#### KANSAS HERPETOLOGICAL SUCIETY NEWSLETTER NO. 65

Uctober, 1986

#### ANNOUNCEMENTS

### The 13th Annual Meeting of the Kansas Herpetological Society

The 13th annual meeting of the KHS will be held 15-16 November 1986 at the Museum of Natural History of The University of Kansas in Lawrence, Kansas. As usual, this meeting is free and open to the public. Please encourage all interested persons to attend. The meeting will be held in Downs Auditorium of the Museum of Natural History, and the social in the Big 8 Room of the Kansas Union. This is also the weekend of the KU vs. Nebraska football game, so participants are encouraged to arrive on Saturday morning to secure a decent parking place, and not leave campus until after the game. Food will be available in the Kansas Union dining area, and there are a couple of restaurants within walking distance of the Museum.

The schedule is as follows:

SATURDAY MORNING, 15 November, Downs Auditorium

- 8:30 REGISTRATION at entrance to Downs Auditorium
- 9:15 Welcome by KHS President MARTIN CAPRON (Oxford)
- 9:25 Discovery of two snakes new to Kansas. JOSEPH COLLINS (Lawrence)
- 9:35 Feeding modalities in captive snakes. JAMES B. MURPHY (Dallas Zoo)
- 10:20 BREAK and GROUP PHOTOGRAPH (by LARRY MILLER, Caldwell)
- 10:55 A Costa Rican odyssey: Its a jungle out there! OLIN KARCH (Emporia)
- 11:30 BREAK for lunch--it is suggested to dine in the Student Union or other near to campus location, or you will lose your parking place.

#### SATURDAY AFTERNOON, 15 November, Downs Auditorium

- 1:00 Radiotelemetric tracking of an alligator snapping turtle in Kansas. MARTIN CAPRON (Oxford)
- 1:20 A report on the 1986 survey of Cheyenne Bottoms Wildlife Refuge, Kansas. KELLY IRWIN (Manhattan)

- 1:45 BREAK
- 2:10 KHS Business Meeting and Election of 1987 Officers, KHS President MARTIN CAPRON presiding.
- 2:45 The amphibians and reptiles of Franklin County, Kansas. ERROL HOOPER, JR. (Ottawa)
- 3:05 COLOR SLIDES of herpetologists and the creatures that make them social outcasts. Bring 10 or 15 of your best (or worst) color slides and tell us about them.
- 3:45 TOUR of the KU Animal Care Unit amphibian and reptile facilities. JEFF WHIPPLE (Eudora)
- 5:00 BREAK for dinner

#### SATURDAY EVENING, 15 November, Big 8 Room, Kansas Union

7:30 KHS AUCTION AND SOCIAL. This annual event will be held in the Big 8 Room of the Kansas Union, which is just north of the Museum of Natural History. Free refreshments, consisting of soft drinks and beer, will be available. WARNING: While everyone is invited to attend the auction, only those individuals 20 years of age or older may drink beer. Proof of age will be required. No other alcoholic beverages may be brought onto the KU campus—it is against the law. Please do bring goodies for the auction, such as books, slides, photos, T-shirts, artwork, snake sacks, herp reprints, etc. Support the auction and KHS!

#### SUNDAY MORNING, 16 November, Downs Auditorium

- 9:00 REGISTRATION continues—you may pay your 1987 dues to KHS Secretary/Treasurer Larry Miller and begin the new year with a clean conscience.
- 9:30 The ornate box turtle, a new official state symbol for all Kansans. LARRY MILLER (Caldwell)
- 10:00 Pet shop exploitation of reptiles and amphibians. ERIC RUNDQUIST (Wichita)
- 10:20 BREAK
- 10:45 A Reptile and Amphibian Miscellany. HANK GUARISCO (Lawrence)
- 11:15 ANNOUNCEMENTS and Adjournment. Have a safe trip home.

If you need additional information about the KHS meeting, contact Joseph Collins at the Museum of Natural History, The University of Kansas, Lawrence, Kansas 66045, or phone (913) 864-4540.

#### Report of the Nominating Committee

The KHS Nominating Committee will present the following names as candidates for KHS offices to be voted on at the KHS Annual Meeting in Lawrence on 15 November:

For President-Elect
Jeff Whipple
Chris Stammler
For Secretary/Treasurer
Larry Miller

### Help KHS Find Newts

The Kansas Fish and Game Commission Nongame Wildlife Program seeks applications for, among other projects, a detailed distribution/habitat survey of the central newt (Notophthalmus viridescens louisianensis). KHS is eligible to apply for funding from this Program, and KHS members in Eastern Kansas are encouraged to participate. If every KHS member in Eastern Kansas will help, we feel the Society could produce a valuable study of this species, which is endangered in Kansas.

Here's a perfect way to help KHS while you're out herping in the Spring. We're asking you to volunteer to go out of your way to seek these animals during the breeding season, collect data in a standard format, and report it to a KHS clearinghouse to be organized by a member in Lawrence. Knowledge of potential habitat in which newts are present or absent is useful. Financially, the Society would apply for a modest stipend to cover some minor expenses involved and an amount which would go into the KHS treasury to provide a bigger newsletter, help with better meeting programs, etc. No money would go to any individual KHS member.

Persons interested in volunteering for this project should contact the Newsletter editor (see address inside front cover) in the next few weeks.

#### Kansas Wildlife Heritage Month

Kansas Wildlife Heritage Month is "a cooperative effort of conservation organizations whose purpose is to increase the public's awareness of and appreciation for the wildlife and associated natural resources of Kansas by focusing on a series of activities in March" of each year. The theme for 1987 will be <a href="Wetlands">Wetlands</a>. Kansas has 28.200 acres of wetlands, fewer than any other state (including Puerto Rico!). Of these wetlands, 1,200 acres have medium to high potential for conversion to cropland. Since 1955, Kansas has lost an estimated 40 percent of its wetlands to conversion, depletion and stream alteration.

The motto of Kansas Wildlife Heritage Month is "Habitat  $\underline{-}$  A Place to Grow." Kansas Wildlife Day in 1987 will be Wednesday,  $\overline{18}$  March. There will be displays relating to this event on the first floor of the Capitol Building in Topeka from 10 a.m. to 4 p.m. on 18 March.

