance of the specimen is unknown, although it was captured in Johnson County, Kansas. The specimen measured 51 inches (129.54 cm), which is close to the state size record (Collins, 1993). On the night of 5 June and during the morning of 6 June, the animal laid 22 eggs. According to Fitch (1985), the maximum recorded clutch size for this species is 31. The eggs were set up for artificial incubation on moist paper toweling in an enclosed plastic shoe box and incubated at 80° F. Due to probable bacterial contamination, a number of eggs died over a period of weeks, although all appeared to be fertile. On 28 July 1998, eleven eggs hatched. The remaining two eggs were opened two days later and revealed one dead early-term embryo and one live, small, severely deformed neonate that died overnight.

A large fecal mass excreted by female specimen revealed numerous undigested bones and what appeared to be a rattlesnake button. Comparison of the bones to skeletal material in collection of the Division of Herpetology, Natural History Museum, University of Kansas, Lawrence showed both rib and vertebral material to be identical to those of a medium-sized Massasauga (*Sistrurus catenatus*) and the rattle segment was comparable to the same species. Although Fitch (1963) recorded snakes (including the venomous Copperhead) in the Racer diet, he did not find Massasaugas. Additional literature searches do not show this snake in the Racer diet, so this appears to be a new food record for the species.

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**BIRTH OF A COPEIA NOTE**

# The Kansas Herpetological Society

The KANSAS HERPETOLOGICAL SOCIETY is a non-profit organization established in 1974 and designed to encourage education and dissemination of scientific information through the facilities of the Society; to encourage conservation of wildlife in general and of amphibians and reptiles in Kansas in particular; and to achieve closer cooperation and understanding between herpetologists, so that they may work together in common cause. For up-to-date information about the Society and its activities check the KHS home page on the World Wide Web at <http://eagle.cc.ukans.edu/~cnaar/khs/khsmain.html>

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Pen and ink illustrations and photographs are also welcomed. These should be sized accordingly as no reductions can be made. Illustrations and photographs will be returned to the author only upon request.

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