KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER NO. 98

NOVEMBER 1994

ANNOUNCEMENTS

KHS MEMBERS INVITED TO TCS HERP COUNTS

Herpetology students at Topeka Collegiate School plan to conduct two herp counts during the 1995 herping season and members of the Kansas Herpetological Society are invited to take part. Both counts are weekend events with planned activities on Saturday.

The first count will be in Sumner County and will take place on the 25th anniversary of Earth Day, 22 April 1995. The second count is the annual TCS count on 29 April 1995 and will take place in Shawnee, Osage, and Douglas Counties.

For more information, contact Larry L. Miller, Science Teacher, Topeka Collegiate School, 201 SE 59th St., Topeka, Kansas 66619.

NEW VIDEO AVAILABLE

The Society for the Study of Amphibians and Reptiles announces its first video production, a recording of a lecture by Dr. Walter Auffenberg presented at the Society's 1993 annual meeting. Dr. Auffenberg describes and contrasts the behavioral ecology and feeding strategies of three different monitor lizards—the Komodo Dragon, Gray's Monitor, and the Bengal Monitor. The 60-minute video is extensively illustrated with color slides, graphs, and other figures and includes several film sequences of Komodo Dragons in the wild.

This video may be purchased from Duane Busick Video Productions, 4400 Etter Road, Bloomington, Indiana 47408 for \$20 in the U.S., \$25 outside the U.S. Payment may be made by personal check or money order.

RECENT SSAR PUBLICATIONS

The Society for the Study of Amphibians and Reptiles would like to notify you of some of its recent publications of which you may or may not be aware. These include Captive Managment and Conservation of Amphibians anf Reptiles by James B. Murphy, Kraig Adler, and Joseph T. Collins (eds.), Biology, Status, and Management of the Timber Rattlesnake (Crotalus horridus) by William S. Brown, Scientific and Common Names for the Amphibians and Reptiles of Mexico in Emglish and Spanish by Ernest A. Liner, and Herpetology: Current Research on the Biology of Amphibians and Reptiles, among others. For a complete listing of these important works, write to Kraig

Adler, Cornell University, Neurobiology and Behavior, Seeley G. Muidd Hall, Ithaca, New York 14653-2702, phone 607-255-6569, fax 607-255-8088, e-mail kraig_adler@qmrelay.mail.cornell.edu.

NEW CALENDAR

The American Federation of Herpetoculturists has recently published a new herp calendar for 1995. Entitled *Creatures of Enchantment*, this 11" X 14" calendar contains 36 full-color photos (many of which are outstanding), moon phases, inoformative captions and is printed on durable, glossy card stock. Individual calendars go for \$12.95 (discounts for larger quantities). Order from AFH, P.O. Box 300067, Escondido, California 92030-5224 or call (619)747-4948.

DONATIONS REQUESTED

The newly organized National Herpetological Alliance is asking for donations for a project. They are attempting to develop guidelines for international and interstate shipment of amphibians and reptiles (which are currently left up to individual shippers for the most part). If you would like to assist in their effort, send your donation to: National Herpetological Alliance, Project CARE, P.O. Box 5143, Chicago, Illinois 60680-5143.

NEW HERP PLACEMENT PROGRAM

Ken Brunson of the Kansas Department of Wildlife and Parks has brought to my attention a new placement program for exotic and non-exotic herps. Called the *Non-releasable Herp Placement Program*, this outfit purports to be able to place in good homes hard-to-place critters such as large pythons, green iguanas, and monitor lizards. In addition, the program is open to placement for any captive herp that cannot be released in its area of captivity. Although I have no personal knowledge of this program, it appears to be legitimate. If you want additional information about the program, contact Non-releasable Herp Placement Program, P.O. Box 627, Midlothian, Texas 76065, phone (214)775-6228 or (214)723-9401; fax (214)723-2100; e-mail 72163,1605@compuserv.com

NEW JOURNAL

The Amphibia and Reptile Research Organization of Sri Lanka (ARROS) announces publication of its new journal, *Lyriocephalus*. The first issue consists of 15 papers on Sri Lankan herps written by a variety of authors, both professional and amateur. Cost of membership is \$10 US. For additional information, write Dr. Anslem de Silva, c/o Faculty of Medicine, University of Peradeniya, SRI LANKA

KHS BUSINESS

1994 ANNUAL MEETING RESULTS

The 21st Annual Meeting of the Kansas Herpetological Society was held on the weekend of 5-6 November in Wichita and was, as usual, invigorating, enlightening, and successful. Primary sessions were held on the campus of Friend's University and the evening social and auction were conducted at the Sedgwick County Zoo. Over 65 folks from all parts of the state gathered to hear lively and thoughtful presentations and discussions on a variety of topics including new evolutionary theory, state wildlife law and regulation, various herpetological research topics, the Sharon Springs roundup (of which a summary of the discussion is provided by Dave Reber later in this section), trends in herpetology and herpetoculture, and other subjects. KHS President Al Volkmann presided over a relaxed atmosphere that allowed thorough examination and discussion of most offerings.

At the annual business meeting, Stan Roth was voted in as the new KHS President-elect in a very close election. Karen Toepfer was re-elected as KHS Secretary/Treasurer. There is no doubt that they will continue to represent the Society in the usual excellent manner of past KHS Executive Council members. Past President David Edds will step down as a council member but his efforts in representing the Society in the past three, somewhat turbulent, years received special recognition from the council and those present. After some discussion, members of the Society voted to rescind an earlier referendum that required that the Ornate Box Turtle be represented on the official KHS logo (more on this later). Finally, this year's KHS Gloyd/Taylor Scholarship (the only one of its kind by a regional herpetological society) was presented to Paul Shipman of Oklahoma State University. The scholarship includes a \$100 grant. We are confident that Paul has a long and outstanding herpetological career ahead of him.

Following a tour of the herpetarium at the zoo, the highlight of the evening was the annual social and auction. Led by auctioneer non pareil Joe Collins, lively bidding on various exotic items added over \$800 to the Society's coffers. Along with income from registration and book sales, over \$1200 was raised at the meeting. These moneys ensure that the Society is able to keep its membership fees low and that we are able to fund other activities of the Society.

The following Sunday morning session included additional talks and discussions on a variety of topics. At approximately 12:00 p.m., President Al Volkmann turned over the gavel to new President David Reber and another successful KHS Annual Meeting was adjourned.

ADDITIONAL ROUNDUP INFO

The following are notes made by David Reber on an open forum concerning the Sharon Springs rattlesnake roundup that was held at this year's annual meeting.

"The general consensus was that we are nowhere near finished with this issue, and I was extremely pleased with that. Discussion focused mainly on the need to continue pressuring Kansas Dept. of Wildlife and Parks to tighten regulations and perhaps create additional ones. Most people agreed on the importance of attending the roundup—it is impossible to successfully fight something unless we know exactly what is going on. The Sedgwick County Zoo is in the process of developing a permanent display on the adverse effects of roundups; the display will be part of the Kansas venomous snake exhibit. There was talk about encouraging other zoos, etc., to do the same.