The public is encouraged to attend Kansas Wildlife Heritage Month meetings to provide input into future activities. The meeting schedule for the remainder of this year is as follows:

October 20 Manhattan (Room 202, Memorial Union, KSU)
November 18 Topeka (location to be announced)
December 15 Manhattan (Room 202, Memorial Union, KSU)
January 20 Hays (location to be announced)
February 17 Manhattan (Room 202, Memorial Union, KSU)

For further information, contact Steven G. Sorensen, P.O. Box 382, Concordia, Kansas 66901, home phone (913) 243-2180, work (913) 243-3857; or Maure Weigel, Rt 1 Box 199, Tescott, Kansas 67484, home phone (913) 283-4894, work (913) 827-8373.

#### Herps on Stamps

Fiji and Pitcairn Island have recently issued a series of postage stamps featuring, among other things, some herps. They are the ground frog (Platymantis vitianus), burrowing snake (Ogmodon vitianus), spotted gecko (Lepidodactylus manni), crested iguana (Brachylophus vitiensis), blotched skink (Emoia campbelli) and the speckled skink (trossula). The set of six mint stamps is F\$2.43 (set of 6 cancelled for the same price), first day cover for F\$2.67. You must remit in Fijian currency, which you can do via your bank. Exhange rate currently is around US\$1 = F\$1.03. Send a bank draft or International Money order payable to the Postmaster, Philatelic Bureau, GPO Box 100 Suva, Fiji. Request Philatelic Bulletin Number 78 when ordering. This is a very nice pamphlet containing interesting information on the natural history and status of the six herps selected for stamps.

#### Salamander Photograph and Information Request

A member of the Dutch herpetological association "Lacerta" is looking for photographs and information on several kinds of salamanders. He is preparing a slide presentation for a meeting of the society, and needs shots of animals in their natural surroundings (Ambystoma maculatum, Ambystoma opacum, Ambystoma talpoideum, and Pseudotriton ruber schencki). In particular, he wants information on Pseudotriton ruber schencki: time of mating and description of courtship, and their behavior in relation to the weather. If you can help, contact: Fred Boekhout, Malmopad 5, NL 3067 PW Rotterdam, Netherlands.

#### Herpetological Book Sale

KHS member William R. Turner has announced that he is offering for sale much of the herp library he has collected over the last 30 years. If you send him a stamped, self-addressed envelope, he will send you a list of titles and prices. Contact: William R. Turner, 2191 E Floyd Avenue, Englewood, Colorado 80110, phone (303) 781-8550.

KHS Newsletter No. 65

#### Amphibians of Kansas Poster Now Available

The long awaited full-color poster featuring the Amphibians of Kansas is now available from the Kansas Fish and Game Commission. The large poster shows all 28 species of frogs, toads and salamanders found in the state in excellent color paintings produced by KHS President Martin Capron, with the assistance of Joseph Collins (former KHS president). The cost of this superb poster is only \$5.00, and it can be ordered from The Kansas Fish and Game Commission, RR #2, Box 54-A, Pratt, Kansas 67124.

#### Information Needed on Captive Breeding

Chris Mattison, the author of Snakes of the World (reviewed in KHS Newsletter No. 64) and The Care of Reptiles and Amphibians in Captivity (reviewed in KHS Newsletter No. 63) is seeking information for a book on the breeding of captive snakes. In order to make the book as comprehensive as possible, he is requesting the following information for any species of snakes you may have successfully bred:

-were the adults hibernated or cooled off?

-approximate age and size at first breeding

-number of eggs or young

-incubation period/temperature

-approximate size of hatchlings/neonates

-special requirements of adults and/or young

For multiple breedings, either an average, or two or three typical sample results would suffice. For rare or rarely-bred species, even incomplete data is welcome.

Please send data by 31 December 1986 if at all possible. This is a very worthy project, and your input will increase the value of the book for all its readers. The address is: Chris Mattison, Department of Zoology, University of Sheffield, Sheffield, S10 2TN, South Yorkshire, ENGLAND.

### Checklist of Turtles of the World

A comprehensive guide to the scientific nomenclature of the turtles of the world, including information on original citations, type specimens, type localities, distribution (with maps) and pertinent literature, is now available. A Checklist with Distribution Maps of the Turtles of the World by John Iverson includes nearly 300 pages and over 260 maps. It is available for \$20.00 (includes shipping) with an extra charge of \$10.00 for foreign airmail, from: John B. Iverson, Department of Biology, Earlham College, Richmond, Indiana 47374.

#### Cannibalism in Reptiles

A new Herpetological Circular is available from the SSAR, <u>Cannibalism in Reptiles: A Worldwide Review</u>, by Joseph C. Mitchell. This is a comprehensive compilation of records of the occurrence of cannibalism in reptiles, including a review of the literature, discussion of terminology, and a listing of 192 species accounts, with information on prey

size, sex, and relevant ecological data. Make checks payable to "SSAR" for \$4.00 and order from: Dr. Douglas H. Taylor, Department of Zoology, Miami University, Oxford, Ohio 45056.

#### Help Wanted

A research project using shed skins from black rat snakes (Elaphe obsoleta) is being conducted by an investigator at the KU Animal Care Unit. We need to collect 60 black rat snakes so that their bi-monthly sheds can be made available. For every snake donated for this purpose, the research investigator will donate \$8 to the Kansas Herpetological Society. The project does not harm the snakes, as the research is on the shed skin. The animals will be housed in the Animal Care Unit facility where their husbandry and health can be monitored. If you have black rat snakes that can be used in this project, please contact Jeff Whipple by phone or mail. The address is:

Jeff Whipple, Amphibian and Reptile Technician Animal Care Unit B054 Malott Hall University of Kansas Lawrence, Kansas 66045

Phone: Animal Care Unit (913) 864-5587

Museum of Natural History (913) 864-3573

Home (913) 542-3478

# J.T. Collins Named Conservationist of the Year

KHS member Joseph T. Collins of Lawrence has received the Kansas Wildlife Federation Conservationist of the Year award for 1986. This award recognizes the achievements of the individual considered to have made the most significant contribution to the cause of conservation of natural resources in Kansas. Collins will be honored at the annual Kansas Wildlife Federation banquet 11 October in Topeka, Kansas.

Collins earned a degree in zoology from the University of Cincinnati, and came to Kansas in 1968 as the preparator for the Division of Herpetology of the Museum of Natural History at The University of Kansas. Currently, he is a zoologist and publications editor at the museum.

