Tennessee Herpetological Society
Vincent Cobb, Publications Secretary
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Murfreesboro, TN 37132 USA

Tennessee Herpetological Society

Newsletter

Fall 2004
Volume 2

Fall 2004

Tennessee Herpetological Society

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Cover Photo
Lisa Powers

American Toad
Bufo americanus

THIS ORGANIZATION WAS FORMED TO PROVIDE HERPETOLOGISTS IN TENNESSEE AND SURROUNDING STATES AN OPPORTUNITY TO MEET AND EXCHANGE IDEAS REGARDING CURRENT RESEARCH AND OTHER PROFESSIONAL ACTIVITIES ASSOCIATED WITH AMPHIBIANS AND REPTILES.

THS Website: http://home.mindspring.com/~froghaven/

A Word from the President

Greetings Fellow Herpers:

The days are getting shorter as Summer turns to Fall. Less anuran music at night, road crossing reptiles are still being encountered and basking turtles are catching the last days of full sun. For THS members this means our Annual Fall Meeting!

Maryville College has turned out to be an excellent site for the meeting. Ben Cash has done a fine job getting all the detail together. Remember, we need member support, we need public support and we need volunteers to make these annual meetings a success. So, if you could not make this years' meeting, please plan to attend the next one.

If you have never attended one of Annual Meetings you are missing a real treat! There is an educational component where professional and student papers/posters are presented. There is the Auction, purely entertaining and an important fund-raising activity to boost the Chad Lewis Memorial Fund. Eventually, a grant will be awarded to a Tennessee student for Herp Research in Tennessee. The third day is the Field Trip, always a memorable experience. This year it will be within the Great Smoky Mountains National Park.

I ask you to take an active role in the Tennessee Herpetological Society. One important reason to attend the annual meeting is the election of Officers. John Copeland and Ray Jordan are busy putting together a slate of nominees and as always, we will take nominations during the Business Meeting.

I am always eager to hear from you.

Sincerely,

Pete Wyatt
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Morristown, TN 37814
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Herpetology Conference Field Trip to Barnett Woods Natural Area

A. Floyd Scott, Austin Peay State University, Clarksville, Tennessee

On 2 November 2002, 11 attendees of the Tennessee Herpetology Conference visited Barnett Woods Natural Area (Montgomery County) to study its herpetofauna. The weather was partly cloudy and cool with temperatures ranging from the low to high 50s. Approximately 3 hours of searching revealed 13 species (2 frogs, 6 salamanders, 2 lizards, and 3 snakes) in the three dominant habitats (cave, 1st order stream, and wooded slope) on the area. The most productive habitat was the wooded slope, which yielded 7 species, followed in order by the 1st order stream (6 species) and cave (2 species). The trip was documented with photographs and field notes.

PARTICIPANTS:
1. Nathan Parker (Leader), Austin Peay State Univ.
2. John Koons, Jackson State Community College
3. John Maxwell, Jackson State Community College
4. Rick Goins, Bays Mountain Park
5. Daniel French, Jackson State Community College
6. Rhonda Goins, Bays Mountain Park
7. Kyle Waggener, Chattanooga Nature Center
8. April Waggener, Chattanooga Audubon Society
9. John Byrd, CRESO
10. Kristie Jenkins, CRESO
11. Floyd Scott (Leader), Austin Peay State University

SPECIES:
Green Frog (*Rana clamitans)*
Northern Cricket Frog (*Acris crepitans*)
Cave Salamander (*Eurycea lucifuga*)
Southern Two-lined Salamander (*E. cirrigera*)
Spotted Dusky Salamander (*Desmognathus conanti*)
Long-tailed Salamander (*E. longicauda*)
Northern Slimy Salamander (*Plethodon glutinosus*)
Northern Zigzag Salamander (*Plethodon dorsalis*)
Five-lined Skink (*Eumeces fasciatus*)
Little Brown Skink (*Scincella lateralis*)
Northern Watersnake (*Nerodia sipedon*)
Smooth Earthsnake (*Virginia valeriae*)
Ringneck Snake (*Diadophis punctatus*)

Comprehensive Wildlife Conservation Plan

Our objective is to develop and write a State Comprehensive Wildlife Conservation Plan (SCWCP) addressing the management of species of greatest conservation need. Species Groups to be addressed include birds, amphibians, reptiles, small mammals, terrestrial snails and aquatic species (Nongame fish, mollusks and crustaceans).