There was also some discussion about the probable move to Colby. It was suggested that being on I-70 would result in greater attendance, but it also seems crazy for a Wallace County civic group to spend time attracting business into a different county. It was suggested that the Sharon Springs folks cut a deal with Senator Frahm — she passes the legislation and they move to her town. Another possibility is that Colby has a Kansas Dept. of Health and Environment-approved butchering facility and that the meat inspection issue was big enough to prompt the move. The bottom line is that we don't know why they might move, or even if the move is a sure thing.

If the move occurs, boycott efforts may be much more successful. As I recall, a letter from the Colby Chamber of Commerce pleaded innocence as to being involved with the roundup. This may be a good time to throw that one back at them. Furthermore, as Colby is a place where travelers, etc. might actually stop, Colby has something to lose in a boycott situation whereas Sharon Springs had little to lose economically.

If anyone wants further information on the topic, they should contact Alison Smith-Reber (same address and phone number as Dave's), our new (un)official chair of conservation issues. She could certainly answer any questions and provide suggestions as to what individuals can do."

A LATE TREASURER'S REPORT

KHS Secretary/Treasurer Karen Toepfer submits the following treasurer's report for fiscal year 1993.

INCOME	
Annual meeting	3949.00
Book Sales	803.16
Dues	2249.00
Interest	37.92
Refund	
Total Income	7041.08
EXPENSES	
Annual Meeting	1208.61
Bank Charge	11.03
Donation	200.00
Postage	728.58
Printing	937.27
Supplies	98.02
T-shirts	
Taylor Publication	1630.51
Total Expenses	5504.02
Total Income/Expense	1537.06

CORRECTIONS AND ADDITIONS

Due to a boneheaded error of my own, two herp counts were left out of the official KHS Herp Counts in the last issue of this Newsletter. Please note the following counts and update your records accordingly. The final official count for specimens is 2572 (+10000 Bufo tadpoles) and for species is 68. My apologies to Al Volkmann and his students.

COWLEY COUNTY HERP COUNT

A herp count was conducted by Al Volkmann in Cowley County east of Winfield on 23 April. The primary activity consisted of rock turning and took place from 10:00 a.m. to 2:00 p.m. Weather was as follows: clear sky, winds up to 15 mph, starting temperature of 60°F up to 71°F. Water temperature at the site was 59°F beginning and 60°F ending.

Participants were Joyce Lent, Eric McCarrier, Jennifer Previtera, Bob Previtera, Al Volkmann, and Todd Volkmann.

Northern Cricket Frog	19
Bullfrog	
Ornate Box Turtle	2
Great Plains Skink	9
Western Slender Glass Lizard	1
Ringneck Snake	31
Flathead Snake	11
Racer	6

Great Plains Rat Snake1
Coachwhip2
Common Garter Snake1
Lined Snake1
12 species 89 specimens
Verifier was Al Volkmann

1ST CHISHOLM CREEK PARK HERP COUNT

On 28 May, Al Volkmann led a survey at Chisholm Creek Park in Wichita, Sedgwick County. The survey method was visual sightings along shorelines and in areas adjacent to bodies of water. The count was done between 10:00 a.m. and 12:30 p.m. Weather conditions were partly cloudy skies, winds up to 12 mph, beginning survey temperature of 75°F. Water temperature was 63°C.

Participants were Al Volkmann, Jamin Johnston, Doug Moore, Jeff Moore, Matt Moore, Phil Rea, Sharon Self, Travis Self, and Stan Wiechman.

Northern Cricket Frog8
Plains Leopard Frog
Bullfrog23
Snapping Turtle1
Yellow Mud Turtle1
Painted Turtle18
Slider2
Great Plains Skink1
Racer3
Diamondback Water Snake2
Northern Water Snake6
Graham's Crayfish Snake2
Plains Garter Snake1
Species13Specimens71

Verifiers were Al Volkmann and Stan Wiechman.

EDITOR'S THANKS

As is usual with this issue, it's time that I thanked the various folks who help me get this Newsletter out. Associate editor David Reber has handled the main sorting, stamp-licking and mailing tasks admirably and efficiently. Without him, this Newsletter would not be possible. The other assistant editor and my wife, Ann, has helped with a myriad of tasks associated with the Society's publication chores. Joe Collins, as always, continues as a main contributor to the physical production of the Newsletter and as a valuable advisor on the details of editing and desktop publishing. All of you have my deep gratitude.

-EMR

Ed. note: The following is a letter by Travis Taggart to Bob Hartmann concerning this year's rattlesnake roundup at Sharon Springs.

16 May 1994

Robert F. Hartmann Kansas Department of Wildlife & Parks Operations Office 512 SE 25th Ave. Pratt, KS 67124-8174

Dear Bob:

This letter is to report my observations and recommendations after the third annual rattlesnake roundup in Sharon Springs. Two aspects of this years roundup concerned me most; 1) K.A.R. 115-17-18, ... open area, daily bag and possession limit and 2) the gross mistreatment of snakes.

While, the amount of available information concerning the ecology and population dynamics of the Western Rattlesnake is scarce and incomplete. The current daily bag limit of ten rattlesnakes over 18 inches in length is too liberal. When a roundup hunter collects ten snakes, they are sold to the roundup sponsors. The hunter may then collect another ten snakes the next day and continue this routine for the thirty days of the event and still never exceed the 20-snake possession limit. A single hunter could possibly collect 300 rattlesnakes during the event. The odds against this happening are low. However, using the above methods, this year's roundup was able to exhibit a record number of rattlesnakes that were collected during a month of unseasonably cool and inclement weather.

The roundup sponsors attempting to maintain such a large assemblage of rattlesnakes touches on my second major concern. A majority of the snakes Dr. Fitch and I examined exhibited at least one of the following: lesions, abrasions, lacerations, and paralysis. At least two rattlesnakes died in the snake pit or holding container before they could be slaughtered or sold to buyers. Saturday morning, the roundup organizers gave us a medium-sized gravid female rattlesnake they had set aside. The snake exhibited a hump in the middle of its back where the spinal column had been dislocated and [the snake] was completely paralyzed from that point to the tail.

The roundup organizers lacked knowledge concerning the husbandry of rattlesnakes and snakes in general. Both Mrs. Withers and Mrs. Fischer acknowledged their lack of information concerning the maintenance of rattlesnakes and were very eager to accept any information or suggestions offered, since the mistreatment of snakes cuts into their profits. Almost every snake, to varying degrees, exhibited dermal rotting. This was largely confined to the

ventral scutes but on several specimens the rotting was prevalent dorsally as well as laterally. The rotting of scales and associated blisters is due to the cramped, unsanitary, and damp containers the rattlesnakes were held in prior to 29 April.