In a recent newspaper interview, Collins said he had long been interested in natural history and conservation causes. He credits the one and a half years he spent editing and writing Natural Kansas (reviewed in KHS Newsletter No. 62) to helping him earn the award, along with his other conservation efforts. Collins has been to all 105 counties in Kansas. "I've photographed in them. I've chased wildlife in them and I've camped out in them," he said.

As a 19-year-old, Collins was one of the founding members of the Ohio Herpetological Society, which began publishing a journal with a membership of only 25. In 1967, they changed the name to The Society for the Study of Amphibians and Reptiles, and by 1978 it had become the largest of the herpetological societies with a membership of 2,600 in 20 countries.

Collins served as president of the Kansas Association of Biology

Teachers in 1980, has been on the Kansas Fish and Game Commission Herpetology Committee since 1975, and was KHS President in 1983.

# Ornate Box Turtle Capital of the World

A proclamation making Caldwell, Kansas the Ornate Box Turtle Capital of the World will be signed by Caldwell Mayor Aubra H. Pierce at a special ceremony in front of the Caldwell Elementary School at 10:00 a.m. on Friday, 24 October 1986.

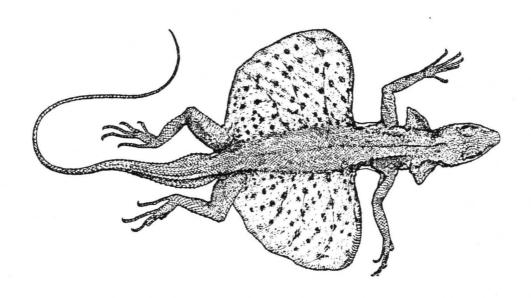
The ornate box turtle, and Caldwell, gained much attention during the 1985-1986 school year when the 6th grade class led a successful campaign to have the turtle named the Kansas State Reptile. A bill designating the ornate box turtle as the state reptile was written and passed by the Kansas House and Senate in early Spring 1986, and signed into law in a ceremony in Caldwell by Governor John Carlin on 14 April 1986.

The events being planned for 24 October are to give a lasting recognition to all of those that were involved with the project and to the City of Caldwell. Lewis Stookey, Caldwell Elementary School Principal will start the activities at 10:00 a.m.

The signing of the proclamation will take place the first morning

of the annual Caldwell Homecoming weekend.

For further information about the ceremony contact: Larry Miller, Teacher, Caldwell Elementary School, One North Usage, Caldwell, Kansas 67022, phone (316)845-2414 (between 8 a.m. and 4 p.m.).



#### KHS BRINGS YOU NEWS OF THE WORLD...SPECIAL GIANT TURTLE EDITION

#### Excitement Over Rare Turtle Discovery

The discovery of an alligator snapping turtle in Montgomery County has caused tremendous excitement among officials of the Kansas Fish and Game Commission, the Museum of Natural History in Lawrence, and the Kansas Herpetological Society.

The turtle was found about 7 a.m. Thursday by C. Douglas Blex, area manager for the Fish and Game Commission, and his son, Jason, on the

side of the road about 20 feet from the banks of Onion Creek.

Blex loaded the turtle onto his truck and took it to the Ralph Mitchell Zoo. Upon determining exactly what it was, he and Ned Stichman, park superintendent, called the Museum of Natural History at the University of Kansas in Lawrence.

Their contact person at KU was Joseph T. Collins, professor of vertebrate zoology at the museum, and he immediately indicated he would be in Independence on Saturday to take the turtle back to Lawrence.

"Joseph can hardly wait to get down here," Blex said.

The finding of this alligator snapping turtle will be the fourth documented in the state of Kansas, and to make it even more interesting and impressive, it will be the first live such turtle ever documented.

"These turtles have been on the threatened species list since 1978, and they are the only reptile currently protected by the state of Kan-

sas," Blex said.
"In fact," he continued, "the federal government is considering

putting them on their list in a couple of years."

Two of the other documented findings came from upper reaches of the Neosho River, one of which was found in Lyons County. It wasn't quite clear what part of the Neosho River the other was found, but the third was located near the banks of the Arkansas River in Cowley County...

Although it's not exactly known what will happen to the turtle, noted the other three skeletons are on display at the museum at

Lawrence.

Martin Capron, president of the Kansas Herpetological Society, proposed an interesting idea during a stop in Independence on Saturday.

"I haven't even seen the thing yet," Capron said. "I can hardly wait to see it."

Capron currently has a grant pending with Fish and Game to study the alligator snapping turtles--a chore he tried before.

"I had a grant two years ago to study these turtles, but I was unsuccessful in finding one," Capron said.

Capron indicated that he would propose that state officials tag the turtle and release it in the water at the site of capture.

"I'm going to propose we attach a small transmitter to the turtle, release it in the water at the site of capture and track it with a radio tracking device," he said.

"That way we could track it all the time and study their habits," Capron added.

Neither Blex, Stickman or Capron could say exactly what Collins would suggest they do with the turtle.

"We'll just have to wait and see," Capron said.

-- Independence [Kansas] Reporter, 13 April 1986

# Giant Turtle to Snap Up KU Display

If Stephen King could see this creature, he'd have the makings for a new novel.

And if he were in Lawrence this weekend, he'd have a chance. Hor-ror-story writers and everyone else will get a chance Sunday to see the largest live turtle found in Kansas in the 20th century...And relax, the big snapper isn't as mean as she looks.

After she is displayed, the 60-pound alligator snapping turtle...will be tagged, photographed, fitted with a radio transmitter and finally released where she was captured.

The turtle, which hasn't been given a name, was...brought to KU by the museum's zoologist, Joseph Collins, who is a noted authority on Kansas wildlife...

"We're so excited about getting this turtle because they are so secretive," he said. Little is known about the giant turtles even though they are native to the rivers of southeast Kansas. That's because they burrow in the mud of river bottoms and hardly ever come up.

"They just sit down there in the mud, waiting for food. We don't know if they are rare or if they're just shy." he said. "That's why they're such a curiosity. No one knows anything about them."

--Lawrence Journal-World, 18 April 1986

#### Alligator Snapper Found in State

Reports of timber wolves and mountain lions met with skepticism from wildlife officials. But in early April a critter whose presence in the state was only suspected was found waddling down a dirt road and captured.

It's ugly, mean-tempered, and can trace its family tree back to the dinosaur era...

The turtle...is now at the University of Kansas, being poked and prodded (carefully, I assume) by zoologist Joseph Collins, who has named it Omar...