Accomplishments:
1. Four (4) Regional Biologists were hired to coordinate planning activities at the regional level.

CWCS Development
1. A comprehensive literature review was conducted to determine which Tennessee species experts had identified as declining in numbers or their population status was unknown. A spreadsheet documenting and referencing over 600 species of amphibians, reptiles, birds, mammals, mollusks and Crayfish was developed.

2. A review of the Tennessee GAP project was conducted to determine its role in development of the CWCS. The GAP project identified and mapped over 30 land use land cover types in Tennessee. With some modification and cross-walking of descriptions, these GAP types are the basis of the land use / land cover being used in the CWCS. The modeled species distributions in GAP were based on the Environmental Protection Agency hexagon coverage. The CWCS project will not be utilizing that structural component. A Comprehensive literature review was conducted in order to determine species for which the TWRA should be "concerned".

3. Criteria were developed to systematically, and justifiably evaluate the status of over 900 terrestrial, aquatic and subterranean species. Currently, our species of concern list is comprised of approximately 900 taxa.

4. Species status was evaluated geographically based on Bailey's Ecoregions and the 12 digit HUC for aquatic species. That is, the species may be of listed statewide or only in one or more ecoregion or HUC.

5. Species were evaluated as to endemism, wide-spread occurrence or peripheral occurrence. Population viability is being determined for each species. That is, how many populations are known and are they viable. Criteria have been established to standardize this process.

6. Species population goals are being determined. That is, how many stable, protected populations need exist before we are no longer "concerned" about this species. This process is underway and must be completed for all species.

7. "Keystone Species" concept and its application in the process is being evaluated. That is, can we identify "key" or "focal" species in communities and/or habitats that can serve as threat/management indicators.

8. Steering committee was formed and the initial steering committee meeting has been conducted. The steering committee is comprised of representatives from U. S. Fish and Wildlife, Cookeville Field Office and the Atlanta Regional Office; U. S. Forest Service, Tennessee Valley Authority, Tennessee Division of Forestry, Dept. of Agriculture; Tennessee Department of Environment and Conservation, Tennessee Department of Transportation, Tennessee Conservation League, The Nature Conservancy, the TWRA and the Governor's Office.

9. Literature review for historic perspectives for the introduction of the plan has begun. Draft introductions and methods are being written now.

Species Inventory

This project involves the sampling of various nongame species groups (ie. shorebirds, small mammals, amphibians and reptiles) on TWRA owned lands. In order to conduct these surveys 4 regional positions (1 / region) were created and hired. Unfortunately, these positions were hired late in the fiscal year. Two positions were filled in May and two in June. Accomplishments were preliminary in nature, that is, purchasing sampling supplies and equipment (vehicles), sample site selection, survey route selection and protocol establishment.

LIST OF ACCOMPLISHMENTS:
Sampling protocols were established from the original approved project statement to U. S. Fish and Wildlife Service, Division of Federal Assistance. It became clear early on that a good habitat evaluation, to include standing biomass and an estimate of downed coarse woody debris was important for the project. Additional protocols were developed for habitat evaluations and descriptions. For consistency, data sheets that can be applied statewide were developed.

Preparation work for sampling on Wolf River WMA and White Oak WMA -Wolf River is 7,000 acres located in Fayette County and White Oak WMA is 7,000 acres located in Hardin County.
Preliminary work conducted:
1. 5 coverboard arrays established on both areas. (each array consisted of 25 boards)
2. 3 covertin transects established on each area (each transect 150m with tin every 10m.)
3. 3 drift fence arrays established on each area (approx. 6 pitfall per array)
4. 5 trap turtle trap nights conducted (3 on Wolf River, 2 on White Oak)

Preparation work for sampling on Bark Camp Barrens WMA. - Bark Camp Barrens is 2,800 acres located in Coffee County.
Preliminary work conducted:
1. 5 coverboard arrays established (each array consisted of 25 boards)
2. 5 covertin transects established (150 m transects consists of 15 pieces of tin)
3. 5 drift fence / pitfall traps arrays established (each consists of 120 ft of drift fence with five pitfalls)
4. Tennessee Amphibian Monitoring route has been established along/on the area.