The container was a box of plywood approximately four by six feet and four feet high with a removable screened lid. Within this box were 200+ rattlesnakes, both Western Diamondback Rattlesnakes [Crotalus atrox] and Western Rattlesnakes [Crotalus viridis]. The snakes crawled over each other and [in] their own excrement. During my observations at the roundup, water was never offered to the snakes. I suspect the viscera samples collected by Dr. Fitch and me will reveal the snakes did not eat either. Nearly every snake we measured appeared emaciated, a sign of dehydration and starvation. This condition is extremely stressful to the snake, as fat stores are at their annual low.

There was no evidence that gasoline was used to extract rattlesnakes from their retreats and all hunters were advised against it when they registered. The geology of the area (largely Ogallala conglomerate of the Tertiary Miocene) makes large congregational denning over most of the area of the roundup unlikely. Therefore, the dumping of several gallons of gasoline to acquire one or two snakes is not very cost efficient.

The price of rattlesnake meat was \$4.00/lb before 29 April and will be \$3.50/lb after the festival, as reported by The Western Times of Sharon Springs, Kansas on Thursday, 28 April 1994.

A school bus was set up on the fairgrounds and contained numerous snakes as an educational exhibit. This was a good idea but the bus was small and cramped and the snakes too secretive to be very effective. Some of the species exhibited were an Eastern Hognose Snake, Coral Snake, Cottonmouth, Copperhead, Timber Rattlesnake, Massasauga, Ribbon Snake, Western Rattlesnake, Western Diamondback Rattlesnake, Gopher Snake, and a Milk Snake.

Recommendations:

A length limit of 70 cm would still allow a large number of rattlesnakes to be collected. Snakes under this size are of little edible value and are simply victims of wanton destruction. Daily bag limit of 5 rattlesnakes and a season/possession limit of 25 rattlesnakes. In addition, each hunter would be responsible for their own 25 or fewer snakes until the festival begins. This would eliminate the problem of the stockpilling of rattlesnakes and the associated physical decay of the rattlesnakes. This would also facilitate more detailed record keeping as to specific locality and environmental factors the rattlesnakes were collected in. Hunters would be informed and educated on the proper methods of snake husbandry before being issued a

permit. They would have to humanely house their snakes, just as those with a scientific, educational, and salvage permit holder do. The standardization of one method to collect rattlesnakes would be helpful to reduce the number of injured snakes. The use a snake stick to scoop up the rattlesnake and place it into a five-gallon bucket or similar container then put the lid on. I have successfully utilized this technique for the last 10+ years without losing a rattlesnake, injuring a rattlesnake, or coming close enough to get bitten. While tongs and nooses may work for capturing and restraining other types of animals, they are a major source injury for snakes. This is especially true for rattlesnakes because of their small neck, bulky body, and habit of thrashing wildly when restrained. In the future you may want to begin measuring the snakes and collecting data before the roundup and as the hunters bring their rattlesnakes in. More biologists present to process the snakes would also help, since we did not get to measure all the snakes while we were there. It would be positive to see an exhibit at the festival on the nonvenomous snakes as well as one giving truths about Western Rattlesnakes.

I would like to thank you, and the investigation and inventory section of the Kansas Department of Wildlife & Parks for the opportunity to participate in this research to gain more information on the Western Rattlesnake in Kansas. A statement is included for the payment of my work at the roundup.

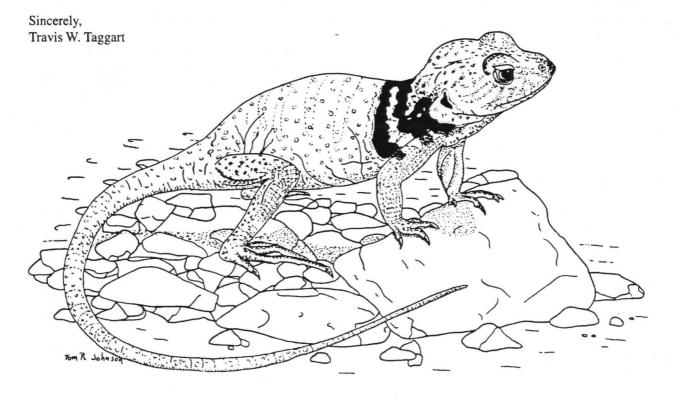
Dr. Fitch has the data and I am waiting with interest to see if anything can be discerned from it. Thanks again and have a long retirement.

KHS LOGO REDUX

For what I hope is the last time, I am revising previous missives regarding a new logo for the Kansas Herpetological Society. At this year's annual meeting, the membership voted to remove the Ornate Box Turtle as part of an official society logo. This means that we are still asking for submissions for a new logo. It does not mean that the Box Turtle cannot be a part of that logo. In addition, at the same meeting an anonymous donor offered a cash award of \$175 to the artist whose submission is finally selected.

Here is what the Executive Council is looking for: a simple artistic rendering of a graphic that reflects herpetology in the state of Kansas and something eye-catching that will be identified with the Kansas Herpetological Society (e.g. the frog motif that is used by the Society for the Study of Amphibians and Reptiles or the snake motif used by the magazine *Captive Breeding*). It must be small (no bigger than 2" X 2"), clear (black-and-white on good quality artist's paper), and simple. If you think you have a good idea for a logo and can use an extra 175 bucks, please submit your rendering to me at the address in the inside front cover of this Newsletter.

-EMR



KHS BRINGS YOU GREAT NEWS OF THE WORLD

RECORD SIZE LIZARD FOUND IN SUMNER CO.

When a group of students, parents, and teachers from Topeka Collegiate School's herpetology class left their school early to 16th of April 1994 for a weekend research trip to Sumner Co., Ks., they had no idea one of their finds would represent a new maximum length record for North America. However, they were recently informed by Joseph T. Collins, author of the new third edition of Amphibians and Reptiles in Kansas, that one of the Southern Prairie Skinks [Eumeces obtusirostris] discovered by the group established a new maximum length record for the species in North America.

The previous maximum length was seven inches until the Sumner County specimen was collected. It measured 71/8 inches in total length.

The research being conducted by the group involved collecting and identifying as many amphibians and reptiles as possible in the research area during a two-hour time period. The research was part of an annual amphibian and reptile census conducted by the Kansas Herpetological Society. The research area was on land owned by Mr. and Mrs. Carson Ward of Caldwell, Ks. It was located along the Kansas-Oklahoma line just to the south of Caldwell.

The trip to Sumner County was organized by Larry L. Miller, Topeka Collegiate School science teacher, with the assistance of Mary Kate Baldwin, also a science teacher at Topeka Collegiate. Both Miller and Baldwin are active members of the Kansas Herpetological Society. Miller, who grew up on a small farm near South Haven in Sumner County, also taught in the Caldwell school system before accepting his current position at Topeka Collegiate School in 1991.