--Topeka Capital-Journal, 24 April 1986

#### Turtle Crawls Into State Record Books

Kansas Fish and Game biologist Doug Blex knew immediately the creature he saw on a Montgomery County road was no ordinary turtle. Its shell alone was nearly two feet long.

Including head and tail, it measured more than four feet...

Blex said he estimated the turtle's head to be more than six inches wide. He had a healthy respect for the animal's sharp, powerful jaws.

"It made a couple of pretty good lunges, trying to bite me," Blex said, "but I kept my distance. One that size could easily take a finger. Finally, I let it bite onto a shovel nandle and I lifted it into the pickup while it held on..."

Dr. J.T. Collins took the huge trutle back to holding facilities at the Kansas Museum of Natural History..."I'm sure there have been other alligator snappers caught and eaten by fishermen," Collins said, "but those haven't been documented so this is only the fourth one on record."

Collins said that the state's winter cold is the main reason for the alligator snapper's rarity in Kansas...

-- The Eldorado Times, 2 May 1986

#### Giant Turtle Appears: Fourth Time in 100 Years

...The Montgomery County turtle will be fitted with a radio transmitter and released near where it was found, allowing researchers to monitor its movements. Little is known about the day-to-day habits of alligator snappers. The study is funded through a \$1,400 grant from the Kansas Nongame Wildlife Improvement Program. Money for such projects comes from the Chickadee Checkoff on state income tax forms.

The transmitting and receiving devices will be loaned to Kansas University by the Milwaukee Public Museum. The turtle will be monitored for about six weeks....

Adult alligator snapping turtles have no natural enemies. The main threat to limited Kansas populations is pollution and other alterations of the state's streams.

-- The Kansas Sportsman, May 1986

## The Turtle Assignment

This news item came over the Associated Press wire last week: LAWRENCE, Kan. (AP)--Although it is no longer the star attraction at the Museum of Natural History...a 60-pound alligator turtle is still being watched as it makes its home in Montgomery County.

Two men have been assigned...to follow the turtle and monitor its living habits through radio signals and a receiver attached to its body.

"They'll be camping along the creek with her and when she moves, they're going to move with her," said Joseph Collins, zoologist and an authority on Kansas wildlife.

The item went on to report that:

- 1. The turtle has been moving about  $100\ \text{yards}$  between midnight and dawn. ("When you look at the turtle, it's really moving pretty quickly," Mr. Collins said.)
- 2. The reptile is believed to be one of the largest ever found in the state.
- 3. The turtle is moving downstream toward the Verdigris River near the Oklahoma border.
- 4. At last report the turtle had settled into about two feet of water to wait for fish, crawdads and other food.

Imagine how a rookie Game Warden might react to such an assignment. Suppose you have just graduated from Emporia State University with a biology degree and you get a job with the Fish and Game Commission. You report to the head office in Topeka. The boss puts you into a pickup, drives you down to a river bank at Independence, points toward the water and says, "Follow that turtle!"

"Why?" you ask.

The boss snaps back: "Because I told you to! Watch the turtle and keep a careful record of what it does." Whereupon the boss drives away and leaves you, the rookie, alone on the river bank.

Many questions well up in your mind: Must you record every move the turtle makes? How do you know what the turtle is doing when it is out of sight in deep water? Do you get involved in the turtle's life or leave it completely alone?

Better safe than sorry. You begin with detailed notes:

"2:05 P.M.--Turtle moves right-front flipper in an arc about 2 inches long.

"2:14 P.M. -- Turtle yawns.

"2:17 P.M.--Turtle turns head to look at rookie game warden on river bank. Rookie yawns."

After two hours of this you are about to doze off when the action begins!

"4:21 P.M.--Turtle spies crawdad and gives chase.

"4:23 P.M.--Crawdad, angered, pinches turtle on snout.

"4:23 1/2 P.M.--Turtle, angered, eats crawdad.

"4:25 P.M. -- Turtle belches."

---

This sort of thing continues until about 6:30 when the turtle gets hooked on a fisherman's trotline.

You are now faced with a real crisis. Do you rescue the turtle at the risk of disturbing the balance of nature, or do you leave it there to die? If the turtle dies, you may be out of work. Into the river you go, naked as a jaybird.

Few people can imagine now much splashing and thrashing around it takes to unhook a 60-pound trutle from a trotline, especially when the turtle has no idea that you are there to help it.

After an hour and 35 minutes you finally drag the turtle out onto the bank where you are horrified to see that it has stopped breathing. Because you do not know how to do artificial respiration on a turtle, you try mouth-to-mouth resuscitation.

Just then, a farmer's wife appears on the river bank with her fishing pole. She looks down, sees a naked man kissing a 60-pound alligator turtle, screams and runs away.

At that point you decide to go into another line of work.

-- The Gazette [Emporia], 16 June 1986

# Plans to Observe Turtle May Be All Washed Up

Heavy rain and high waters in southeastern Kansas have resulted in a loss of contact with a rare turtle...

Martin Capron, field biologist for the [Fish and Game] commission and head of tracking operations for the turtle, said that southeastern Kansas had received more than 24 inches of rain since May 15, when he arrived in the search area. The normally shallow waters of Onion Creek, just southwest of Independence, are now more than 8 feet deep.

The transmitter attached to the turtle does not give a strong enough signal to pick up if Omar is in more than 4 feet of water, Capron said..."A turtle of Omar's size and strength has the ability to go anywhere it wants," he said.

It is possible that they may not be able to relocate Omar, even after the waters recede. Omar was named before her sex was determined.

Although actual tracking of the turtle has been minimal because of rain and mud, they did determine she could move 100 yards in 45 minutes.

"It's more than we knew before," Capron said. "She does most of her moving between midnight and 6 a.m. During the day she rests under logs in shallow water."

Before they lost her, Capron and Kelly Irwin, a former KU biology student now enrolled at Kansas State University, were to track her with a radio receiver and antenna to try and discover her breeding and moving habits...

Capron said tracking Omar was some of the most difficult field work he had had to do.

"This place is buggier, rainier, grassier and muddier than anyplace I've ever worked before," he said. "Even the tropical rain forests in Africa didn't pose some of the problems I've had this time around..."

Irwin said that if Omar had been fitted with a more expensive fish transmitter, instead of a waterproof mammal transmitter, she would have been easier to track.

The fish transmitter would enable them to find  ${\sf Umar}$  in deep water and find her from a distance. The mammal transmitter can only be picked up in shallow water.