Todd is now an Assistant Professor at the University of Tampa. **Justin Walguarnery** is presently conducting doctoral research on interactions between the juveniles of the two species, and **Nathan Turnbough's** doctoral research is on the impacts of dense populations of *A. sagrei* on local food webs. Echternacht and **Glenn Gerber**, a former doctoral student, continue studies of an introduced population of *A. sagrei* on Grand Cayman. In another study of an invasive species, **Kevin Smith** is conducting his doctoral research on the impacts of the larvae of two introduced anurans, the cane toad (*Bufo marinus*) and the Cuban treefrog (*Osteopilus septentrionalis*) on the larvae of native anuran species that breed at the same sites. He is also comparing the toxicity of the paratoid gland secretions of *B. marinus* among introduced populations (e.g., Florida, Bermuda) and the source population in Guyana.

Finally, Echternacht's lab is studying the ecology and behavior of large endangered iguanas with the hope of obtaining data that will contribute to their conservation. **Rachel Goodman** is currently completing her Master's thesis on habitat use by the Grand Cayman Blue Iguana (*Cyclura lewisi*). Fewer than 25 of these lizards survive in the wild population and Rachel studied a population of head-started and captive-released iguanas that has begun to reproduce in a reserve. A second project, just getting under way, will investigate the interactions between the endemic Baker's iguana (*Ctenosaura bakeri*) on the island of Utila in the Bay Islands of Honduras. **Stesha Pasachnik**, who will join the group in the Fall of 2004, will undertake this research as part of her doctoral studies.

Neil Greenberg (Ph.D., Rutgers University) studies the behavioral neurology and endocrinology of *Anolis* social behavior. In particular, he is interested in how the basal forebrain and physiology of stress interact to control behavior. Neil has published a review paper a year for the past few years. In his most recent review he reprises and updates an ethogram of *Anolis* social behavior which can be supplemented with input and feedback from all other observers of that species. Neil does not currently train graduate students, but encourages collaborations with those interested in his work while focusing on publishing.

Marguerite A. Butler (Ph.D., Washington University), the newest of the UTK herpetologists, has two main research interests that both involve lizards. One is understanding the evolution of sexual dimorphism, especially any adaptive component. For this she has worked on *Anolis* lizards of the Caribbean which form an adaptive radiation. Her second, and most recent, line of research is focusing on the effect of reproduction on locomotion in lizards, which is likely to have a very strong influence on morphological evolution (and lizards exhibit many morphological specializations for running). Marguerite is currently conducting experiments on burst speed, locomotion kinematics, biomechanics, ventilation, and exercise physiology studies on gravid and post-gravid females with her lab looking at the effects of external load on non-gravid animals.

James A. Fordyce (Ph.D., University of California, Davis) has diverse interests in ecology but has two herp-related projects. Jim has found that chemical defenses of toads are chemically similar to some chemical defenses of milkweeds. Jim also is examining geographic and phylogenetic patterns of variation in these toxins in collaboration with Greg Pauly (U. Texas), examining the evolution of these defenses. Jim has a doctoral student **Elizabeth McDonald** focusing on the spatial ecology and habitat use by eastern hognose snakes, *Heterodon platirhinos*.

An additional faculty with peripheral herp interests is **Thomas J. Near** (Ph.D., University of Illinois, Urbana-Champaign) who focuses on the use of phylogenetic hypotheses for studying patterns of speciation in fishes. Recently, Tom has applied the same techniques of examining molecular clocks in fish to turtles.

Picture of a Cave Salamander taken by Lisa Powers.

OBSERVATIONS ON A CLUTCH OF EASTERN HOGNOSE SNAKE EGGS AND HATCHLINGS FROM SOUTH CENTRAL TENNESSEE

Brian T. Miller
Department of Biology, Middle Tennessee State University, Murfreesboro, TN 37132

On 22 July 1994 39 eggs were found beneath a section of concrete slab associated with a pile of rubble located alongside road J-5 near the R-3 intersection in the western section of Arnold Air Force Base in Franklin County, Tennessee. The eggs were measured (Table 1) and incubated in a sealed plastic container lined with dampened paper towels and placed on top of an environmental chamber.