While living in Caldwell, Miller was responsible for organizing Kansas' first amphibian and reptile censuses during the mid-1980s. These censuses, called "Herp Counts," now take place in all parts of Kansas each spring, [with] the Sumner County one being the oldest. Information obtained from the counts is provided to the Kansas Department of Wildlife and Parks non-game wildlife program. It is used to help determine such things as population density and distribution of Kansas' amphibian and reptile populations. Most animals collected during each count are released after they are identified and recorded. Unusual finds, such as the record length skink, are sent to the University of Kansas for further study.

Those participating in the Sumner County count included [Miller and Baldwin, Sam Knowlton, John Freeman, Nick O'Hara, Dylan Brooks, Katie Crowe, Jared Nance, Jimmy Shepherd, Allison Brooks, and Kelly Farmer

(TCS science students); Joel H. Nance, Frank Shepherd, Larry O'Hara, and Glenn Freeman (parents of TCS students); Carson and Nina Ward (owners of the land where the count was conducted); and Gene Trott (photographer from Hunnewell, Kansas)].

—South Haven New Era, 29 June 1994 (submitted by Glenda Ryan, Braman, Oklahoma)

HERPETOLOGISTS THINK POACHER OF RATTLERS IS LOWER THAN A SNAKE

Franklin County, Pa. — This is rattlesnake country. At the top of a ridge overlooking a sunlit valley here, at a spot where shrub gradually gives way to a rocky hillside, a paunchy, aging man in faded jeans and torn, olive T-shirt probes among the rocks with a pair of long, aluminum tongs. "There are a hundred snakes under these rocks," he says. "A few feet below us."

Lucky for them, the snakes are just out of reach of Rudy Komarek, perhaps the nation's most notorious and prodigious rattlesnake poacher. "I've taken a lot of rattlesnakes in the past 40 years, about 9,000," he boasts. "And I'm still active."

Mr. Komarek's captures are all the more striking – or disturbing, depending on how you feel about snakes – given the fact the his prey is an endangered species in many Northeastern states, although not including Pennsylvania. Experts estimate probably fewer than 10,000 Timber Rattlers are left in those protected areas.

For years, this 67-year-old outlaw has plundered the dens of Timber Rattlesnakes, earning extra cash by selling the slithery contraband to collectors and pet stores. Scientists say he has single-handedly devastated the population of rattlers in New York and Massachusetts and has had a major impact in Connecticut and New Jersey. New York has fewer than 7,000 rattlesnakes left; New Jersey has fewer than 1,800, state officials believe. Pennsylvania has 60,000 to 90,000 Timber Rattlers, according to one study.

"He is a persistent and ruthless poacher, says William Brown, an herpetologist at Skidmore College in Saratoga Springs, N.Y. For 10 years he has tried, and failed, to put Mr. Komarek out of business, even circulating "Wanted" posters bearing the poacher's mug shot to other herpetologists who are equally rattled by his behavior. Earlier this year, Dr. Brown published a scathing, 10-page article in the Bulletin of the Chicago Herpetological Society, chronicling Mr. Komarek's misdeeds and describing him as a "nefarious hominid."

In recent months, the struggle to stop Mr. Komarek has

acquired a new urgency, He threatens to write a book revealing the location of 150 Timber Rattler dens in New York –locations that authorities desperately want to keep under wraps – unless his foes essentially pay him to forgo his authorial ambitions. Scientists fear collectors and snakeskin peddlers would use Mr. Komarek's secret maps to all but wipe out the snake population. "He's a bastard," says Dr. Brown. "No responsible biologist would sanction this."

But then, Mr. Komarek is no biologist. He is a short, rough-hewn man with a high-school education. Under the name "Cobra King," he has done stints as a snake charmer for carnivals. On 17 occasions, he has been bitten by venomous serpents, including one encounter with a cobra that nearly killed him. He has never married. He has no permanent address and no telephone, roving from state to state and town to town.

Wildlife authorities find it nearly impossible to oversee the vast tracts of Northeastern forest where the Timber Rattlesnake – and Mr. Komarek – range. Lax laws and the heavy burden of proof required to nab a poacher make it difficult to get a conviction.

Mr. Komarek has been arrested five times in different states, but never served more than four months in jail for any single offense. In 1992, Mr. Komarek was entrapped in a federal sting operation and served several months in jail. And he is still a wanted man in New York state for failing to pay a fine and skipping bail for illegal possession of rattlesnakes, according to Alvin Breisch of the state endangered species unit.

But the most serious conviction came after Mr. Komarek was charged with illegal weapons possession (baby Timber Rattlesnakes) in connection with a rattlesnake-for-hire plot. At a friend's behest, Mr. Komarek released three baby rattlesnakes in the home of a woman who was feuding with the friend. She survived; the snakes didn't. Mr. Komarek spent three months in jail for the crime.

At the center of Mr. Komarek's notoriety is *Crotalus horridus*, the Timber Rattlesnake. Scientists say the creature's presence helps check the population of rodents, its main prey. They also assert that these beautiful reptiles—their colors vary from jet black and brown to a vivid sulfur-yellow—are crucial to the nation's natural heritage.

C. horridus was the first North American snake ever to be scientifically described. Its scarcity is partly its own fault: it has one of the lowest reproductive rates among snakes. However, the snakes once were plentiful enough to be considered vermin. New York state for decades paid \$5 for every rattlesnake tail turned in by bounty hunters. One hunter, Arthur Moore, killed more than 15,000 rattlers over 35 years. Now 62 years old and a resident of Dresden, N.Y., Mr. Moore recalls the snakes as so abundant that he occasionally served them up at barbecues. "They taste like frog legs," he says.

Not surprisingly, the Timber Rattlesnake population plummeted in New York and neighboring states, due to commercial hunting and the spread of housing developments. New York revoked the bounty in 1971. New Jersey placed the species on its endangered list the same year, outlawing the trapping, selling, and killing of the snakes. New York, Connecticut, and Massachusetts followed suit by the mid-1980s; Pennsylvania has not, and Mr. Komarek operates legally here.

Mr. Komarek says his passion for handling snakes started as a child growing up in Little Ferry, N.J. His father helped him catch harmless species during weekend outings, and young Rudy built up a menagerie of 50 snakes in the family garage. Occasionally, one would turn up in the laundry and spook his mother. When the Komareks banned venomous snakes from his collection, he stuffed the reptiles in plastic bags and hid them under the eaves of the house

After high school, Mr. Komarek fought briefly in Korea and returned to New Jersey to work in milk plant, where he loaded trucks for \$3.75 an hour. His work-day ended at 1:30 P.M., and on spring afternoons he would drive to nearby Bear Mountain to capture Timber Rattlesnakes and Copperheads. He began selling the snakes to reptile dealers and private zoos for about \$5 a specimen and continued raiding dens even after most Northeastern states had declared the Timber Rattler an endangered species.

