

KANSAS HERPETOLOGICAL SOCIETY



NEWSLETTER No. 118



DECEMBER 1999

ANNOUNCEMENTS

NATIONAL WILDLIFE FEDERATION CONSERVATION FUNDING UPDATE

Ed. Note: The following letter is from the National Wildlife Federation. The legislation it details is vital to non-game conservation in this country. Kansas stands to gain millions of dollars in funding for non-game programs. The Kansas Herpetological Society is one of only two herpetological societies in this country that has signed on to this initiative. Your voice is important in supporting this legislation.

Dear Friend:

Thank you for joining the 865 businesses, organizations and agencies that signed on to the conservation community's group letter to Congress in support of permanent conservation funding legislation. This group letter made it clear to all members of Congress that there is widespread support for conservation funding. It was delivered in mid-November to every member of the House and Senate as well as the White House to tell them that the time has come to give back to nature. Thanks to you, we can start the New Year with a great deal of momentum for this critical initiative.

As you know, Congress has been moving forward on various legislative proposals that would reinvest offshore oil and gas leasing revenue into programs that benefit our nation's natural and cultural resources. Key members in the House worked for nearly four months to merge the two primary bills, Rep. Don Young's H.R. 701 (The Conservation and Reinvestment Act or CARA) and Rep. George Miller's H.R. 798 (Permanent Protection for America's Resources 2000).

The House moved one step closer to enactment of an historic conservation funding bill this fall. By a vote of 37 to 12, the compromise version of H.R. 701, the Conservation and Reinvestment Act (CARA) was passed out of the Resources Committee on November 10th. The revised bill promises nearly \$3 billion annually until 2015 for coastal conservation, open space protection, fish and wildlife conservation, urban park renewal, and other

conservation and historic preservation goals. While the bill is an improvement over current law, unmet goals and concerns remain in the bill that must be addressed before this bill will garner the widespread support it needs to become law (see attached information).

In addition to the House Resources Committee's approval of CARA, Congress provided \$651 million in the FY 2000 budget for President Clinton's Land Legacy Initiative. The Land Legacy Initiative was a one year budget request to revitalize the Land and Water Conservation Fund. This year's budget includes increased funding for federal land acquisition, urban parks, farmland protection, and (for the first time in five years) for the state component of the Land and Water Conservation Fund. The Administration remains aware of the need and will be active in the effort to make conservation funding permanent.

NEXT STEPS

Congress is now in recess until late January, but more work must be done before conservation funding legislation becomes law. The bill must be approved by the full House of Representatives and is likely to be taken up in the Spring of 2000. Senator Frank Murkowski (R-AK), Chairman of the Energy and Natural Resources Committee, has not yet reported a bill out of his Committee. As legislation moves through both Houses of Congress, there will be opportunities to improve it as well as attempts to weaken or kill the bills. I hope that you and your organization are committed to continue working with us and others to secure passage of a strong, environmentally sound permanent conservation funding bill.

Here are a few things that you can do in your state to help in this effort:

Request a meeting with your Congressional members in their home offices during the next few weeks, while Congress is on recess, to discuss the importance of this legislation. Tell them to pass an environmentally sound conservation funding bill next year.

Set up editorial board visits with state and

local newspapers to publicize this issue. Arrange to do the meeting with several individuals representing various interests that support conservation programs. Use the attached sign-on letter as a guide for which groups are active in your state. Let the boards know that permanent conservation funding legislation is likely to be an active issue in Congress next year. Tell them that it is critical to raise public support for this issue in order to secure passage.

If your member is on the House Resources Committee and voted for this legislation (see <http://www.nwf.org/naturefunding/updates/update11111999cara.html> for the vote list), send him or her a letter thanking them for their vote. Send a similar letter to the editor of your local paper so that your Representative can be thanked publicly for their support of conservation. Contact us if you need samples to work from.

In short, keep the pressure on! We couldn't have gotten as far as we have without significant grassroots action. Now that H.R. 701 is moving forward, we must broaden support for conservation funding in every state. NWF staff will keep you updated by e-mail (if you provided us with one) as the legislation moves through Congress. Or, you can find additional information at: <http://www.nwf.org/naturefunding>. If you have any questions or need any help on this issue, please feel free to contact Jodi Applegate at 202-797-6840; applegate@nwf.org.

HERPETOLOGY POSITIONS AVAILABLE

The Wildlife Conservation Society and National Park Service have signed a cooperative agreement for the purpose of inventory studies of amphibians and reptiles at ten National Park sites in the Northeast over the next 3 field seasons. These include Acadia National Park, Delaware Water Gap National Recreation Area, Fire Island National Seashore, Gateway NRA, Minuteman National Historic Site, Saint-Gaudens NHS, Sagamore Hill NHS, Saratoga NHS, Morristown NHS, and Weir Farm NHS.

Y2000 work will take place at Weir Farm NHS (Wilton, Connecticut), Morristown NHS (Morristown, New Jersey), and at Delaware Water Gap NRA (located in northeastern Pennsylvania and western New Jersey).

Goals are to inventory and record 90% of the herpetofauna currently estimated to occur at each site, determine the status of species of management concern (endangered, threatened, special concern & other declining species) and identify critical habitat, and provide a basis for development of a long-term monitoring program. The herpetofauna at Delaware Water Gap NRA is better known than at other sites to be examined. Here, six focus studies will be conducted. These include timber rattlesnake den and bog turtle habitat surveys, identification of important vernal pond sites, evaluation of man-made impound-

ments as herp habitats, a survey for wood turtles in Delaware River tributaries, and comparison of amphibians associated with hemlock and hardwood forests streams.

Positions Available (full-time, temporary position March - October 2000)

Herpetological Survey Team Leader (2 positions)

Responsibilities include day-to-day direction of survey crews, research assistants, and herpetology interns and volunteers, the implementation of the work plan and schedule maintenance, and coordination with project NPS/WCS directors, data processing, and report preparation.

Requirements: Applicant should hold a degree in biological sciences, preferably at the master's level, and have demonstrated expertise in field herpetology and be familiar with amphibian and reptile survey methodology. They should possess strong levels of independence and leadership, and be able to work well with others and be able to contend with long and hard hours and inclement weather. Clean driver's license.

Start date: mid-March. Finish: early October.

Work site: Weir Farm NHS & Morristown NHS (travel between parks involved) or Delaware Water Gap NRA

Stipend: \$500/week, plus housing. One week paid vacation; month of July off.