-- The University Daily Kansan

#### Low Water Raises Hope for Turtle

Low waters in a creek near Independence have Kansas University researchers hoping they can locate Umar...

August promises the lowest waters of the year, though, and the best chance to find Omar, Collins said...Museum officials calculate the turtle is about six miles up or down stream from where he was lost.

"We figure it could travel about a hundred yards a night," he said.
"I do believe he is down there," Collins said. "All I can do is wait by the phone and hope to hear that someone has hit paydirt."

--Lawrence Journal-World, 30 July 1986

#### <u>High Water Sinks Hopes of Finding KU's Giant Turtle</u>

Omar may never be seen or heard from again...

"I'm afraid it's gone for good," said Joseph Collins, a zoologist from the museum. "We'll never know what happened to it."

After several weeks of traversing the creek where Omar's radio beeper was last heard beeping, researchers have give up and declared the unusual reptile "officially lost."

...Capron is preparing a report for the Kansas Fish and Game Commission. Collins said even though the volume of data is not great, it will supplement future studies. He is optimistic there will be such studies soon.

"Now that we've found one of these things," he said, "I suspect there will be more and more."

-- Lawrence Journal-World, 25 August 1986

#### FEATURE ARTICLES

#### Some Unusual Injuries to Snakes

by Ken Brunson Kansas Fish and Game R.R. # 2, Box 54-A Pratt, Kansas 67124

Figure 1 shows the head of a bullsnake (Pituophis melanoleucus) that obviously was at one time in the death grasp of a hawk or possibly a human. When I discovered this snake underneath a strip of corrugated metal behind my office, he had sustained a recent head injury that indicated perhaps a recent encounter with a raptor. It appeared that the predator had initiated an attack on the bullsnake's head and I assume that the five-foot long snake had successfully extricated himself from the talons just in the nick of time. The snake also appeared blind in one eye from the incident. I kept the snake for a few days, at which time it fed on two mice and seemed to be healing nicely. In fact the eye, which had been completely matted, had cleared and the head wounds came along in good order. In a week I released the snake, confident it had made a full recovery.

Figures 2 and 3 depict a curious injury to an eastern yellowbelly racer (Coluber constrictor flaviventris). While I was collecting grass-hoppers in the Kingman Wildlife Management Area on 30 May, I happened onto this specimen. I first noticed the snake slithering through the grass and instinctively went for it. Grabbing it, I immediately noticed it had a bad injury ventrally not far from its head. Looking closer, I was stunned to see the wound had completely exposed the snake's beating heart. There was no connective tissue, scales, or anything between the animal's heart and the ground it was passing over. As it shook vigorously, I was afraid it would shake it's own heart completely out of it's body.

The wound itself was interesting. Approximately 5/8 inch wide and 1.5 inches long, it was almost perfectly rectangular. My first thought was that a raptor had an encounter with the racer. However, the injury seemed too perfectly and geometrically formed for this. Another explanation may be that some demented vandal had caught the animal and carefully made an incision to place the critter in misery and perhaps cause a slow and cruel death. For the sake of human conscience, I hope it wasn't the latter. It would be very difficult to believe that some layperson knew exactly where to cut a snake to expose the heart. But then again, in this day of strange animal mutilations, we shouldn't become too complacent.

I placed the animal in a snake bag, feeling that it didn't have a chance at surviving such a wound. I figured that I would at least preserve it as a specimen and thus salvage some scientific good from the situation. I left the snake in a cage over the weekend, and on Monday morning I noticed that the injury was better. In fact, in just a couple of days, the racer had managed to regenerate tissue that completely

closed the opening to the heart. I could still see the heart pounding on the other side of this natural window. Still, I thought the animal would have to sustain an infection of some sort and didn't give it much hope. But as I observed it for over a week's time, I realized that this Coluber was not in need of sacrifice to science. The injury had healed almost miraculously. As I released this animal, I thought how impressed I was at its powers of healing. I've been aware of the hardiness of snakes for years, but this particular experience expanded my amazement to new levels.

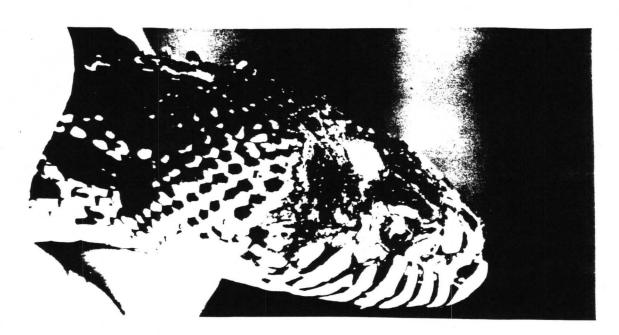


Figure 1. Injury to neck of a bullsnake. Photo by Mike Blair.





Figures 2-3. Injury to venter of eastern yellowbelly racer. Photo by Mike Blair.

## <u>Crazy</u> <u>from the Heat</u> Nine Days in the Florida Sun

by Marty Capron Box 542 Oxford, Kansas 67119

After a year or so of across-the-bar-table planning, half a dozen postponed dates of departure and a lot of wishful thinking, plans finally came together on 8 March, and Chris Stammler, John Tollefson and I hit the open road for the Deep South. It didn't look easy from the start, our vehicle having blown up on a trial run from Lawrence to Kansas City. With less than a week to lift-off and a trip of an estimated three thousand miles hanging in the balance, it looked as though we were in for another delay. Luckily, our cause was taken up by a philanthropist who I can only characterize as a pillar of human decency and the very heart and soul of charity and goodwill. Thus equipped with a brand-new Rent-A-Buick, we bravely set forth.

By driving in shifts, rarely stopping and a lot of white-knuckled pedal to the metal driving, we made Baton Rouge by 7:00 p.m. Saturday evening, eleven hours out of Oxford. We tanked up, locked the doors and made ready for a crossing of Mississippi and Alabama under cover of darkness. We made it and by 11:00 p.m. we had unrolled our sleeping bags at the "safari campground" just east of Pensacola, Florida. The trip had been uneventful at best, having rounded a curve in northern Louisiana just in time to smash a stinkpot (Sternotherus odoratus) as it crossed the treacherous two-lane. It was the only herp sighted in those 17 hours on the road.

