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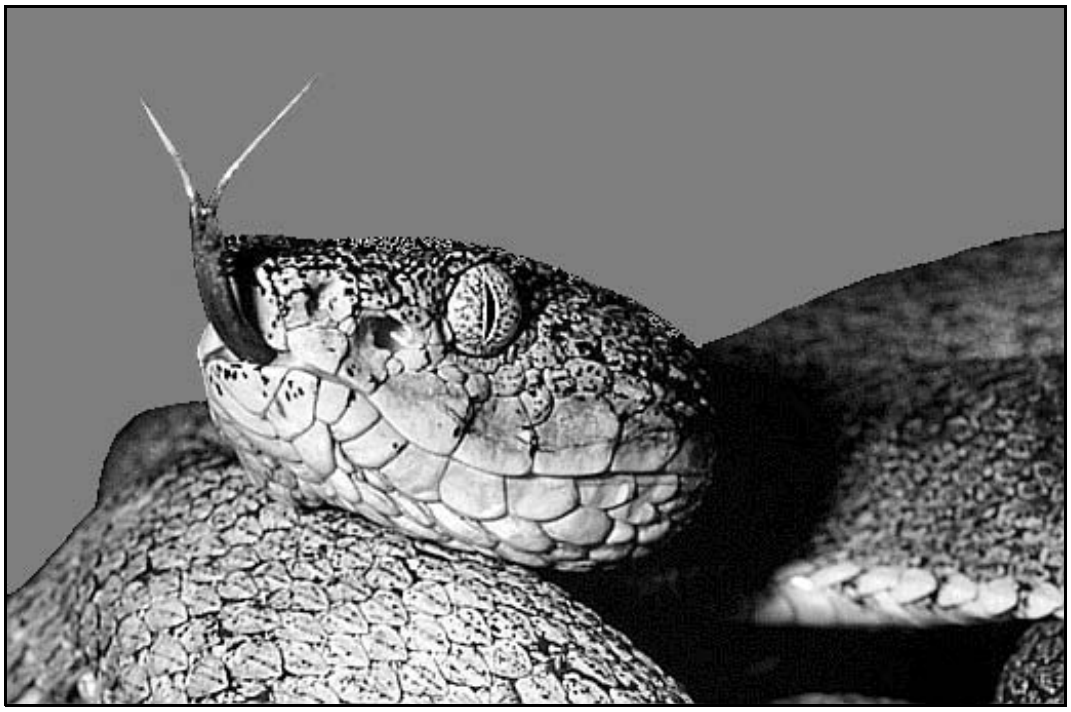

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Cover: A two-striped forest pitviper, *Bothriopsis bilineata*, from northeast Ecuador. Photograph courtesy of Dr. Zoltan Takacs.

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A Rare Accident

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Key words: Brazil, Atlantic rainforest, conservation, snakebite, *Bothriopsis*

Introduction

"I've only seen *B. b. smaragdinus* cases on the western side of S. America so this is specially valuable" (David Warrell, personal communication, 2007)

Three venomous snake species of the Brazilian Atlantic rainforest are endangered. These are *Lachesis muta rhombeata* (the Atlantic bushmaster), *Bothrops pirajai* and *Bothriopsis bilineata* (if you follow Campbell and Lamar [2004], or *Bothrops bilineatus* if you follow Wüster et al. [2002]). *Bothriopsis bilineata* is also found in the Amazon Basin and apparently not under a major threat over there. Coastal populations of these three species face a dire future due to the ever-increasing anthropic pressure in the form of habitat distruction. It's rare to find data about accidents they may inflict on humans.

Isolated populations of these three species are found only within stretches of primary or old secondary forest along the east (Atlantic) Brazilian coast, and since there is usually no comunication between these pieces of land, genetic exchange becomes the major issue for these groups of animals. Recently the federal agencies Instituto Brasileiro de Florestas, IBF and IBAMA developed the program "Corredores Ecologicos" or "eco-corridors," to make possible a connection (a green highway) between the many "protected" Atlantic rainforests. In this program, and in effective environment protection lies the future of these (and many other) species.

Baby chimps inherit genetic fear of snakes for survival; we are all apes and everywhere, besides what's genetically inherited, humans learn from childhood to fear (and later on to kill) all snakes. The green ones share a better reputation around here (Brazil) and are usually left alone, but for the sake of accuracy and prevention we must affirm that the truth is that two of these "green snakes" may cause severe and even life threatening accidents in Brazil: the opistoglyphous genus *Philodryas* being one of them, and the genus *Bothriopsis*, the subject of this short comunication, the other.

Also for the sake of truth, prevention and accuracy we must affirm that all instances of "aggressiveness" in snakes are reactive responses: "Snakes really want nothing to do with us and do not go on the hunt for people to bite since they can sense that we are too large for prey, saving the precious venom to subdue the meal and to help its digestion" (Matt Etterbeck, in the "Snake-man" Newsletter, Sept. 2007).