Herpetology Field Technicians (3 positions)

Responsibilities include field crew leadership and implementation of the work plan. Assist Team Leader as required.

Requirements: Applicants should have a degree in biological sciences, herpetological knowledge, and be familiar with amphibian and reptile survey methodology. Must have leadership and teamwork skills and be able to contend with long and hard hours and inclement weather. Clean driver's license.

Start date: mid-March. Finish: late September.

Work site: Weir Farm NHS and Morristown NHS or Delaware Water Gap NRA

Stipend: \$300/week, plus housing. One week paid vacation; month of July off.

Internship in Field Herpetology, Volunteers

Inventory teams are being organized for the year 2000 field season at Delaware Water Gap NRA, Morristown NHS, and Weir Farm NHS. Interns and volunteers will assist survey teams under the direction of the Team Leader and/or Research Assistants and help implement the amphibian and reptile survey work plans.

Requirements: Applicants should have a bachelor's degree in biology, or be a biology major, or have knowledge of the local herpetofauna. Knowledge of amphibian and reptile survey methodology helpful. Be able to work independently as well as in a team environment. Must provide own transportation and housing.

College credit (i.e., for independent studies, field herpetology, ecological field methods, or MS studies associated with this project) subject to the requirements of the student's university.

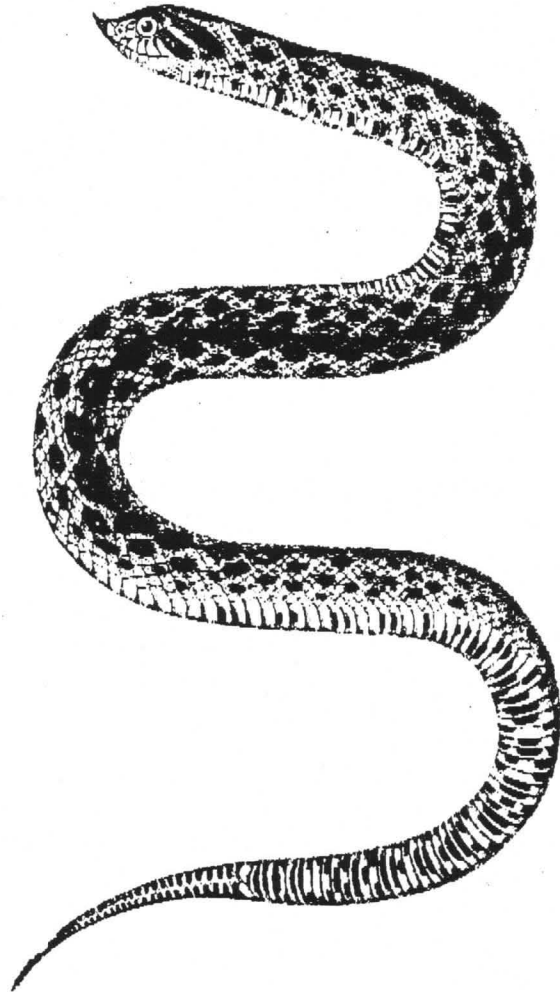
Start date: mid-March. Finish: early September.

Work site: Weir Farm NHS, Morristown NHS, or Delaware Water Gap NRA

Applications for the above positions will be accepted until 1 March. Application should include resume and a cover letter stating specific interests and flexibility. Also include names, addresses, telephone numbers, and email addresses of three references familiar with the applicant's educational and field experience.

John L. Behler
NPS/WCS Cooperative Agreement
C/o Department of Herpetology
Wildlife Conservation Society
Bronx, New York 10460-1099
Jbehler@wcs.org

WCS and NPS are Equal Opportunity Employers. Team Leaders, Technicians, Interns, and Volunteers will not be considered WCS or NPS employees.



KHS BUSINESS

26TH ANNUAL MEETING NEWS

Although the official attendance was recorded as 76 individuals, nearly 100 persons attended the 26th annual meeting of the Kansas Herpetological Society at Pratt Community College on 4-6 November 1999.

Meeting participants first gathered the evening of 4 November at Woody's Sports Bar in lovely downtown Pratt for libation, conversation, story telling and other such lies.

The meeting proper began at the unusually early hour of 8:00 am 5 November at the college. Paper presentations lasted throughout the morning and broke at around 11:30 for lunch and the Executive Council meeting. The afternoon convened with the annual KHS business meeting. This meeting included reports by KHS officers and the election of officers for the coming year. Mark Ellis was elected as the 2000 President-elect and Travis Taggart was announced as the new KHS Editor, an appointed Executive Council position. Paper presentations continued after the business meeting.

For the duration of the meeting, photography exhibitors displayed their best images in a nearby room in competition for the first Joseph T. and Suzanne L. Collins for Excellence in Kansas Herpetological Photography. The quality of photography was uniformly excellent, making the choice of a winner a difficult task for judge Gene Brehm.

After breaking for dinner, participants gathered at Cafe Bourgeois (a surprisingly good Cajun restaurant, by the way) for the annual KHS Auction (led by the incomparable Joe Collins) and presentation of awards.

KHS President Chris Mammoliti announced that John Tollefson of Lawrence and Emporia State University was the 1999 recipient of the KHS Howard K. Gloyd/Edward H. Taylor scholarship, which is named for two of Kansas' most outstanding herpetologists.

A plaque was presented to Eric Rundquist by Chris and from the KHS Executive Council in recognition of his service as KHS Editor.

Dr. Greg Sievert was then recognized as the Joseph T. and Suzanne L. Collins Award winner for 1999 and received a certificate and check for \$1000 for his superb image of a Gray Treefrog.

After the award presentations, Joe proceeded to extract remarkable amounts of cash from the assembled participants for great bargains and remarkable curiosities alike. When the smoke and food (what a buffet!) cleared, nearly \$900 had been added to the KHS treasury. In addition to registration fees and miscellaneous other in-

come, approximately \$1600 was raised overall for KHS.

Presentations began at the extraordinary hour of 8:15 am. Joe Collins gave a report on the Kansas Amphibian Monitoring Project that included presentation of the first annual Big Croaker Awards that were given to Nicole Gerlanc of Kansas State University and Dwight Platt of Newton College for their dedicated pursuit of amphibian population monitoring in Kansas.

The meeting concluded at around noon and participants wended their ways home under cloudless skies and an unheard November temperature of 80°F.