Filled with renewed hope after a restful night beneath the pines in the panhandle, we broke camp early and proceeded along the coast. As always, if one pays close attention to the towns, signs and people along the way you may glean some insight into their cultures. Amongst the live oaks festooned with beards of Spanish moss we passed the "Snake Feed & Seed Company." Near Panama City, there was the "Spunky Monkey" surf shop, "Starvin' Marvin's" food store and of course, the "Three Stooges Deli." Hmmmmm.

Along a coast ravaged by last season's hurricanes we found large sections of coastal forest blown down, the trees pointing inland in the wake of huge waves and high winds coming in off the Gulf. Resort homes lay in piles of rubble like match-sticks and here and there a shrimp trawler lay wrecked upon it's side in the debris tossed up by the sea. Once we skidded off the road after sighting a Gulf Salt Marsh Snake (Nerodia fasciata clarki) making its way across a mud flat. But the snake disappeared into sea-side grasses leaving us only a wave of fiddler crabs to retreat before our advance.

We forged on, covering nearly as much ground in Florida as we did the previous day in Kansas, Oklahoma, Texas and Louisiana. We saw a lone DOR cottonmouth (Agkistrodon piscivorus) near Perry, Florida, and attempted to camp near Manatee Springs in hopes of finding Gulf Hammock rat snakes (<u>Elaphe obsoleta ???</u>). However, the state of Florida requires a shelter be it tent or tarp or mobile home to stay overnight in one of their parks and sleeping bags and Buicks don't count! We were told of a secluded beach at the end of a one way road near Cedar Key where we could sack out, but we were advised to steer clear of the "good ol' boys from Cedar Key" who often went there to drink beer or whatever it is the good ol' boys do on weekend nights. That didn't sound too cheery to us so we elected to blast on south to Labelle where a friend of mine lives for a safe and restful night.

After two days of endless driving we needed a rest so we drove out to Sanibel Island just off the coast from Ft. Myers for a bit of beachbumming. It had rained overnight, the first rains in the area this year, and a squirrel treefrog (Hyla squirella) had sought refuge in the doorjam of our Buick. Sanibel was wonderful as always with half a dozen dolphins arcing to the surface beside us as we crossed the bridge out from the mainland. Brown anoles (Anolis sagrei) were everywhere and after a day of lounging upon the beach chasing lizards around coconut palms we felt well rested and ready for some serious herping. Crossing back to the mainland, a sea turtle surfaced below us as we passed.

We dropped by Herpetofauna, Inc. to pick up our host, Bill Love, who works there and to talk with friend and owner of the business, Tom Crutchfield. We drove back to Bill's rural home and got the grand tour of his herp collection, especially his huge breeding group of corn snakes in every conceivable color variation. Inspired by all of these creatures, we decided to do a bit of road cruising down towards Lehigh Acres in the pine-palmetto country so famous for diamondbacks and such. But alas, our only find was a southeastern five-lined skink (Eumeces inexpectatus) beneath a roll of old carpet.

On 11 March we headed east to the area of sugar cane fields south of Lake Okeechobee to hunt kingsnakes along the endless miles of drainage canals in this area that was once the northern edge of the Everglades. Herps were out in droves as the 9:00 a.m. temperatures neared 75. In the canals redbelly turtles (Chrysemys rubriventris), Florida softshells (Trionyx ferox), Florida banded water snakes (Nerodia fasciata pictiventris) and brown water snakes (Nerodia taxispilota) sunned along the edge and disappeared into the black waters at our approach. I caught a large, gravid kingsnake (Lampropeltis getulus) sunning in the grasses and an eastern garter snake (Thamnophis sirtalis) along one canal. Chris spotted a juvenile cottonmouth and we observed a large alligator (Alligator mississippiensis) in another canal.

We tired of the sun out in the cane fields and went to hunt rat snakes in rows of Australian pine trees planted along the roads in the area. Anoles scampered about like grasshopers beneath our feet and soon we found a gravid five-foot Everglades rat snake (Elaphe obsoleta ross-alleni) perched on a limb some fifteen feet up. John, famous for his reckless daring in such situations, went up after the serpent which decided to come down about the same time. Chris made the catch as the snake came to the earth, but both he and I ran afoul of fire ants in the process. These introduced pests are now rampant across the South and to those not acquainted with them they will cause severe pain and swelling

after only a few bites. Livestock has been killed by their multiple bites! We stopped to help a Florida snapper (Chelydra serpentina osceola) cross the road shortly thereafter.

We stopped by an access point on Lake Okeechobee as we headed back to Bill's house and found a drowned Indo-Pacific gecko (Hemidactylus garnoti) floating amongst the cypress knees. That evening we found nine racer eggs (Coluber sp.) beneath yet another roll of dead carpet down in Lehigh Acres.

The next day was Bill's day off, so with him acting as guide we were sure to do better. The strategy worked as we bagged seven more kingsnakes and saw scores of water snakes, garter snakes, cottonmouths and such. In the reptiles-gone-bad file we saw three Audubon's Caracaras and a trio of baby barn owls in an abandoned house. I discovered the freshly shed skin of a scarlet king snake beneath the bark of an Australian paper tree and a juvenile yellow rat snake inside a rotten pine stump.

We dropped south of Alliyator Alley and skirted the northern edge of the Everglades along the Tamiamia Trail. We stopped to photograph a large cottonmouth crossing the road. It performed quite well, and a short distance on, we found another cottonmouth, this one DUR. Peninsula ribbon snakes (Thamnophis sirtalis sackeni) were everywhere on the road and as evening came on we discovered a couple of pigmy rattlers (Sistrurus miliarius barbouri) and another baby cottonmouth on the road near Golden Gate. Gators were everywhere and dispite Chris's best efforts, they all escaped him. As we headed home for the evening, our last find was a DUR corn snake (Elaphe guttata).

On 13 March we went over to Miami to ride around in our Wayfarers and Buick and check out the vice situation. It was far less pastel than the TV version, but just as seamy. On the lengthy journey back along Alligator Alley we probably saw more 'gators than most folks see in a lifetime and it was nice to see those big herps by the roadside as the success story of an endangered species comeback. Walking catfish "boiled" the waters of roadside pools, brown anoles had chased out the native green anoles, and foreign trees have nearly taken over as the dominant flora of the region. Water tables are falling, panthers are getting scarce, and Indo-Pacific geckos dodged this way and that on a camper abandoned in the swamp. Yet, it was still a beautiful place. Remarkably wild and wooly, even remote. Wildlife, foreign or not, thrived there still. It was warm and green and wonderful.