Mr. Komarek freely admits to illegally capturing 100 snakes last spring in New York, selling them at \$25 a head to some collectors. He argues that, since many people have an innate fear of snakes, he is merely performing a service by selling them to true reptile lovers.

This month, he headed to the Southwest to hunt Diamondback Rattlesnakes in New Mexico – legally. He is more than willing, however, to take visitors on a tour of snake dens in New York next spring, when he plans to return for another illegal outing. "But only if we take your car," Mr. Komarek says. After all, he still a wanted man in the state.

— 15 November 1994, The Wall Street Journal (submitted by George Pisani, Lawrence)

ESCAPED STRANGLER IN SNAKE-SKIN SUIT CAUGHT AFTER HUNT

He's not armed.

He can be dangerous.

Jake, a 12-foot, 50-pound python busted out of his cage around noon in the home Dave Seals, 21, who lives [in Topeka].

The snake was found ...in a neighbor's wheel barrow several houses down and across the street.

Three officers from the Topeka Police Department's Animal Control division retrieved the snake. It was then taken into custody, because it exceeds Shawnee County's 8-foot maximum allowed length for snakes.

Seals said he was told to appear in court ...in the matter.

Some worried the 5-year-old, brown-and-gold colored reptile had the run of the Highland Park area, but fortunately no one was gobbled up or given a hug they would never forget.

Jake's breeding partner, Lucky, a 9-foot, 2-year-old female python also escaped the pair's cage. But Seals captured her soon afterwards, snoozing on the house's front porch.

Seals owns Lucky, but Jake belongs to Karla Deiter of Topeka.

The snakes were boarding temporarily at Seals' home. Deiter had planned to take both reptiles with her as soon as possible to a new home she is building near Lake Perry in Jefferson County.

Her main fear about Jake's escape, she said, was "that someone who doesn't like snakes would take a shovel and do him in."

Another of her concerns—domestic critters in the area.

Jake, a constrictor that kills his prey by [suffocation], could put cats and small dogs at risk.

"My neighbors up the street raise chickens, so I talked to them about Jake," she explained earlier. "That might be where he headed."

But humans weren't in any peril. Jake likes people, but he doesn't eat them. He isn't big enough to do that, anyway.

"He's not normally aggressive," Deiter said. "He was in the school homecoming parade for Silver Lake High School. My son carried him."

And, fortunately, Jake's stomach probably wasn't grumbling during his escape.

"We feed him two rabbits a month," she said. "We fed him about a week ago, so he's not hungry."

Lucky for those chickens.

—10 July 1994, Topeka Capital-Journal (submitted by Irving Street, Lawrence)

THIS IS A SERPENT. GIVE ME ALL YOUR MONEY

When a couple of punks mugged a Camden, New Jersey, couple using a live black snake on August 11, astonishingly, no U.S. congressman called for the abolition of snakes. Could this be the powerful snake lobby at work? The American Society of Ichthyologists and Herpetologists referred *New York* to [KHS member] John Simmons, an herpetologist at the University of Kansas' Natural History Museum.

Is the snake a pet or a weapon?

There's a real flaw in using snakes to kill people, in that they usually don't. I've heard of them being used as defensive weapons, and I've heard of them being left in mailboxes. But a snake's venom digests flesh, so a bite on the hand can mean you lose a digit. They can cause a lot of pain and even tissue loss, but Cleopatra picked a bad way to go.

Do you recommend keeping a snake around the house for protection?

You can buy boas and pythons in any pet store. You might have a thief with a mortal fear of snakes, and then they would work fine. But if he knows anything about snakes, he knows they won't just lunge out and attack people. Besides, snakes really are lot of trouble to keep.

Despite regulation, can't criminals get any kind of snake they want out on the streets?

If you have the money and energy, you can probably get any kind of snake you want. In San Francisco, I saw two six-foot Indian Cobras a guy had abandoned at an animal shelter.

But, in fact, aren't snakes really most dangerous to their owners?

Boas, for instance, kill people, but usually their owners. When a snake gets seven or eight feet long, it can be dangerous to startle. But you have to be doing something pretty stupid to make them dangerous.

Do people carry concealed snakes?

Concealed snakes are extremely common. Snakes are cold-blooded, so they don't need much oxygen. People put them in a cloth bag and slip them into their shirts. Of course, you're not supposed to carry them on a plane but smugglers do.

What about a waiting period to purchase snakes?

Laws regarding snakes are local; I don't know of any requiring a waiting period or background check. It's like buying a dog. Look in your want ads—I'm sure you can find wolf-dog hybrids, which are extremely dangerous.

—29 August 1994, New York (submitted by Irving Street, Lawrence)

Ed. note: John wanted me make clear that he was somewhat misquoted in this article. The reference to boas should have been *boids*, which include large pythons

PAIR SNAPS UP TURTLE SALES

Trapper Carla Henderson has been called by a Woodward farmer to catch a varmint that swallowed one of his big white ducks. The critter also is eating catfish in the pond.

It's the kind of story that makes Carla's husband, Mike, grin with anticipation. The beast of this Oklahoma lake is a turtle.

Meanwhile, in China, they are thinking how tasty that ancient creature will be when frittered or fried or stewed and the business end of chopsticks.

It's a case of one person's pest becoming another juicy tidbit. Such is the market opportunity for the Hendersons, a Woodward couple now ending their first year as Quality Seafood Traders in Oklahoma.

They send their prey, alive and healthy, to Clewiston, Fla., where Quality Seafood owner Robert Granat has a 285-acre turtle farm. Lest anybody think the Oklahoma man-and-wife team overestimate their market, they say they could use several times the 8000 turtles they ship every by airplane and truck every month, Mike Henderson said.

The turtle business is just getting started in the state, however.

The Oklahoma Department of Wildlife began licensing commercial turtle trappers in January. On June 8, the governor signed the new rules into law. Wildlife Department zoologist Charles Wallace counts 37 licenses issued so far.

Mike Henderson would like to see 400 more permits, all devoted to selling him a creature only an epicure seems to love.

"Farmers don't like turtles. Fisherman don't like turtles. People driving cars don't like to see them on the road," Mike Henderson said. "Maybe the pet trade defends them, but if turtles have any purpose in ecology, I don't know what it is."

He knows, of course, what turtles are good for. Turtles eat anything they can catch and are pond scavengers of the first order, he says. They will even gobble vegetation when meat is not available.

The Wildlife Department credits Oklahoma with 13 species of turtles. The snapper and yellow bellied [sic] mud turtles are the most common. Trapping is legal for all but a few species, the alligator [sic] and map turtles among them.

As for the turtle business, the new law allows commercial trapping on Oklahoma waters except in state, federal, and scenic areas. Permission is required from property owners. Trappers also need a state vehicle operator's license, since lugging turtles around usually means a truck or van is in use.