A shriveling egg was dissected on 2 August and contained a well developed, but dead snake (MTSU 89S). Hatching of the eggs began during the evening of 3 August; all eggs hatched by the afternoon of 4 August. The hatchlings, identified as eastern hognose snakes, *Heterodon platyrhinos* (Fig. 1) were measured (Table 1) and either preserved (n = 4) or released (n = 34) at the location where the clutch was found. None of the hatchlings showed any aggressive defensive response, such as hissing or inflating the neck, to mild assault (gently tapping the dorsum); rather, all hatchlings responded to this assault with death-feigning.

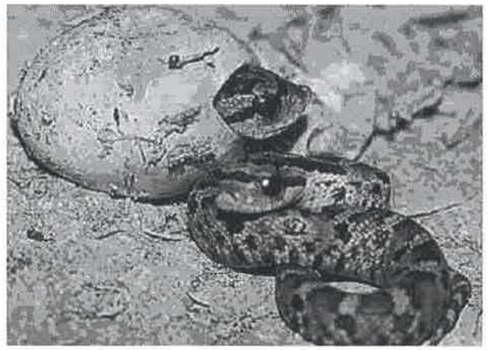

Figure 1. Hatchling Eastern Hognose Snakes from Franklin County, TN.

Table 1. Egg Dimension and Hatchling Length Associated with a clutch of Eastern Hognose Snake eggs from Franklin County, Tennessee.

Egg Dimensions (mm)	Hatchling Total Length (mm)
30.3 x 25.8	151
31.4 x 27.1	152
38.5 x 26.4	158
31.9 x 27.5	146
33.7 x 25.7	143
31.6 x 25.3	162
32.5 x 24.4	156
34.4 x 25.2	152
37.2 x 24.3	161
36.1 x 24.5	151
35.2 x 24.0	153
35.1 x 24.7	150
30.0 x 25.5	152
30.8 x 26.4	151
32.7 x 25.8	152
33.8 x 24.6	129
34.8 x 25.6	143
34.2 x 26.8	155
34.5 x 26.7	162
33.4 x 28.7	157
33.6 x 25.5	154
34.1 x 24.5	154
34.9 x 26.8	157
34.5 x 23.5	153
33.7 x 24.3	154
33.7 x 24.0	158
31.8 x 25.4	139
35.1 x 24.6	155
34.5 x 25.5	160
34.6 x 25.8	156
35.3 x 25.2	154
33.9 x 26.9	153
30.9 x 26.2	150
36.2 x 26.6	146
32.5 x 26.7	153
34.8 x 22.4	154
35.3 x 25.8	155
31.9 x 23.4	156
27.8 x 22.6	159
$\bar{x}$ = 33.6 x 25.4	$\bar{x}$ = 153

In Memoriam – William H.N. Gutzke, 1950 - 2004

In April 2004, a heart attack claimed the life of one of the more charismatic members the Tennessee herpetological community, William H.N. ("Bill") Gutzke. Bill was a co-advisor for my dissertation work whilst I earned a Ph.D. from the University of Memphis in the mid- and late-1990's. Although I know relatively little about Bill's up-bringing and personal life, the five years that he served as my mentor provide several memorable examples that portray his professional life well.

My first interaction with Bill was over the telephone, with me being a prospective graduate student discussing our potential collaboration. His southern Appalachian accent oozed out of the phone like molasses. I had read a few of his papers, but was not aware until arriving in Memphis of the impression that the general campus community had of him – depending on whom was asked, Bill was the Gator Guy, or the Snake Man. Of course, it wasn't his work with either of these taxa that had put Bill's name on the radar screen. Instead, his post-doctoral research with David Crews on temperature-dependent sex determination in turtles (1988, Nature, 332:832-834) validated what was, by then, an already-productive scientific career.