Next year's meeting will be held in Kansas City, Missouri under the leadership of incoming President Bob Powell and in conjunction with the Missouri Herpetological Association. See you in KC!

TREASURER TO RETIRE

At the November meeting of the KHS Executive Council, KHS Treasurer Karen Toepfer announced her retirement as treasurer effective at the end of next year. During her ten years of service to the Society, Karen has overseen an unprecedented rise in the Society's fiscal health, largely due to policies and procedures that she established. In addition, for most of her tenure, Karen also acted as the Society's Secretary, handling the many day-to-day correspondence affairs of the Society. On behalf of the Executive Council and the Society, I extend our gratitude to Karen for her many years of outstanding service and wish her well in her new endeavors.

Anyone who is interested in this position should contact Society President-Elect Robert Powell. This is an elective position and will be voted on by the membership at the next general meeting.

THANKS

As this is my last edition of the KHS Newsletter, there are a number of people I need to thank for all their help and support over the last 11 years.

Foremost are two former assistant editors. Jeff Whipple and Dave Reber did much of the grunt work involved in the actual production of the Newsletter. Their duties included stamp licking, volume stuffing, label attachment, bulk mail sorting, and hauling the actual mailing to the post office. You guys have my deep gratitude.

I must also thank my wife Ann for assisting in various aspects of Newsletter production and for putting up with my bad moods and frustration when various aspects of

getting the Newsletter out failed, as they frequently did over time.

Special thanks go to Joe Collins who has served as my associate editor for many years now and guided and mentored my way into the perils and pleasures of electronic publishing.

I also thank the many members of the KHS Executive Council for their patience and understanding for my various production failures over the years and for supporting my logistical requests and editorial initiatives.

Finally, I thank Bill Duellman, Linda Trueb, and John Simmons of the Division of Herpetology, Natural History Museum, University of Kansas for gracefully allowing me use of the many Division resources over time. We would not have been able raise the Newsletter to such high production standards nor produce a number of other Society publications without their permission and assistance.

Thanks all, it's been a great ride.

THE LAST TIME

Free at last, free at last, thank Godalmighty, free at last. Well, that's not really how I feel, but I've always wanted to use an M. L. King line in one of my ramblings.

At any rate, yes, this is the last time that I'll be sending a missive from this editorial pulpit to the KHS faithful. It's hard to believe that I started this gig 11 years ago. Just think, then I was single, had all 10 fingers, rented a studio apartment in Wichita, and scooped poop for a paycheck. Now I'm married, have nine 1/2 fingers (eight if you count the one that really doesn't do much but salute anymore), own a house and am up to my neck in good old, All-American debt. About the only thing that has remained the same is that I still scoop poop for a paycheck (although the pay, benefits, and lack of general grief are much better at KU).

On the other hand, the Kansas Herpetological Society has changed a great deal over this period. It has been my privilege to have watched some remarkable changes in our Society in a bit over a decade, some changes of which perhaps many you are unaware and which I'd like to recount for you.

I think the foremost change has been one of visibility and credibility. Prior to the onset of the Sharon Springs rattlesnake "roundup", KHS pretty much operated on a quasi-club basis. That is, Society members were involved in field trips for county records and sightseeing and the annual meeting for fellowship, a few honest papers, and general schmoozing. Not that there is anything wrong with those activities. All of this changed when Sharon Springs reared its ugly, mammal-chauvinist, I'll-do-what-I-want-to-any-damn-snake head. The Society and its leadership were challenged to back up their beliefs with action and, in my view, did so magnificently. We haven't won the war

(yet) and many of us had a few political teeth kicked in, but we gained a new-found respect and credibility among many people and groups across the state and nation. Ironically, I suppose we owe Judy Withers and her supporters in Wallace County a vote of thanks for helping us achieve this station.

Other changes include the following: establishing a student scholarship, establishing the largest cash award by any conservation organization in the state to promote good science in vertebrate biology, funding a research grant award for work on Kansas herps, the annual herp counts which are beginning to tell us not just where critters are but what they do, and moving into the electronic age by establishing a World Wide Web site and digitally converting all Society publications. In addition, we have recently partnered with the Kansas Grazing Lands Coalition to provide expertise and advice to anyone involved with that group in need of herpetological resources and in turn receive the opportunity for the Society and its members to conduct work on privately held lands. As 98% of state lands are privately held, that is no small thing and I know of no other herpetological society in the country which has taken on a similar initiative. We are also involved with the national amphibian population monitoring project and the national amphibian malformation database. We have come quite away from plundering hillsides (speaking metaphorically), sitting around campfires, and catching up on gossip at the annual meeting, although we do continue those proud traditions.

So, what does the new century and millenium hold for KHS? Well, let me take a peek at my crystal ball ... dang. I can't see a bloody thing! Steve Gould is right: the future is unpredictable and when the so-called millenium begins is irrelevant. However, rather than give more rah-rah for the Society (rightly deserved, mind you), I would like to offer some caution and perspective (as editor and a founder).