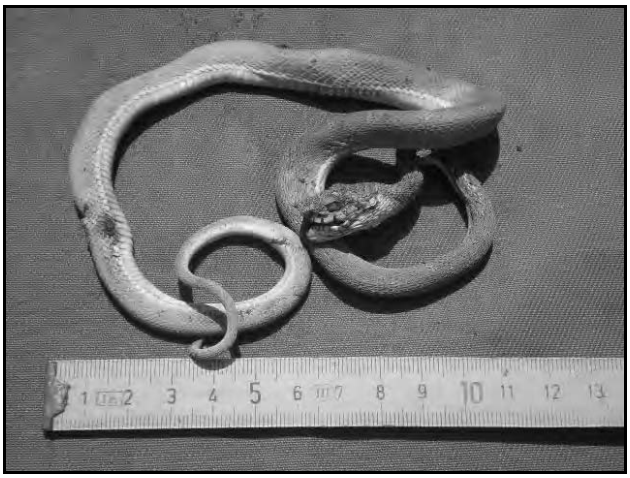
Case Report

This is first accident I've seen involving *Bothriopsis bilineata*. Some nurses working in our hospital for the last 30 years did not recall another accident like this nor have they seen the animal before. Experts like Cardoso (Butantan) in major works like *Animais peçonhentos no Brasil* have no data about these intoxications. In Amazonian countries of the north-northwestern portion of South America, accidents with this forest-pitviper seem to be less rare (Smalligan et al., 2004).

I received the patient, JRAG, a male farmworker, 26 years old, 70 kilos of weight, 1 hour and 50 minutes after a bite that ocurred in "Mata Grande" (around Itacaré, Bahia, Brazil), on a Sunday, 2 September 2007, 6:00 A.M. He brought the animal along. Upon admission: intense local pain and a burning sensation, "hot" edema from bite site (left index finger) until medium third of left forearm. Normal blood pressure, but pulse at 100 bpm + due to pain and anxiety.

Since I considered the animal "a teen" and took the case as mild, also because of the quick antivenom administration and no use of a tourniquet, I proceeded with 4 IV vials of anti-bothropic (Butantan) anivenom while cleaning wound site with clorohexidine 4%. There were no signs of any allergic reactions. The edema progressed for the first 12 hours and got stable after that, reaching the biceps muscle of the left arm (again, hot edema). It's well known that the antivenom does not imediately control swelling and pain.

When I say hot edema I mean it. Manuals refer to *Bothrops* accidents as causing "cold" edema. What I saw in this specific



Lines on the patient's arm indicate the progress of the edema 2, 4 and 12 hrs after the bite.

case was that the burning sensation was for real, the entire left arm was much hotter than the rest of the body, as observed in some infected wound sites. I chose to use no "prophylactic antibiotics" believing that what I was observing was obviously direct action of the poison, for no infection would progress as fast as that.

No biochemistry was available at the moment of the treatment. Sites of shots (pain relief) and venopuncture were not bleeding abnormally and that speaks for coagulation time at least close to normal within two hours of the administration of the antivenom, which is also unusual, for CT restoration usually takes at least six hours to occur after treatment of bites inflicted by the genus *Bothrops*. After 20 hours in the hospital pain started to ease without medication. The patient was allowed ambulatorial follow-up 36 hrs after admission, showing no systemic or local signs and symptoms, and was discharged taking Nimesulide 100 mgs BID. Seventy-two hours after his leaving the hospital, we can affirm that there will be no complications (necrosis, infection) and that JRAG will soon be back to work.

Discussion

I've had the opportunity to rescue and remove to reserves two other *Bothriopsis bilineata* in the last seven years. They may reach a meter in length and inject four times more venom than the individual in this in this case report did. Although there is no LD_{50} available for the species, I can certainly affirm that the intoxication should be taken as a medical emergency, especially if it takes longer than six hours for the patient to reach the hospital, and/or if a tourniquet was placed. In a recent publication in the CHS *Bulletin* (The enigma of the North Margin of the Amazon River) we've cited works that demonstrated that as far as the *Bothrops* genus is concerned, the size of the animal is the main prognostic factor in the accidents: bigger animal = more venom injected = more damage. It was a surprise to see a small animal like this do such damage (extensive hot edema and pain), something that, in our experience, a same size (sympatric) *Bothrops leucurus* would not do. Others have also been surprized by the power this poorly studied envenomation: 1) "Published allegations of extreme toxicity for this species [*B. bilineata*] require substantiation" (Campbell and Lamar, 2004) ; 2) Theakston (personal communication, 2007) reports "severe local envenoming and incoagulable blood" in his own accident in 1998.

In vitro, the venom presents high enzymatic activities for the proteases kallikrein, thrombin and plasmin and was able to induce neutrophil recruitment into peritoneal cavities of mice 4 hours after injection. Shortly stated, the venom induces a pronounced inflammatory reaction, with leukocyte recruitment, edema formation and hemorrhage, which parallels to a high proteolytic activity also detected (Porto et al., 2007). The species displays high arboreality rates (100% of the time during daylight in captivity) and birds are part of the diet. What we may be seeing here is another evolutionary trait so that the stricken bird does not go too far into the wet forest (getting lost forever), the same rationale used to understand why *Bothrops insularis* has a much more powerful venom than continental *Bothrops* species. *Bothrops insularis* is only found in Queimada Grande Island, Sã o Paulo, Brazil, and its diet is mainly birds that may fall off the steep rocky cliffs into the ocean if not instantly killed after the bite.