In my first year as Bill's student, I quickly learned, and still appreciate, his conviction in the value of the graduate degrees that the department conferred. During seminars given by graduate students defending their work, he was quick to point out seemingly minor or technical errors – for instance, in nomenclature – that had been overlooked by the student and the major professor. Although the colleague might have been annoyed by Bill's identifying minor oversights, Bill defended his habit to the entire audience because he didn't want to see the same degree awarded to other students devalued in any way.

Bill really enjoyed being in the field searching for herps. I found parts of his attire perplexing, however. There were the usual items – a t-shirt and a faded pair of jeans; but then, he always showed up wearing white, flimsy, canvas sneakers without any socks. I remember his leading a 3-day class trip to the Great Smokey Mountains National Park with only one pair of this shoe type and being amazed that his feet could stand all of the hiking with relatively little protection or support.

During his years as graduate coordinator for the department, I think that Bill provided prospective graduate students with an honest appraisal of what graduate studies at the University of Memphis would be like – he rarely sugarcoated any comment. Bill subscribed to the "hands-off" mentoring paradigm and didn't mollycoddle his students if their research protocols weren't working out. I could always count on him for a thorough evaluation of any change in my research methodology. Instead of funding students off of his own grants, Bill was more likely to encourage their independence through submitting their own grant proposals. Although resource pools differ at different universities, Bill's strategy was certainly one that fostered further development of all graduate students.

For those who knew him, it probably comes as no surprise that Bill was quite willing to voice his opinion on any controversial subject. His direct approach didn't always engender the collegial atmosphere that one hopes to find around academic departments, but I admired his willingness to take a stand for what he felt was in the department's best interests. His colorful nature will be missed.

-- Stephen J. Mullin, Ph.D. 1998 University of Memphis
Department of Biological Sciences, Eastern Illinois University

In Memoriam – Bill Gutzke

Bill had a knack for capturing the essence of any situation with a memorable one-liner or story. These stories tend to stick with a person so much so that every time I see a road-kill turtle, I think of Bill. You see, Bill (and perhaps many of us) thought that "any turtle was better than a
lot of people." He recounted an incident in which he was a passenger in a vehicle and the driver purposely ran over a turtle. Bill proceeded to grab the steering wheel, pull the vehicle over, drag the driver out of the vehicle, and then beat the tar out of the guy. He said, "I didn't stop until he promised never to do that again." Anybody listening to this or many other stories is probably a little shocked and wondering how much of it is true. It is common to think, "If it is true, I'm glad it wasn't me."

No matter how you felt about him, Bill was not a person that you would ever forget. More importantly, Bill never forgot how important reptiles and amphibians are in enriching our world and our professional lives.

-- Carol Britson, M.S. 1991, Ph.D. 1996 University of Memphis
Department of Biology, University of Mississippi

In Memoriam – Dave Snyder

Herpetologists across Tennessee and the U.S. mourn the death of Austin Peay State University Professor, David Hilton Snyder.

Dave died while sleeping at his home in Montgomery County on the night of 7 May 2004. He was 65 years old.

Born in Giles County, Virginia on 24 June 1938, Dave spent most of his youth in Missouri and earned B.S. and M.A. degrees from the University of Missouri in 1958 and 1962, respectively. In the fall of 1962, he accepted a position in the Biology Department at Austin Peay. From 1969 to 1971, he took a leave of absence to attended Notre Dame University, where he earned a Ph.D. in Zoology. During his 42-year association with Austin Peay, he served as advisor and mentor to scores of undergraduate and graduate students. Twelve of his graduate students produced theses on a variety of topics in herpetology, mammalogy, ichthyology and ornithology. In addition to authoring a number of scientific works, he was also actively involved in many local, state, and national professional organizations. Locally, he was noted for his willingness to serve as a guest speaker at local schools and civic organizations. His greatest contribution, however, was probably his ability to transfer to his students a sense of excitement and enthusiasm when exploring the natural world. Many of those who served under his tutelage went on to earn terminal degrees and are now recognized as respected educators and professional biologists.
Dave will be sorely missed, but fondly remembered, by all who knew him.