We spotted a mother racoon with three kits at a roadside canal and chased armadillos till we were short of breath. An otter played joyfully in a puddle just off the highway and when we stopped for a bit of a stretch out in the Devil's Gardens we spooked a trio of wild boar from the palmetto thickets. The area fairly thronged with life. And in that, in this triumph of life and of wilderness to hold on, one way or another, in the face of such human pressure, I found great comfort.

At Crutchfield's place a star tortoise was laying eggs on the lawn and his rhinocerous iguanas were courting in their outdoor kennels. False gavials sunned in a pond out front alongside huge Nile softshell

turtles and for a herper who leans strong toward keeping a nice collection, Florida is a lot like the promised land.

We headed out of Ft. Myers Friday around noon as a cold front brought lowering skies and lightning bolts danced on the palm studded horizon. We drove into the storm and out of it and stopped to pick up a road crossing red-bellied turtle in the panhandle. Along the way, we selected New Orleans as a good place to end the day's driving. rolled in around midnight and checked into a motel we never used, opting instead to bar-hop Bourbon Street till the wee hours of the dawn. was a fitting tribute to a five thousand mile journey and as they say, the evening wrote a check the morning couldn't cash. We made it home somehow just about twelve hours later, having managed to regain roadworthyness by 10:00 a.m. It had been a hilarious, dangerous, fantastic, nine day, five thousand mile trip packed full of herps, wildlife, adventure, and humor and before it was over we were planning the next one. Honduras, perhaps, or maybe...

#### Smallmouth Salamander Coloration

by Errol D. Hooper, Jr. and Jeffrey F. Whipple Museum of Natural History University of Kansas Lawrence, Kansas 66045

There have been only a few reports of albinism in smallmouth sala-

manders (Ambystoma texanum).

On 6 May 1986, while investigating a newly reported location for Ambystoma texanum in Franklin County, Kansas, I seined a partial albino larva. The larva was translucent about the body and had pink gills, but the eyes were darkly pigmented.

On 7 May 1986, with the help of Jeff Whipple, a survey was taken to attain the ratio of albinistic individuals in the larval population. Five passes with a 4-foot one-man seine and three passes with an 8-foot two-man seine yielded 253 individuals of which two partial albino larvae (as described above) were collected. The sample gave a ratio of 125 1/2 normal to 1 albino.

Nine normal larvae and two partial albino larvae are preserved at the University of Kansas Museum of Natural History (KU 206194).

# HERP HEALTH CARE AND HUSBANDRY TIPS

It is always best for any reptile to feed voluntarily, as forcefeeding can be traumatic and even counterproductive. Providing the snake is in good condition, there are several weeks to a few months during which various measures can be taken to entice the animal to eat.

Normally, the snake has already been provided with the basic environmental requirements: of course, it is housed in a clean, warm (78°- 82<sup>0</sup> F) cage, with easy access to clean water. Of course, the snake has not been handled or moved the few days prior to a feeding attempt, and is provided with a hide box that it can fit snugly into. And, of course, it has been separated from any cagemates and given a chance to feed in complete visual isolation (this latter requirement can most simply be met by throwing a cloth over the cage).

If these basic conditions and measures have failed to produce a successful feeding, start with the simplest adjustments first. Raise the temperature 5 to  $10^\circ$  above the norm, preferably by adding a light bulb heat source at one end of the cage so there is a temperature gradient present. Put hide boxes at both the warmer and cooler ends of

the gradient.

Try feeding the snakes neonate rats and mice. Most snakes will take these more readily than adult prey. Drop a neonate directly in front of the hide box entrance. The snake inside may take the neonate when it doesn't have to relinquish its secure position.

Try feeding at different times of day, specifically early morning and late at night. For xeric species, fluctuate the temperature more radically to imitate the warmer days and cooler nights of the desert, and attempt feeding in the mid-range temperatures which would correspond to dawn an dusk.

A short (gradually introduced) cold spell  $(62^{\circ}-65^{\circ})$  for a few days followed by a return to original temperature will sometimes stimulate

appetite, especially in snakes from temperate climates.

Lack of water can be a primary inhibitor of feeding behavior. Occasionally a new snake will not find its water, or maybe refuse to leave the hide box to drink. Any new snake not observed drinking from or in the water bowl should be placed in the bowl, or soaked in warm water a few hours prior to feeding.

When the snake is interested but will not take rats or mice, try a gerbil or hamster instead. If it is intimidated by live prey, reduce the activity of the rodent by dipping it in warm water before presenting it to the snake. The animal will then sit in one place and groom itself, providing an easy and unthreatening target.

itself, providing an easy and unthreatening target.

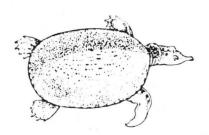
If the snake constantly kills the rodent but doesn't swallow it, or noses a dead animal without attempting to swallow, try cutting off the whiskers before presenting the mouse. On a dead rodent, the nose and

skin around the nose can be removed as well.

Alternatively, feed a freshly killed rat or mouse, slitting open the stomach and the skull and exposing, respectively, the gut or the brains. The additional novel scent can be a prompt.

There is no foolproof method for insuring spontaneous feeding, but by varying the environment slightly and offering food over a period of weeks, a successul combination can be discovered.

In terms of your herps adaptation and ongoing health, it is well worth the initial extra effort to avoid the stress of force-feeding.



--Nancy Schwarting and Jeff Whipple Animal Care Unit The University of Kansas Lawrence, Kansas 66045 Halliday, Tim and Kraig Adler, editors. 1986. The Encyclopedia of Reptiles and Amphibians. Facts On File Publications, New York. 160 pages, over 150 full-color illustrations and photos, \$24.95 hardbound. Available from: Facts On File, Inc., 460 Park Avenue South, New York, NY 10016.

This large format (the pages are  $8.5 \times 11$  inches) book is full of surprises. The title might suggest yet another amphibian and reptile picture book, but it's a lot more than that. This volume falls into that rare category of books that bridge the gap between popular publications and technical publications.

In addition to sections written by the editors, some 17 other herpetologists from around England, Scotland, New Zealand, Sweden, and the United States contributed to this book. They provide a wealth of information in clear, understandable language. I know of at least one college-level herpetology course that is using this book as a text this year, yet it is easily accessible to people with little biology back-ground.