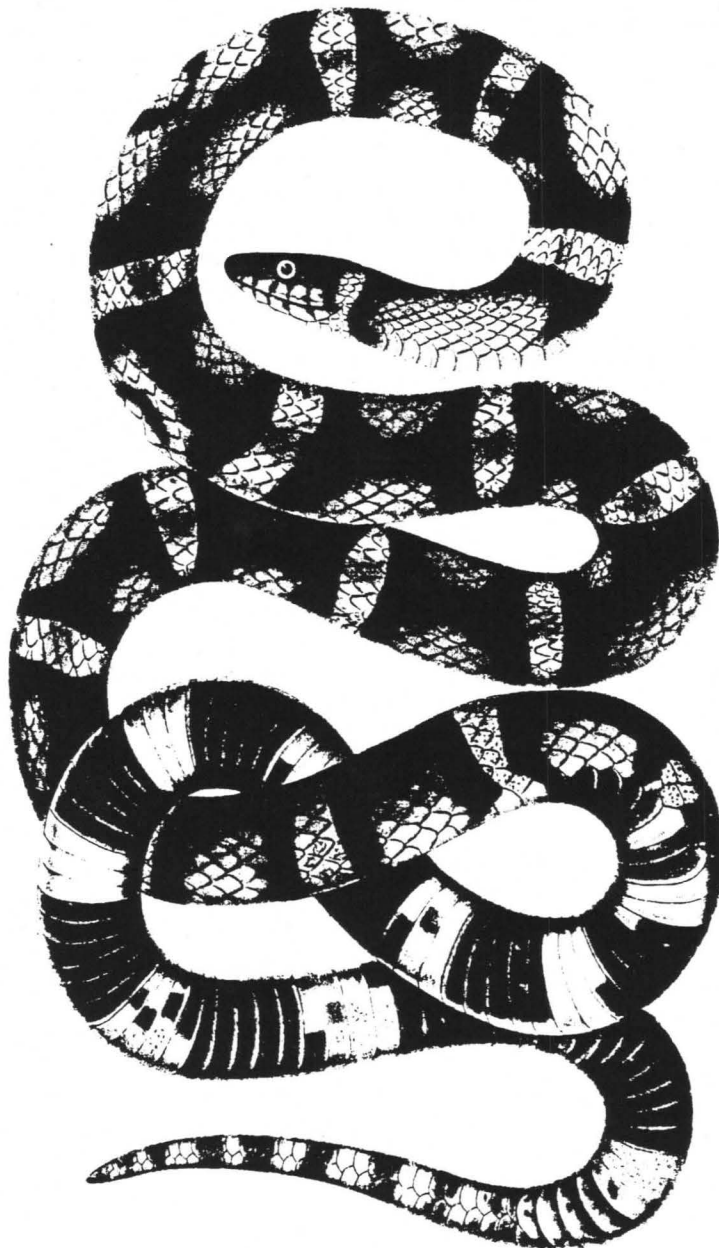
I urge all members to become more active in Society affairs, be it attending field trips, annual meetings, Executive Council meetings (anyone can attend), committee assignments, article submission to the Newsletter, Society initiatives, or just proselytizing the Society to gain more recognition and membership. Our membership has remained stagnant at a little over 200 members for a number of years now. Although we have not declined as so many other regional societies have done over the past 10 years, I am convinced that there are more than 200 people in Kansas and throughout the country with an interest in our herpetofauna. We are recognized within the herpetological community as one of, if not the, best regional herpetological groups in the country and that is largely the result of members' efforts. But we can do better. We *need* to do better.

One of my cautions is that we remain focused on the goals and objectives of the Society, e.g. "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 particular, and to achieve closer cooperation and understanding between herpetologists, ..." There is danger in allowing only a few individuals to decide the course of Society affairs. This is not to say that the Society's leadership has failed to serve our members well; they have succeeded magnificently in my opinion. However, at meetings, at field trips, for article submission to the Newsletter, I keep seeing or hearing from the same people time and again. What happens to the Society when these same people are no longer part of Society affairs? Who will take their place? Who will fill the void?

Perhaps it is time that we stop looking at ourselves as just herpetologists but as part of a larger whole. Rather than promoting "closer cooperation and understanding between herpetologists", why not among all biologists? Why not among all conservationists? For that matter, why not among all Kansans? If we think small, we will remain small. If we think in a larger domain, the world expands for us and for others.

So here is my challenge for the coming new century: try to find ways to take our Society outside the traditional scope of just amphibians and reptiles and those associated with them. Think large. Think of the whole and not just some parts. Don't be afraid to fail, for if we are afraid to fail, we will never succeed.



KHS BRINGS YOU GREAT NEWS OF THE WORLD

SCIENTISTS THINK THEY NOW KNOW WHY LONESOME GEORGE, THE GALÁPAGOS ISLANDS' MOST ELIGIBLE BACHELOR, CAN'T SEEM TO HAVE A MEANINGFUL RELATIONSHIP.

George was the only giant Galápagos tortoise found when scientists from the Charles Darwin Research Station visited his island, Pinta, in 1971 and came upon a land ravaged by centuries of trapping and the feral goats, rats and other creatures sailors had left behind. Researchers, believing him to be the last of his subspecies, rescued George and took him to their headquarters on the island of Santa Cruz.

Over the years, scientists from the Darwin center have bred 2,000 tortoises and set them free on the islands where their subspecies, decimated by humans, originated. Hoping someday to do the same for George, they put him in the same living area as female tortoises of other subspecies. The idea was at least to hone his social skills should another Pinta tortoise be found.

Reasoning that one can never go wrong with the girl next door, they chose tortoises from the island of Isabela, which neighbors Pinta in the northern reaches of the archipelago.

But George would have none of it.

"There was not mating activity or even interest displayed by George," said Dr. Howard Snell, a herpetologist at the Darwin station.

Researchers worried that perhaps there was something wrong with the tortoise. "An alternative hypothesis," Dr. Snell said, "is that George is a discerning Pinta tortoise, and he's not particularly interested in tortoises that are not of his island."

Now a new study seems to support that explanation. Researchers say they were surprised to discover through DNA analysis that George's closest relatives are not from neighboring Isabela, but from the islands of San Cristóbal and Española — at 180 miles to the south, the farthest Galápagos islands from Pinta.

The study, published today in Proceedings of the National Academy of Sciences, focused not on George but on finding the genetic origins of all the tortoises. It concludes that the closest living link to the Galápagos tortoise, or *Geochelone nigra*, is probably a relatively small tortoise found in South America.

It was on the Galápagos Islands that Darwin — fascinated by the giant tortoises, which can grow to five feet and more than 600 pounds — developed the theory of evolu-

tion.

The new information about George, said Dr. Jeffrey R. Powell of Yale, an author of the study, suggests that the Darwin station scientists should consider introducing George to females from San Cristóbal and Española. As fate would have it, some are being kept as part of the breeding population on Santa Cruz only a short distance from the tortoise's quarters.

But Dr. Snell said that while that might happen, it would not be any time soon.

Scientists first want to continue efforts to find a true Pinta female for George, so his subspecies can be preserved, and this could take several years. (George is believed to be at least 50; Galápagos tortoises can live more than 150 years.) They are renewing a search for other tortoises on Pinta, which, thanks to a goat eradication program, is once again lush. Using the DNA analysis, they will also seek to see whether any female tortoises in captivity elsewhere are from Pinta.

For scientists at the center, the main issue is not, as Dr. Snell put it, "George's well-being as an individual," but what will best help restore the ecology of the Galápagos.

The Darwin center is reluctant to pair George with a San Cristóbal or Española female from the breeding program, because that would slow the tortoise repopulation efforts and yield offspring of questionable value.