-- A. Floyd Scott, Austin Peay State University, Clarksville, Tennessee

Species Profile: Eastern Racer
Coluber constrictor

J. Jeffrey Green
Department of Biology
Middle Tennessee State University

The common name "black racer" is often used to refer to either of the two subspecies of racers found in the state of Tennessee. Currently there are 11 recognized subspecies in North America. An abundant species, the northern black racer (*Coluber constrictor constrictor*) and southern black racer (*C. c. priapus*) occupy separate regions of the state, but tend to utilize similar habitats. *C. c. constrictor* can be found throughout all of East Tennessee to the westernmost point of the Cumberland Plateau, while *C. c. priapus* occupies west on from the plateau. Although separated as subspecies, their differences are restricted to internal anatomical differences (i.e., enlarged basal hemipene spine on *C. c. priapus*) with no morphological differences externally.

A medium sized snake (90 – 150 cm), the general appearance of the black racer is heavily tapered (almost whip-like) with a glossy black dorsum and a solid bluish-gray venter with the exception of its' characteristic white chin. Upon closer examination it should be recognized that *C. c. constrictor* and *C. c. priapus* possess a smooth scale type and a divided anal plate. Scale type will immediately distinguish this species from another mostly black species. Generally showing some evidence of dorsal blotches, the black rat snake (*Elaphe "Pantherophis" obsoleta*), has keeled scales. Although the black kingsnake (*Lampropeltis getula*) has smooth scales, its' single anal plate will serve to distinguish it from the racer. Although these features will help in distinguishing between similar species, the racer's most notable attribute is its incredible speed. Most often heard retreating through the brush, this snake appears as a blur. Identifying the young juvenile racers is another story. The young are slender and fast but their dorsum is covered with dark blotches or spots on a grayish background.

The racer is considered a generalist in habitat preference. Both *C. c. constrictor* and *C. c. priapus*, although occupying different regions of the state, inhabit similar habitat types. Racers can be found in most all habitat types, such as deciduous and evergreen forests, cedar glades, open fields, and urban environments. Male racers tend to roam more than females and consequently occupy a larger home range. This is especially evident in late April and May when courtship and breeding take place in Tennessee. In June, females lay about 8 – 16 eggs, which hatch in August. The eggs are white, oblong, and have a granular surface that that is similar to sandpaper. This species also is a generalist in its feeding habits and is known to take small birds, mammals, reptiles, amphibians, and insects. The prey is not constricted as implied by the snake's specific epithet. Instead the prey is subdued with force before being consumed. Racers are active foragers and likely use their keen eyesight for locating prey as much or more so than chemical scents.

This is a non-venomous species, but possesses an aggressive temperament. Typically avoiding confrontation by lying still or retreating with a burst of speed, if cornered this snake will vigorously attack the instigator, often striking at the offender's face. This species has been known to retreat into trees to avoid a confrontation, and although believed to be a terrestrial snake, has been observed spending extended periods of time in an arboreal environment. Such arboreal behavior seems to vary greatly between individuals.

ANNOUNCEMENTS-

- The Frogs and Toads of Tennessee poster is now available and looks great. To obtain a free poster, contact Patricia Miller (615-781-5276) at the Tennessee Department of Wildlife and Conservation. A Salamanders of Tennessee poster should be available shortly.
- New Book: THE EXOTIC AMPHIBIANS AND REPTILES OF FLORIDA by Walter E. Meshaka, Jr., Brian P. Butterfield, and J. Brian Hauge. Illustrated species accounts detail the history and nature of each, the mode of dispersal, natural history, and present-day habitat and geographic distribution in the state. Krieger Publishing Company, Published 2004, ISBN 1-

2003 Tennessee Herpetology Conference Field Trip to the Hatchie NWR.

Brian P. Butterfield
Department of Biology
Freed-Hardeman University

On 4 October 2003, four members of the Tennessee Herpetological Society participated in a field trip to the Hatchie National Wildlife Refuge near Brownsville Tennessee. The weather conditions were cool (19-22 °C) and clear. Participants collected in three different habitats for a total of two hours (0900-1200 hrs).