Although the Hendersons are turtle buyers, Carla Henderson is giving her business a jump start by doing some of her own harvesting. Twice a week, on Tuesdays and Saturdays, the couple drive to their Oklahoma City warehouse, where they unburden themselves from their accumulated catch.

They are ever alert to the danger of a beast that bites first and lets go later, Mike Henderson says. So far, he's been spared, but his wife has nipped by a softshell turtle when she reached into a galvanized tub.

"The snappers you handle by the tail. You never get close to their mouth," Mike Henderson said. He is quick to dispel the dim-witted, sleepy-eyed, vegetarian, shy-and-slow rumors that are often attributed to his lake-lounging wards.

Turtles recognize people. They dive to the bottom of the tub when he enters his warehouse. For his wife, their feeder and keeper, the turtles surface and appear hungry.

Turtles are never picky eaters. He has heard farmers and trappers tell stories of the turtle's voracious eating habits, and in one case, he says, the turtle's ability to strip the bones of a cow that fell into a farm pond.

On a flat surface, turtles are said to outrun a teenager, Mike Henderson said.

"The big snappers do a lot of damage. I would venture to say they could take a hand off. You are talking about a 150-pound turtle, when a 27-pounder I know about bit a broomstick in half."

Turtle lore says the state's record-size snapper was snagged in a fishing net in southeast Oklahoma. It weighed 317 pounds, "and you could put your head in its mouth."

"After seeing these turtles that are coming out of these places, I won't go swimming in a pond again."

Big turtles are not what he's after. Their meat can be tough. Tender, smaller softshell turtles pay \$1 a pound in the range of 1-6 pounds, and 75 cents a pound for seven pounds and up. Snappers sell for 40 cents a pound.

"The snapper in Oklahoma goes up to 100 to 150 pounds, but we haven't gotten any of those yet," Mike Henderson said. "They are pretty hard to take care of. You might have to lasso them."

The trappers' wire cage typically yield four or five turtles a catch. So far the biggest snappers caught are about 27 pounds, the softshell 17 pounds, the red ears 5 pounds, and the river cooters about 9 pounds.

He's not worried about running out of product. Turtles are notorious for their fertility, he says. He points to Minnesota where trappers have been snagging turtles for 75 years with no effect on the turtle population.

His only problems in Oklahoma has been with the fishermen. Unfamiliar with commercial turtle traps, the anglers are yanking traps out of the water and complaining to game wardens about fish poaching.

"They ought to leave the traps alone," Henderson said. "All the traps are marked."

Besides, he said, "The fishing should be a lot better if we can get some of those turtles out of the water."

—10 July 1994, The Sunday Oklahoman (submitted by Jeff Black, Ada, Oklahoma)

Editor's note: Although I normally do not print articles such as the above, I thought it might be interesting to our readers to see how other states manage (or not) their herpetological resources.

FEATURE ARTICLES

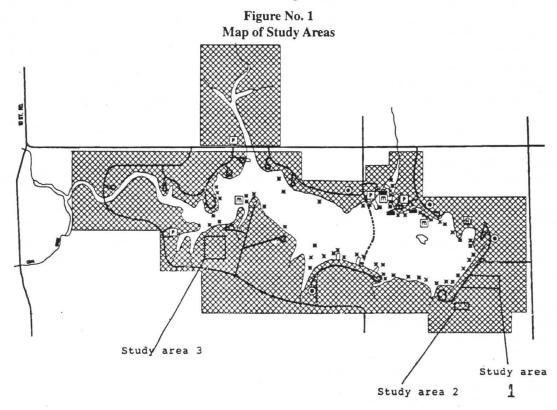
A Survey of Reptiles and Amphibians at Montgomery County State Fishing Lake

Daren Riedle
Division of Biological Sciences
Emporia State University
Emporia, KS 66801

Montgomery County State Fishing Lake is a 42.5 hectare impoundment located 6.5 km south and 1.5 km east of Independence, Kansas. One hundred and twenty-one hectares of state-owned terrestrial habitat surrounds the lake. This management area is primarily woodlands with some pasture land. From 1990 to 1992, I surveyed the reptiles and amphibians in the management area, and compiled a herpetofaunal species list.

Materials and Methods

From May-September 1990, and April-September 1991, I spent four hours per day, two days per month surveying the entire management area. From March-May 1992, I restricted my collecting to three localities which represent the primary terrestrial habitat types in the management area.



MONTGOMERY STATE FISHING LAKE

The first habitat type surveyed was a 134 m x 95 m woodland plot located on the east side of the lake, directly behind the dam (see Fig. 1 for location of study sites). Vegetation consists mainly of black jack oak, red oak, white oak, American elm, and sycamore, and is 50 m from the lake. Creeks form the area's north and east boundaries. The second area studied was the spillway, a 73 m x 30 m grassy area located on the southeast side of the lake. Except for the driest times of the year, standing pools of water occur in this area. The third study site was a 95 m x 95 m tallgrass area located on the southwest side of the lake. There is no standing water bordering this area, but its north end is approximately 20 m from the lake. There are large sandstone outcroppings in various places throughout this area, and the main kinds of vegetation are Indian grass, buckbrush, and prickly pear cactus.

A total of 136 hours was spent surveying the management area during the two-year period. Of this total, 16 hours were spent in each of the three study areas.

Results

Twenty-nine species of amphibians and reptiles were found at the Montgomery County State Fishing Lake. The abundance of each species is noted below as: common (C) = high probability of being seen; occasional (O) = can occasionally be seen; and rare (R) = high probability of not being seen. Notation of each species' abundance is based on my experience of whether a person searching a full day is likely to encounter that species.

Table 1

Abundance of Amphibian and Reptile Species at Montgomery County State Fishing Lake.

<u>Species</u> <u>Abundance</u>
American Toad (Bufo americanus)C
Cricket Frog (Acris crepitans)
Gray Treefrog
(Hyla chrysoscelis-versicolor complex)R
Bullfrog (Rana catesbiana)O
Southern Leopard Frog (Rana utricularia) R
Plains Narrow Mouthed Frog
(Gastrophryne olivacea)C
Red-eared Slider (Trachemys scripta elegans) C
Painted Turtle (Chrysemys scripta) C
Three-toed Box Turtle (Terrapene carolina) C
Ornate Box Turtle (Terrapene ornata)R
Common Musk Turtle (Sternotherus odoratus) O
Common Snapping Turtle (Chelydra serpentina)C
Eastern Collared Lizard (Crotaphytus collaris) R
Six-lined Racerunner

(Cnemidophorus sexlineatus) C
Five-lined Skink (Eumeces fasciatus) C
Ground Skink (Scincella lateralis) C
Rough Green Snake (Opheodrys aestivus) R
Eastern Yellowbelly Racer
(Coluber constrictor)R
Black Rat Snake (Elaphe obsoleta) C
Western Worm Snake (Carphophis amoenus) C
Ringneck Snake (Diadophis punctatus) O
Graham's Crayfish Snake (Regina grahamii) R
Common Garter Snake (Thamnophis sirtalis) O
Common Kingsnake (Lampropeltis getula) R
Bullsnake (Pituophis catenifer)R
Northern Water Snake (Nerodia sipedon) C
Plainbelly Water Snake
(Nerodia erythrogaster)R
Brown Snake (Storeria dekayi) O
Copperhead (Agkistrodon contortrix) O

Discussion

Ninety-one species of amphibians and reptiles are known to occur in Kansas, and 53 of these have been found in Montgomery County (Collins 1993). Twenty-nine species were found in the Montgomery County State Lake area during my survey. The lake area offers several transition points, having an aquatic environment bordered by woodlands, which then turns to pasture land. This edge effect may account for the high diversity of herpetofauna occurring there.