On the other hand, if scientists decide that reintroducing even a mixed subspecies of tortoise onto Pinta would help the island's ecology, they will consider trying again to find George a mate.

— Herpdigest Vol # 2 # 23, 9 November 1999
(submitted by Alan Salzberg, New York, New York)

TRACKING THE LIFE OF A SPECIES IN DANGER

In the forests along the Murray River between Swan Hill and Mildura, carpet pythons are being tracked in a bid to preserve the threatened species.

The Victorian population of the non-venomous snakes has dropped 80 per cent in the 211 years since European settlement to fewer than 1000.

What is known is that carpet pythons were once common around farms and rivers in the north-west but are now rarely seen.

The Department of Natural Resources and Environ-

ment department is developing an action plan in an attempt to preserve the species.

Twenty-five pythons have been caught and tagged with radio transmitters in north-western Victoria in the past two years and are being tracked as they slither through woodlands in north-western and north-eastern Victoria.

Mr Peter Johnson, a flora and fauna planner with the department in Bendigo has been tracking five of the pythons in the Mount Hope area north of Bendigo. He said the tracking had revealed something of how far the pythons roam, their mating behaviors and food preferences.

The snakes live in forests close to rivers and swamps and may also be found on rocky outcrops. Mr Johnson said the biggest threat to carpet pythons was loss of habitat through clearing for forestry or agriculture. Pythons rely on fallen timber, leaf litter and tree hollows for shelter and in some areas such havens have become scarce, he said.

Mr Johnson said poaching was also a problem with people catching the pythons and selling them to private collectors overseas and in Australia.

One threat that became particularly apparent during the radio tracking was foxes. Mr Johnson said about one-third of the tracked pythons were killed by foxes.

Although foxes prey on juvenile snakes and unhatched eggs, they are not averse to taking adult pythons, which can grow to 2.5 metres. Mr Johnson said the last of the tagged pythons to be taken was a female, 2.1 metres long.

But it is python deaths due to motorists that Mr Johnson least understands. "People deliberately run over them because they're snakes," he said. Even the tell-tale pattern of grey and black blotches on their backs does not deter them.

— Herd Digest Vol. 2, No. 25,

(submitted by Alan Salzberg, New York, New York)

INFECTED TICKS POSE A THREAT

Three state agencies have issued emergency rules to prevent a tick-borne disease with no known cure from taking hold in Florida.

So far, the disease — heartwater disease — has only been found in certain ticks. But if left unchecked, researchers believe those ticks could quickly spread the disease, killing thousands of infected large animals.

Scientists say the disease could surpass the threat posed by brucellosis, an infectious bacterial disease of animals and humans. It causes reproductive abnormalities in animals and a disease in humans called undulant fever, a lingering illness characterized by intermittent fever, headaches, fatigue, joint and bone pain, psychotic disturbances, and other symptoms. It is contracted through exposure to contaminated milk and organs from infected animals.

"Heartwater disease can be much more devastating than brucellosis because it could kill 40 percent of our cattle and 100 percent of our deer," said State Veterinarian Dr. Leroy Coffman, the director of Florida's Division of Animal Industry. "This disease has the potential to create huge problems. This is something that could be passed on to humans. What we don't know about this disease is what really scares us."

What researchers do know is that heartwater disease is caused by a bacteria transmitted by ticks from the *Amblyomma* genus. The ticks pass on the disease by feeding on cattle, sheep, goats, deer, antelope and other wild and domestic animals. Death can come quickly.

Ticks capable of carrying the disease have been found in nine reptile facilities in Florida since 1997. But this past May, the situation grew more serious. Dr. Michael Burrige, chairman of the department of pathobiology at the University of Florida's College of Veterinary Medicine, said ticks collected from tortoises that had been imported from Africa to Hillsborough County were carrying the bacteria. The bacteria's presence took several months to confirm the ticks were sent to the research lab Burrige's uses in Zimbabwe. Coffman said no lab in the United States is equipped to confirm the bacteria.

"This is very serious," Burrige said. "It is something that I have been preaching about for years and now people are starting to listen. I hope it is not too late."

Burrige's most recent research on heartwater disease prevention will be published in the *Journal of Parasitology* next year.

"Heartwater is a bacterial disease caused by the same group of bacteria as Rocky Mountain spotted fever," Burrige said. "The organism attacks the cells lining the blood vessels. There is no treatment known and no effective vaccine on the market yet, but we are field-testing two of them. One is conventional and the other is a DNA vaccine that uses genetic engineering."

Burrige said death in infected animals is relatively fast — usually within a week of the first signs of trouble. An animal first develops a high fever, then goes into respiratory distress followed by nervous signs like moving in circles, paddling or loss of coordination. Animals that survive develop an immunity, but are also carriers for life.

Heartwater disease is most commonly found in Sub-Saharan Africa, Madagascar, Indian Ocean islands, the Caribbean islands and occasionally in Europe. Of great concern to Burrige and Coffman is the appearance of the disease in cattle egrets in the Caribbean. They believe the birds fly back and forth between the islands and Florida, possibly bringing the disease with them after picking up ticks from infected cattle.

To prevent a potentially devastating outbreak of heartwater disease, emergency rules have been issued this month by Coffman's agency as well as the Department of

Agriculture and Consumer Services and the Florida Fish and Wildlife Conservation Commission.

Both Coffman and the agriculture department have implemented an emergency rule that restricts imports of reptiles, amphibians, llamas, antelopes and captive wild species unless each animal has an Official Certificate of Veterinary Inspection identifying them as being free of infectious or communicable diseases and free of disease-carrying ticks.

The conservation commission has temporarily banned all imports of two species of tortoises into Florida, both popular exotics. The African spurred tortoise [*Geochelone sulcata*] and the leopard tortoise [*Geochelone pardalis*] cannot be brought into the state.

While those turtles may not contract the diseases, they are the means ticks — especially the African tortoise tick — use to reach the state, Burrige said.

“The African tortoise tick may be one of the largest ticks in the world — it’s bigger than a large man’s thumbnail,” Burrige said. “We don’t want it carrying heartwater disease into this country and we don’t want any of these foreign ticks establishing themselves here. We already have some ticks that could easily transmit this disease so we don’t need any help from anywhere else.”

Coffman said that once ticks get established, they can be fairly difficult to eradicate, with or without any diseases they may be carrying.

“They (ticks) came from Africa which has a harsh climate, so we know they know how to survive,” Coffman said.