The central theme of the book is well summarized in Halliday's preface, when he writes that "the science of zoology is like a tapestry, with numerous interwoven threads. In one direction run several distinct disciplines, such as anatomy, physiology, ecology and behavior, which consider similar processes in a variety of animal types. In the other direction are those branches of zoology that each consider just one kind of animal, such as insects, fishes or birds. This book reflects the complex, integrated nature of zoology inasmuch as, while it is concerned with only two classes of animals, it also considers phenomena, in physiology and behavior for example, that are found in a wide variety of animals."

The book is divided into two main sections, one dealing with the class Amphibia, the other with the class Reptilia. The evolutionary history of each group is explained, and then aspects of physiology, life history and behavior, and then further information is provided about the orders within each class, highlighting important genera and species.

There are summaries of each family of amphibians and reptiles, giving worldwide distribution (with map), characteristics of the family, some representative species, and the total number of threatened species in each.

The photographs are consistently good, but the artwork varies from artist to artist in quality. The book is very well designed, with appropriately interspersed illustrations and boxes explaining such things as metamorphosis and brooding behavior in snakes.

There is an up-to-date bibliography (arranged both by topic and by geographic region), a three-page glossary (everything from "acrodont teeth" to "zygodactyl"), and detailed index.

This is one of those books that will probably find its way into every serious herper's library, bridging the gap between popular works and technical works as it does. It is not a book for beginners, but rather one which will enable you to elevate the study of amphibians and reptiles to the level of a truly rewarding pursuit.

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

A FINAL WORD FROM THE EDITOR ...

You will note that this issue comes complete with a dues envelope. We need your money! Please pay your dues promptly. Unfortunately, some people are just now paying their 1986 dues, which puts quite a strain on the KHS treasury to make it to the end of the year.

The KHS Annual Meeting being planned for 15-16 November will be a very good one, so be sure not to miss it. Do try to get to Lawrence early on Saturday to avoid being caught up in the football crowd and to get a parking place reasonably close to the Museum of Natural History.

The KHS Newsletter needs your original contributions of articles, stories of your field trips, accounts of your experiences with captive reptiles or amphibians, and artwork. Don't hesitate just because you have never written anything before. Just get it down on paper and send it in. Your editors will be happy to help fix things up for publication.

The December 1986 issue of the KHS Newsletter will be late, so don't worry if January is drawing to a close before you get your copy. I will be in the field during November and will not be able to start compiling the next newsletter until December.

# NEW ZEALAND AMPHIBIANS

AND

# REPTILES IN COLOUR

JOAN ROBB

NEW ZEALAND AMPHIBIANS AND REPTILES IN COLOUR presents an informed account of the amphibians and reptiles of New Zealand, both native and introduced. It gives detailed descriptions of all of their frogs and lizards, and New Zealand's most ancient creature, the tuatara. The text is accompanied by 145 color photographs, 12 black & white photos, 14 drawings, 43 range maps, diagrams, a glossary, notes on scientific names and section on diseases and parasites. This softbound edition is revised from the 1980 edition with 3 newly described forms of lizards and all the information is updated in the light of current research. 128 pages. Softcover 7½ by 10 inches.

- PRICE.\$ 27.50-

ORDER NOW A LIMITED QUANTITY IS AVAILABLE FOR THIS COUNTRY.

KHS Newsletter No. 65

# REPTILES AND AMPHIBIANS OF AUSTRALIA

THIRD REVISED AND ENLARGED EDITION (1983)

By H.G.COGGER I.S.B.N. 0 88359 012 3

In this book Dr. Cogger has set out to provide for the first time in nearly a century, identification keys to the entire Australian herpetofauna - frogs, crocodiles turtles, lizards and snakes. These keys, together with over 880 photographs (230 in color) of living reptiles and frogs, 830 distribution maps, line drawings, definitive text and selected references, combine to provide a unique and comprehensive guide to this important and facinating animals.

This third edition of what has, since first publication in 1975, become a classic in its field has been revised and expanded to encompass the taxonomic changes which have occurred since publication of the second edition in 1979. A further 121 species have been included together with 64 additional photographs and all photographs have now been fully cross-referenced to the text.

- Price \$ 59.50 -

WE PAY POSTAGE WHEN PAYMENT ACCOMPANIES ORDER. Fla. Orders Add 5% for State Tax.

ORDER FROM: RALPH CURTIS BOOKS P.O. BOX 183 SANIBEL, FLA. 33957

# SNAKES: ECOLOGY AND EVOLUTIONARY BIOLOGY

Edited by

Richard A. Seigel, Savannah River Ecology Laboratory,
Joseph T. Collins, Museum of Natural History, University of Kansas,
Susan S. Novak, Savannah River Ecology Laboratory

This much-needed, up-to-date text/ reference will be of considerable value to the biological community. For the first time the interested reader can find, under one cover, extensive material on the systematics, zoogeography, and fossil history of snakes, as well as see how this information relates to the details of foraging ecology, reproductive biology, and conservation.

Written by experts in the growing field of herpetology, this volume is divided into three sections: Systematics and Morphology; Techniques; and Life History and Ecology. Each section summarizes what is known about these major aspects of snake ecology and evolutionary biology and synthesizes the primary literature on snakes, both for the experienced researcher and for the student just beginning to work with these animals.

Snakes: Ecology and Evolutionary Biology will stimulate additional research on this group of animals. The individual chapters will encourage researchers and graduate students to study snakes for the answers to ecological and evolutionary questions.

Jan. 1987 • 528 pages • ISBN: 0-02-947830-8 Tent. Price \$55.00

See over for contents

Ecology and Evolutionary Biology edited by Seigel, Collins, and Novak (528 pages, ISBN:0029478308, tent. \$55.00). If I am not completely satisfied, I may return the book (s) within 30 days for a full refund.  Return to: Debbie Decker, STM Dept., Macmillan Publishing Co., 866 3rd Ave., N.Y., N.Y. 10022		
☐ Charge my	□ VISA	☐ MasterCard
Card no		Exp
Name		
Address		
City		
State/Zip		-
Signature	2 1 1 11	
(Order invalid without signature)		

To charge to your VISA or MasterCard, call toll-free, 1-800-257-5755. (In NJ, AK, or HI dial direct 1-609-461-6500).

Prices are in US dollars and are subject to change w/o notice.

Roy 9 PCNY PSR 938 PSL 938

MACMILLAN PUBLISHING COMPANY 866 Third Avenue, New York, N.Y. 10022