The most common amphibian encountered during my study was Acris crepitans, which was found near the water's edge throughout the management area. Bufo americanus could be found frequently in the early spring, and occurred more frequently in the spillway area. During the course of my study, the spillway was a breeding site for B. americanus. Gastrophryne olivacea was found only on a rocky slope on the east side of the management area, but in this one area this species could be found frequently. Rana catesbeiana was seen occasionally along the various creeks entering the lake. Only two specimens of Rana utricularia and one specimen of Hyla chrysoscelis-versicolor complex were found during this study.

Trachemys scripta and Chrysemys picta are the two most common aquatic turtles in the area, and can be seen frequently basking along the lake shore and on partially submerged logs. Chelydra serpentina is most often seen along the lake edge or sometimes crossing a road. One specimen of Sternotherus odoratus was found in the woodland area. The only other specimen of S. odoratus observed during the survey was a shell found on the northern side of the lake.

Terrapene carolina is very common in the woodland

areas surrounding the lake. In the spring of 1992, while working in my woodland study site with Jim Arnwine's zoology class from Independence Community College, six specimens of *T. carolina* were found in 20 minutes. Terrapene *ornata* is seen around the lake only rarely, occurring along woodland edge habitat.

Of the four species of lizards found at the lake, Eumeces fasciatus and Scincella lateralis were the most common. They were found throughout the lake area. Cnemidophorus sexlineatus was common, but could be seen frequently only during the warmest days of summer, presumably due to their high optimum body temperature requirements (Collins 1993). In the fall of 1990, there were a large number of juvenile C. sexlineatus near the lake's outlet channel. One specimen of Crotaphytus collaris was observed near a rocky sandstone outcropping in the tallgrass area.

Thirteen species of snakes were observed in the management area, and seven of those were found frequently. Carphophis amoenus, Diadophis punctatus, Storeria dekayi, and Agkistrodon contortrix were observed in wooded areas near or beneath rocks and logs. Nerodia sipedon was found more often in the shallows along the spillway and rocky fishing berms. Elaphe obsoleta and Thamnophis sirtalis were common throughout the lake area.

Opheodrys aestivus, Coluber constrictor, Lampropeltis getula, Nerodia erythrogaster, and Regina grahamii were only observed once. One specimen of Pituophis catenifer was captured by Jim Arnwine's zoology class in the management area, and is included in my list.

On 9 September 1977, the Kansas Herpetological Society held a field trip at Montgomery County State Lake, and observed 27 species of amphibians and reptiles (Perry 1977). Although the KHS field trip also included areas outside of the management area, there are a couple of differences between my list and theirs. The KHS count included the Spiny Softshell (*Apalone spinifera*), Prairie Kingsnake (*Lampropeltis calligaster*), and the Western Ribbon Snake (*Thamnophis proximus*). These species were not found during my study. Other differences include five observations of *Crotaphytus collaris* and four observations of *Nerodia erythrogaster* in 1977. During my 1990-1992 study only one individual of each of these species was observed.

Pituophis catenifer and Regina grahamii were observed during my study, but not during the 1977 count. One Cottonmouth, Agkistrodon piscivorus, was captured by KHS members during the 1977 count in the nearby Verdigris River. This specimen was later found to have been intentionally released into the wild. The Cottonmouth's natural range in Kansas is in the Spring River drainage in Cherokee County (Collins 1993).

Compilation of this list is ongoing. During the

summer of 1993, two more species were added to the list. A River Cooter (*Pseudemys concinna*) was observed basking on the north side of the lake, and one Diamondback Water Snake (*Nerodia rhombifer*) was captured below the lake's spillway.

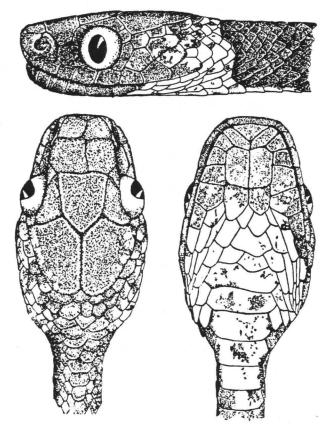
Acknowledgments

I would like to thank Mr. James Arnwine and Dr. Don Schnurbusch of Independence Community College for their help and guidance with this independent study project at ICC; Mr. Ed Miller, nongame wildlife biologist of the Kansas Department of Wildlife and Parks, for additional information on the lake; and Dr. David Edds of Emporia State University for his suggestions and review of this paper. I would also like to thank Killian Lowry, Eric Rice, and James Sumner for their help in the field.

Literature Cited

Collins, J. T. 1993. Amphibians and Reptiles in Kansas, 3rd. ed. Univ. Press, Lawrence. 397 pp.

Perry, J. 1977. KHS members achieve goal - get cottonmouth. Kansas Herpetol. Soc. Newsl. 21:3-4.



TWO AMPHIBIAN AND REPTILE COUNTS IN THE SOUTHEASTERN UNITED STATES

Joseph T. Collins

Zoologist & Editor Natural History Museum University of Kansas Lawrence, Kansas 66045

and

Director The Center for North American Amphibians and Reptiles 1502 Medinah Circle Lawrence, Kansas 66047

During late July 1994, accompanied by Suzanne L. Collins, Kelly J. Irwin, and Travis W. Taggart en route to the annual meeting of the Society for the Study of Amphibians and Reptiles in Athens, Georgia, a count was made at two localities of all species of amphibians and reptiles observed by the four of us. Although the Kansas Herpetological Society has an ongoing program of such counts, few if any are available for other areas of the United States. The results of these two counts are reported here in the hope of stimulating others to undertake such observations in their respective areas. Common names are those of Collins (1991). In the lists below, the number before the + is used in the total count of specimens.

Locality 1. Kentucky: Caldwell County: vicinity of Pennyrile State Forest near Dawson Springs. 23–24 July 1994. About 10 hours of field work. Sunny.