— December 22, 1999, Gainesville, FL Sun
(submitted by Alan Salzberg, New York, New York)

BULGES’ GIVE AWAY TORTOISE SMUGGLER

When Barbados pet store owner Rodney Carrington tried to enter the United States, he told customs officers at Miami International Airport he had nothing to declare. But his pants said otherwise, officials said.

Carrington was arrested Friday after officers said they found 55 red-footed tortoises stuffed in his pants. They became suspicious, federal prosecutor Thomas Watts-Fitzgerald said, after they noticed that Carrington’s pants were wriggling and had “some ominous bulges...in unusual places.”

A search found that Carrington was wearing two pairs of pants and that he had stuffed the 4-inch-long endangered reptiles between the inner pair and outer pair.

Carrington then confessed, officials said, saying he had planned to try to sell the tortoises. They fetch about \$5 in Barbados, but go for \$75 in the United States.

He was charged with smuggling and violating a treaty prohibiting the transportation of endangered species.

The tortoises were given to the U.S. Fish & Wildlife Service.

— Herpdigest No. 27, December 1999
(submitted by Alan Salzberg, New York, New York)

PRAISE THE LORD AND PASS THE DEADLY RATTLE

To enter a church and find before the altar what Milton called ‘a crowd of ugly serpents’, a box containing a writhing knot of the creatures which corrupted the Garden of Eden [sic], is, in itself, a kind of Paradise Lost.

Condemned from biblical times as the instrument of Satan and commanded by God ‘upon thy belly groveling thou shalt go’ in retribution for the temptation of Eve, it seems inconceivable that they could play any part in a Christian service.

But in the kind of America which is more Huckleberry Finn than Hollywood, they can and do. Here in the Church of the Lord Jesus in Jolo, West Virginia, the fundamentalist congregation is devoted to the now widely outlawed practice of preaching and praying with deadly snakes as a test of faith. They also drink strychnine and hold their hands in a naked flame.

It resembles a scene from Deliverance, where mountain people live lives of unfamiliar ritual way beyond social convention. And, climbing through a series of desolate villages up to the small, white chapel perched on the edge of an Appalachian mountain gully, you can almost hear the dueling banjos.

It is exactly 1 p.m. when 72-year-old Pastor Bob Elkins (whose daughter Colombia was killed in prayer at the age of 22 by a rattler) grabs his cherry-red electric guitar and twang-a-langs the start of Sunday worship.

Melissa Evans is at the piano, with Everett Blankenship on drums and Alline McCallister playing the organ. Other members of the 30- strong congregation take up cymbals, triangles and tambourines. The lusty medley of Bible-thumping favorites which follows drowns out the sound of a half-dozen timber rattlers and western diamond backs shaking their tails in percussion.

Within minutes the majority of the adults have approached the altar.

Children pelt up and down the aisle and play between the pews. There are two babies in arms.

Their parents dance with abandon, arms outstretched, feet stamping the wooden floor. They twist and spin into a trance. They talk in tongues, punctuating their unintelligible babbling with screams of ‘Praise the Lord . . . Hallelujah . . . in His Name . . . Glory . . . Pray Sweet Jesus . . . Holy, Holy, Holy’. The spirit, they say, moves them.

By 1:13 p.m., coal miner Richard Evans (bitten 22 times) is edging closer to the snake boxes. Watched by his

sons Tyler, nine, and Nathan, four, from no more than 8ft away, he unhooks a frail, brass clasp and sticks his hand into a nest of rattlers. He snatches one and hugs it to himself, dancing harder and faster.

Fellow worshippers take the rest and then open the box of copperheads.

Pick up one copperhead and you pick up them all. A bundle like a gorgon's head writhes from hand to hand.

For maybe 45 minutes the snakes coil and sway among the congregation, tongues flicking in and out, beaded, black eyes staring into unseeing human ones.

They are wrapped around necks, arms and musical instruments. They are waved in the air, pushed into faces.

Two men exchange snakes by throwing them at each other. A bite from any one would be enough to kill [sic] and there are at least a dozen in circulation. But the handlers display neither fear nor pride: their religious fervor is all-consuming.

They are shrieking and wailing their prayers aloud, their grimace and openly weep.

Slowly the snakes are placed back in their boxes. Pastor Elkins (bitten 133 times) chooses a text from Romans, but adds his own, highly personal interpretation. 'You either got it or you ain't. You're either in or you're out. We are earnestly contending for the faith here . . .' His congregation of 30 listen intently as he paces the stage. He is wearing a pristine black suit and, rather alarmingly, a pair of patent leather shoes.

His feet look as if they ought to be on Come Dancing. Later, when he takes to the floor, I realize they are.

He spent 44 years down the coal-mines of West Virginia. He has hands the size of manhole covers, the legacy of his working life. They cradle a microphone, very American, but entirely unnecessary in such a small church.

'I have the Word,' he booms, 'the Word is with me today, I tell yah.' I ignore the Word in favor of reading the various signs which adorn the walls.

The most important is the imprint of Mark, Chapter 16, Verses 17 and 18 (believed by most scholars to be invalid, later additions to the original Gospel), which explains the serpents, strychnine and fire.

'And these signs shall follow them that believe; In my name shall they cast out devils; They shall speak with new tongues; They shall take up serpents; And if they drink any deadly thing, it shall not hurt them; They shall lay hands on the sick and they shall recover.' As Richard Evans explains to me: 'You are not a true Christian if you only believe the bits of the Bible you want to. You have to believe each and every word because, if one part is true, then it is all true. If you eat the Book whole, then your mouth will be sweet and your belly better.' The other notices, handwritten, are equally dogmatic. 'Women not allowed to wear short sleeves, jewellery or makeup. No gossiping. No tale-bearing.

No lying. No backbiting. No bad language or by-words,' reads one.

Three quarters of an hour later, for no discernible reason, the snakes come out again. There is a small, domestic altercation between Ray McCallister (bitten 86 times) and his wife Alline (bitten only three times).

He has been a snake devotee for more than half a century. He is 81 and dancing so wildly I fear that if a snake doesn't get him, a heart attack will.

Sadly the spirit hasn't moved Alline for several weeks now. Ray is determined she is going to take up a serpent.

She is equally adamant she won't, despite a supportive gang at either elbow. There are a few cross words and an exchange of dark looks. Pastor Elkins intervenes, pointing out that the desire to grab a snake will return when the Lord is good and ready.