The first area collected was in and around a small fishless pond located in oak/hickory hardwood forest. This area yielded 1 western cottonmouth (*Agkistrodon piscivorus leucostoma*), 1 mole salamander (*Ambystoma talpoideum*), ca. 10 central newts (*Notophthalmus viridescens louisianensis*), ca. 5 northern cricket frogs (*Acris crepitans*), 1 green treefrog (*Hyla cinerea*) and 2 bronze frog tadpoles (*Rana clamitans clamitans*).

The second area was a flood control ditch located between two corn fields. We found no herps along the ditch but we did find a small cottonmouth crossing on a nearby dirt road.

The third area was in bottomland hardwood forest within the flood plain of the Hatchie River. Here, we collected or observed 1 southern painted turtle (*Chrysemys picta dorsalis*), 1 Fowler's toad (*Bufo fowleri*), and 1 bronze frog.

Most of the animals collected were photographed and all were release at the capture site. Voucher photographs will be deposited in the Austin Peay State University Museum of Zoology. We thank Marvin Nichols for allowing us to hold this field trip at the Hatchie National Wildlife Refuge.

SOME HERPETOLOGICAL TAXONOMY UPDATES FOR TENNESSEE

- *Crotalus horridus horridus* (Timber Rattlesnake) was once described as ranging in east and middle Tennessee while *C. h. atricaudatus* (Canebrake Rattlesnake) was found in the lowlands of west Tennessee. In the 1970's, the two subspecies were eliminated, leaving just *C. horridus*. Recent mitochondrial DNA analyses confirmed this taxonomic change. It appears that there is not enough genetic variation throughout the range of *C. horridus* to warrant a subspecies designation. Journal of Herpetology (2003).
- The *Desmognathus ochrophaeus* complex has again made phylogenetic news for Tennessee. Recent allozyme study of this complex in the Cumberland Plateau has revealed *D. ochrophaeus* (Allegheny Dusky Salamander) in the northern plateau, *D. ocoee* (Ocoee Salamander) east of the Sequatchie Valley, and a new species, endemic to the plateau, *D. abditus* (Cumberland Dusky Salamander) that ranges from about Morgan Co. down to Grundy Co. Herpetological Monographs (2003).
- *Chrysemys picta* (Painted Turtle) systematics have been updated. Mitochondrial DNA analyses resulted in a proposed splitting of *C. picta* and its four subspecies into two species, *C. picta* and *C. dorsalis*. For Tennessee, *C. dorsalis* would occur in west Tennesse while *C. picta* would be the species in the rest of the state. Evolution (2003).
- Ratsnake genus *Elaphe* has recently been replaced with *Pantherophis* for North America. Mitochondrial DNA showed that the North American ratsnakes are genetically distinct from the Old World ratsnakes. Russian Journal of Herpetology (2002).

UPCOMING MEETINGS

Tennessee Academy of Science, November 19, 2004
Columbia State Community College, Columbia, Tennessee

Biology of the Rattlesnakes Symposium, January 15-18, 2005
Loma Linda University, Loma Linda, California

Association of Southeastern Biologists, April 13-15, 2005
University of North Alabama, Florence, Alabama

5th World Congress of Herpetology, 20-24 June 2005
Stellenbosch University, Stellenbosch, South Africa

American Society of Ichthyologists and Herpetologists, Herpetologists' League, Society for the Study of Amphibians and Reptiles Joint Meeting, July 6-11, 2005
University of South Florida, Tampa, Florida

2005 Newsletter – Please send all newsletter contributions to Vincent Cobb – Publications Secretary, Department of Biology, Box 60, Middle Tennessee State University, Murfreesboro, TN 37132
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Acknowledgments – Much of this newsletter was made possible by the Editorial Assistant, MTSU student Heather Kilburn.

Tennessee Herpetological Society Membership Application

Name _____ Address _____

Phone _____ _____

Email _____ _____

Institutional or Agency Affiliation _____

Membership Category (check one)

___ Charter (until July 31, 2003 only) - $50
___ Institution - $25
___ Individual - $15
___ Supporting - $30
___ Family - $20
___ Student - $10

___ Donation (Chadwick Lewis Scholarship Fund) – Amount: _____

return with membership fee to:

Date: _____

J. Jeffrey Green, Treasurer
Tennessee Herpetological Society
Department of Biology
Middle Tennessee State University
Murfreesboro, TN 37132