Longian Salamander (Eurycea longicauda) 12
Northern Slimy Salamander
(Plethodon glutinosus)2
Midland Mud Salamander
(Pseudotriton diastictus)7
Northern Cricket Frog (Acris crepitans) 15+
American Toad (Bufo americanus)1
Woodhouse's Toad (Bufo woodhousii) 15+
Bullfrog (Rana catesbeiana)12
Green Frog (Rana clamitans)1
Southern Leopard Frog
(Rana sphenocephala)11
Eastern Mud Turtle (Kinosternon subrubrum) 1
Painted Turtle (Chrysemys picta)4

Common Map Turtle (Graptemys geographica) 2
Eastern Box Turtle (Terrapene carolina)
Eastern Fence Lizard (Sceloporus undulatus) 1
Five-lined Skink (Eumeces fasciatus) 15+
Ground Skink (Scincella lateralis)1
Six-lined Racerunner
(Cnemidophorus sexlineatus)2
Eastern Worm Snake (Carphophis amoenus)2
Rat Snake (Elaphe obsoleta)1
Prairie Kingsnake (Lampropeltis calligaster) 1
Common Kingsnake (Lampropeltis getula) 1
Northern Water Snake (Nerodia sipedon) 1
Brown Snake (Storeria dekayi)1
Redbelly Snake (Storeria occipitomaculata) 1
Eastern Ribbon Snake (Thamnophis sauritus)2
Common Garter Snake (Thamnophis sirtalis) 1
26 species118 specimens observed

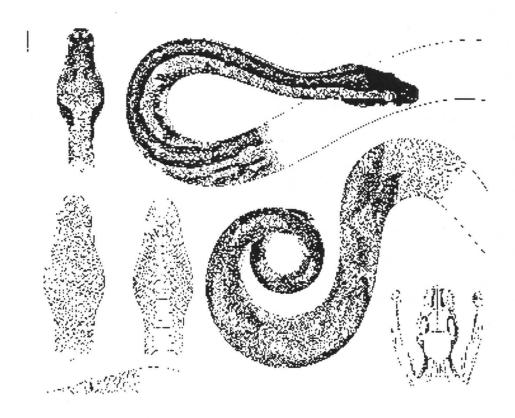
Locality 2. Georgia: Walker County: vicinity of Pigeon Mountain. 25–26 July 1994. About 4 hours of field work. Much rain.

Eastern Newt (Notophthalmus viridescens)2
Northern Dusky Salamander
(Desmognathus fuscus)9
Longtail Salamander (Eurycea longicauda)3
Cave Salamander (Eurycea lucifuga)2
Spring Salamander (Gyrinophilus porphyriticus) 1
Northern Slimy Salamander

(Plethodon glutinosus)4
Pigeon Mountain Salamander
(Plethodon petraeus) 100+
Red Salamander (Pseudotriton ruber)1
Green Frog (Rana clamitans)2
Eastern Box Turtle (Terrapene carolina)7
Eastern Worm Snake (Carphophis amoenus)1
Ringneck Snake (Diadophis punctatus)1
Racer (Coluber constrictor)1
Rough Green Snake (Opheodrys aestivus)1
Northern Water Snake (Nerodia sipedon)1
15 species 136 specimens observed

Literature Cired

Collins, J. T. 1990. Standard Common and Current Scientific Names for North American Amphibians and Reptiles. SSAR Herp. Circ. 19: 1-41.



(reprinted from NYTTS NewsNotes, Fall 1993)

BOOK REVIEW: Amphibians and Reptiles of Connecticut and Adjacent Regions by Michael W. Klemens. 1993. State Geological and Natural History Survey of Connecticut Bulletin 112. 318 pp. plus 32 color plates and 2 auxiliary maps. ISBN 0-942081-04-8. Hardcover. \$45.00.

Most regional faunas are written primarily from the literature. The author reviews publications of all kinds, including a large number of papers published over many years in scientific journals, then adds a relatively small amount of new information from his or her own experience, puts it all together in a (hopefully) organized format, and voila!—a new regional fauna. This book by Dr. Michael Klemens is quite different. It consists mainly of his own observations and data obtained during 17 years of field work and data analysis. his findings are supplemented, to be sure, by a thorough review of existing literature, but the heart and soul of the book consists of his original work.

I am in no way trying to denigrate the other type of publication—the type resulting primarily from literature reviews. They serve a very real purpose. They bring together a great deal of information from widely scattered and often unavailable sources and put it under one cover, where it can be used by people who do not have the time or inclination for an exhaustive literature review of their own.

Dr. Klemens' current contribution is a combination of the best of both types of publication. It presents an enormous quantity of new, original work, supplemented by, and integrated with, a thorough review of existing knowledge on the subject. The "Adjacent Regions" referred to in the title of the book refer almost exclusively to those counties of New York, Massachusetts, and Rhode Island which border on Connecticut. There are occasional references in the test to other counties and even other states, but these are not included in the geographic area which is covered in detail. If I had to make one suggestion for improving this book, it would be to drop the words "and Adjacent Regions" from the title.

The book contains accounts of all 22 species of amphibians and all 28 species of reptiles known to occur in Connecticut. Each species account is organized into five sections and seven subsections as follows: Identification; Distribution, general, regional; Life History and Ecology, habitat, activity, reproduction, size, food habits and predation; Conservation Status; and Specimens Examined.

These species accounts constitute the major portion of the book. Some species are covered in more detail than others, but all accounts are thorough, interesting, and informative. A detailed map of Connecticut, showing the species' distribution in the state, is included in each account.

There are 32 color plates in the center of the book.

Each plate contains one to eight high-quality color illustrations. All specie covered in the text are illustrated at leas once, and some are illustrated several times, including mature and immature stages, various color morphs, and both sexes. There are also a number of good photographs of the habitat in which various species have been found. I found these habitat photographs to be quite helpful in visualizing what I read in the text.

The last two color plates are maps of Connecticut. The first is a topographic relief map of this state with contour intervals of 500 feet. The second is a map showing the detailed locations of two prominent and ecological important physiographic features of the state: the Marble Valleys and the Trap Rock (Basaltic) Ridges. A unique and fascinating feature of this book consists of loose copies of the maps described above, printed in color on translucent material and stored in a pocket inside the back cover. These maps are drawn to the same scale as the distribution maps accompanying each individual species account. The transparencies can be overlaid on the species distribution maps to ascertain whether a correlation exists between any given species' distribution and elevation and the Marble Valleys and/or the Trap Rock Ridges. In some cases, the correlation is almost 100% and seeing it graphically is far more impressive than just reading about it in the text.

I would recommend this book heartily to anyone interested in the natural history of the southern New England area. It is particularly useful in pinpointing the regional distribution of the individual species and in describing their habitats, but it also contains excellent accounts of their behavior, reproduction, and ecological requirements.

— Don Riemer Rutgers University Rutgers, New Jersey