Now Ray is a different story. Give him a snake and he doesn't want to share it. Others are passed round regularly, but he likes to keep his for what looks to me a little like showoff time.

But the real showoff proves to be Melissa Evans. It is more than three hours since the service began and the drumming has reached a crescendo.

She climbs on to the stage, where she whirls like a dervish, her waist-length brown hair swinging in a sheet behind her. She grabs a jar of clear liquid and takes a gulp. It is strychnine. She falls to the floor moaning and lies there for a moment.

Then she springs to her feet and sets fire to a rag stuffed in a bottle of spirit.

When it is well ablaze she plunges her right hand into the heart of the flame.

She marches the length of the stage, screeching and gibbering. Finally she takes her blackened hand out of the fire and turns to her husband, Richard, who grasps it and holds it aloft. She shows no pain.

Her fellow worshippers are in awe.

Me, too.

This type of worship began in 1908 when itinerant preacher George Went Hensley first grabbed a rattlesnake from White Oak Mountain near Oolte-wah, Tennessee, in accordance with Mark, Chapter 16, Verses 17 and 18.

He survived the encounter to become the father of the snake-handling movement, but died, not unexpectedly, from a snake bite in 1955. All but two states - West Virginia and Georgia - have now outlawed his teachings.

There have been almost 80 recorded deaths from snake venom and about five from strychnine poisoning. Most of Pastor Elkins's congregation have been bitten, but lived. His stepson Dewey Chafin (bitten around 140 times) shows me a patchwork of double puncture wounds and a withered finger as evidence.

'I have never been to hospital. I am dependent on God.

If I get bit, that's all right. I might die, but that's all right, too,' he tells me.

The last death among Jolo's congregation was Ray Johnson, 'called by the Lord' in 1991 when a rattler fanged him twice. 'We don't know why. He was a good man, prayed as hard as anyone,' says Pastor Elkins.

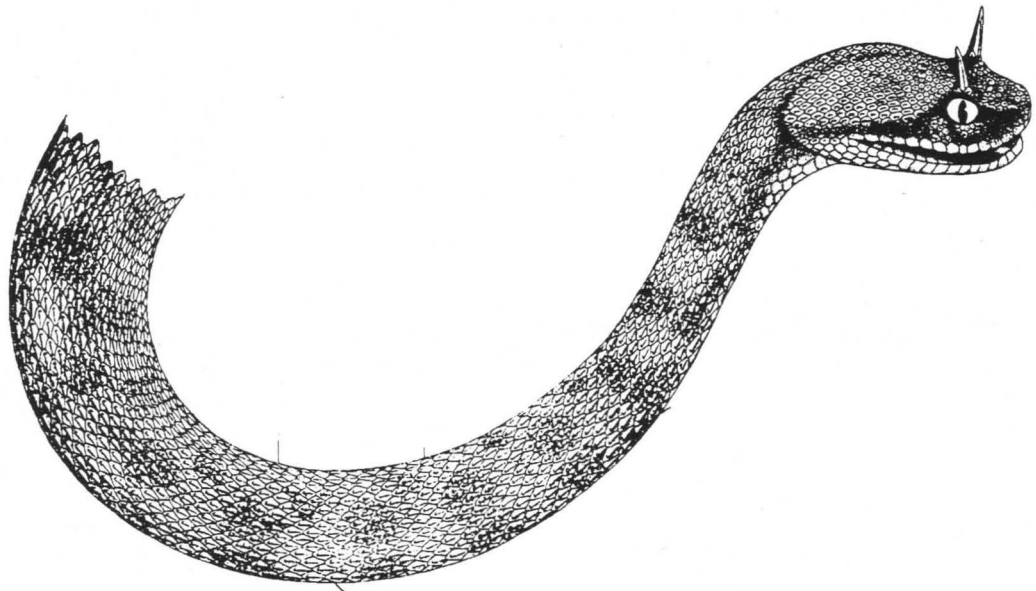
The thing which surprises me most is the age of the worshippers. I had expected to find a dying religion, but the Church of the Lord Jesus is filled with young families.

Melissa Blankenship is 21 and has three children, Holly, four, Dakota, two, and one-year-old Jordan. Her youngest suffers from cystic fibrosis, but she is so persuaded by her faith that she has refused to let doctors treat him. She believes the words of Mark, 'They shall lay hands on the sick and they shall recover', and she is waiting for a miracle.

She said: 'Taking up snakes gives you authority over the Devil. If I get bit, then I get bit. I am not worried about my babies because, if the Lord takes me, I know he will provide.' Her children, like all the youngsters in the church, are beautifully mannered.

And, if they grow up harboring as fervent a belief in serpent prayers as their parents, that will be sufficient to ensure this bizarre religion - unlike some of its followers - lives on.

— Mail on Sunday, 5 December 1999
(submitted by Alan Salzberg New York, New York)



FEATURE ARTICLES

Update on *Lacerta* in Topeka, Kansas

James E. Gubanyi
2501 Burnett Road
Topeka, Kansas 66614

European Lacertas (*Lacerta* sp.) and Italian Wall Lizards (*Podarcis sicula*), which are not native to Kansas, probably escaped from captivity in the late 1950s to early-middle 1960s from Quivera Specialties Company, Topeka, Kansas and established breeding colonies in nearby residential areas. The first confirmed specimens from Topeka were received at the University of Kansas Natural History Museum Division of Herpetology in 1973 (Collins 1974). Conant and Collins (1991) noted that that *Lacerta* had not been observed in Topeka in over 10 years and for this reason did not include an account of the Green Lacerta in their field guide. This lizard was subsequently rediscovered in Topeka in 1996 (Gubanyi 1996, Gubanyi and Gubanyi 1997).

Quivera Specialties was a biological wholesale and retail business owned by the late Charles Burt, who traded and sold live specimens of aquarium plants, insects, amphibians, crocodylians, lizards, snakes, birds, and mammals. These specimens were sold as pets to people throughout the United States. He preserved many other specimens and these were donated or sold to universities, museums, and hobbyists. Lacertas and Wall Lizards were among the animals he sold.

Dr. Burt, a native Kansan, received a Ph.D. from Michigan University and was an assistant curator of herpetology at the American Museum of Natural History. He opened Quivera Specialties in 1939 in Winfield, Kansas and exchanged specimens with collectors in Germany, France, Spain, Italy, and other countries before World War II.

During the summer of 1962, I worked for Dr. Burt at Quivera Specialties at 4010 West 21st Street in Topeka. My duties included cleaning and sterilizing glass bottles, utensils, and pet dishware and cleaning and organizing the business' back yard, which was not neat nor very clean. Piles of wood, mixed with animal and pet devices, littered the yard. I also cleaned pet cages as well as provided fresh food and water. I did not see escaped lacertid lizards at this time.

I am sure *Lacerta* and *Podarcis* escaped while being fed. They are wary and fast. I have had lizards escape when I have opened the top lid or doors of cages. When I worked at the Topeka Zoo in 1965-66, I remember receiving calls from residents of the area near Quivera Specialties about finding large emerald-green lizards in a back yard and perching on a wooden fence. We did not keep *Lacerta* or *Podarcis* at the Topeka Zoo at this time.

During the summer of 1998, I was contacted by Larry Miller about obtaining young (three or fewer weeks of age) *Lacerta* for Dr. Guntram Diechsel (German herpetologist) to determine whether the species was *L. viridis* or *L. bilineata*. The following summer, I obtained permission from owners of two residences in the vicinity of the former location of Quivera Specialties to search for juvenile *Lacerta*. On 12 August, 1999, I observed what appeared to be a nesting area under a driveway at one of these residences. I returned to the residence several times over the next two weeks and on 25 August, captured one juvenile *Lacerta*. Total length of this specimen was 94 mm with a snout-vent length of 34 mm.

I captured three more juveniles at a different residence (ca. 100 m from the original capture site) on 3-4 September.

These specimens were presented to Dr. Deichsel on 11 September and he determined that they were *Lacerta bilineata*, not *L. viridis*, as had been previously presumed. The specimens were documented photographically by both Miller and Deichsel.

I believe that these lizards are well-established at the aforementioned sites and will continue to exist as long as sufficient cover and food sources remain. The Topeka area shares a similar seasonal cycle as does southern Europe where *L. bilineata* occurs.

The four juveniles will be released at their original capture sites in summer 2000, after data on their growth is taken. The adult specimen captured by me remains alive in my collection and will be donated to the Division of Herpetology, Natural History Museum, University of Kan-

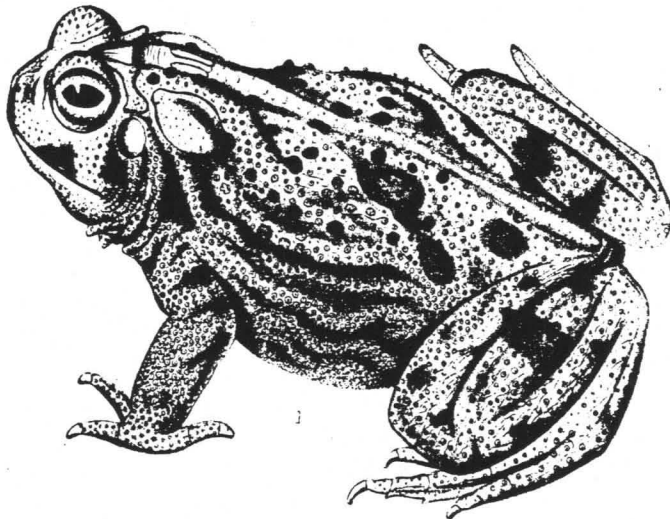
sas subsequent to its death.

Acknowledgments

I wish to thank Larry Miller for taking photographs and Dr. Deichsel for examining the specimens. I would also like to thank Keith Coleman for his help proofing this article, Tim Wray for information contribution, and Carol Cowger for typing and computer skills. I would also like to thank Joseph T. Collins for advice and encouragement.

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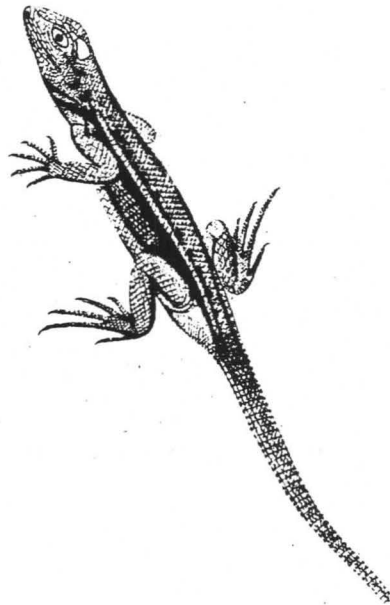
SHORT COMMUNICATIONS

Garter Snake Hybridization

On 5 July 1999, a litter of 7 neonates were born to a female *Thamnophis sirtalis* as a result of a mating with a male *Thamnophis radix* at the Live Snake exhibit at the Natural History Museum, University of Kansas, Lawrence. Six neonates were born alive and one specimen was still-born. The latter animal was preserved and will be deposited in the herpetology collection at the Natural History Museum. The female (ACU 105) was received as an adult in May 1996 from Sedgwick County, Kansas and was only kept with the male *T. radix* (ACU 139), which originated in Ellis County, Kansas and was a long-term captive.

Copulation was not observed in this pair but relatively constant courtship was observed in January-February of the year. As the normal gestation period for *T. sirtalis* has been recorded as being between 87-152 days, with the lower range being more normal for captive specimens (Slavens 1983, Tinkle and Gibbons 1977), it is likely the impregnation occurred in late April-early May. Interestingly, neither snake has ever been subjected to artificial hibernation, which is thought to enhance reproduction in temperate zone squamates (D. Grow, pers. comm.). Elsewhere, it has been my experience that hibernation is not necessary for successful captive reproduction of *T. sirtalis*.

Smith (1946) records three apparent hybrid specimens as a result of wild mating of Kansas *T. marci* and *T. radix*. The mating and birth reported here confirm that there appear to be no physical reproductive barriers to mating between *T. sirtalis* and *T. radix* nor genetic barriers to such births where these species are sympatric.

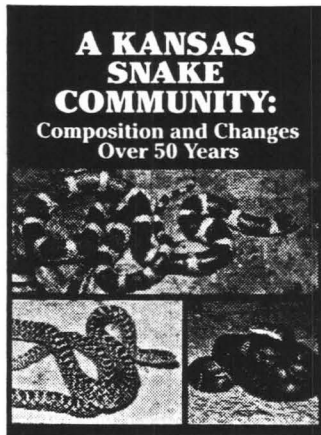


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