Ancestral memories have rural workers terrified about this snake around here, and one of the reasons for this is the possibility of accidents in the face and neck because of the arboreality we've mentioned above. In *cacau* (cacao) plantations amidst the forest, they pay closest attention to the ground (bushmaster) and tree tops, where the *ouricana* or *pingo de ouro* ("gold drops" because of yellow paraventral spots) or *surucucu de ouricana* (all referring to *Bothriopsis*) may be be taking her daytime nap, under a perfect pale green (yellow belly) camouflage.

Conclusion

All those within the Amazon or Atlantic rainforests should be ready to face the medical emergencies of snakebites inflicted by bushmasters (*Lachesis*),"jararacas" (*Bothrops*, *Bothriopsis*), coral snakes (*Micrurus*) if you handle them, and rattlesnakes in Roraima and Marajó (Amazon) and in coastal biomes (*restinga*) of the Atlantic rainforest in Piauí state (Freitas and Silva, 2005).

The usual advice to watch where you step, must in these areas include an additional warning to keep the entire body away from high vegetation, especially along creeks (wide tracks/trails are a must). Attention should also be exercised on the occasion of picking fruits and collecting samples from trees. I interviewed one farmworker who reports to have been saved by his hat after a *pingo-de-ouro* strike towards his fore head in a cacao plantation. The strike in the case reported here happened 40–50 cm above ground level, when JRAG was pulling a tapioca root out of the ground.

Acknowledgments

To Dr. Joã o Luis Cardoso, for pushing me further.

Literature Cited

Campbell, J. A., and W. W. Lamar. 2004. The venomous reptiles of the Western Hemisphere. Ithaca, New York: Cornell University Press.

Cardoso, J. L. C., F. O. S. França, F. H. Wen, C. M. S. Málaque and V. Haddad, Jr. 2003. Animais peçonhentos no Brasil: Biologia, clí nica e terapêutica dos acidentes. Sã o Paulo: Sarvier.

Freitas, M. A. de, and T. F. S. Silva. 2005. Guia ilustrado — A herpetofauna da mata Atlântica nordestina (coleçã o manuais de campo USEB — vol. 6). Pelotas, Brazil: Editora USEB.

Porto, B. N., C. A. Telli, T. P. Dutra, L. S. Alves, M. T. Bozza, C. A. Fin, F. V. Thiesen and M. F. Renner. 2007. Characterization of enzymatic and inflammatory activities of venoms of the Amazonian snakes *Bothriopsis bilineata* and *Bothriopsis taeniata* (Serpentes: Viperidae). Poster 89. IX Symposium of the Brazilian Society on Toxinology. Journal of Venomous Animals and Toxins including Tropical Diseases 13(1):389.

Smalligan, R., J. Cole, N. Brito, G. D. Laing, B. L Mertz, S. Manock, J. Maudlin, B. Quist, G. Holland, S. Nelson, D. G. Lalloo, G. Rivadeneira, M. E. Barragan, D. Dolley, M. Eddleston, D. A. Warrell and R. D. G. Theakston. 2004. Crotaline snake bite in the Ecuadorian Amazon: Randomised double blind comparative trial of three South American polyspecific antivenoms. British Medical Journal 329:1129.

Wüster, W., M. da G. Salamã o, J. A. Quijada-Mascareñas, R. S. Thorpe and BBBSP. 2002. Origins and evolution of the South American pitviper fauna: Evidence from mitochondrial DNA sequence analysis. Pp. 111-128. *In*: G. W. Schuett, M. Höggren, M. E. Douglas and H. W. Greene, editors, Biology of the vipers. Logan, Utah: Eagle Mountain Press.

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Conservation Concerns for Maryland's Tiger Salamanders: Corrections and New Information

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What's with these state endangered species? An account of the demise of the tiger salamander in Maryland outlining neglect of that state's DNR appeared in the December issue of the *Bulletin of the Chicago Herpetological Society* (Lee, 2006).

In that account I reported that the last population of tiger salamanders, *Ambystoma tigrinum*, appeared to have disappeared from a site that was owned and managed by Maryland DNR. This site was purchased by The Nature Conservancy specifically to protect this species and was later sold to the state of Maryland with the stipulation that this salamander be managed in perpetuity. The one viable breeding pond was not managed and over time silted in, the pH and water depth changed, surrounding vegetation shaded the pond, and bluegills were introduced. Despite warnings of alarm from people familiar with the needs of the salamanders and a documented decline the state refused to take action or to listen to advise from local private sector herpetologists.

An agency boasting that everything they do is based on the best available science failed to maintain a robust viable population under their stewardship. An agency with a forestry division, wetland specialists, wetland restoration teams, a legal mandate to protect state endangered species and a state herpetologist was unable to oversee the wellbeing of a creature on lands they own and manage.

What follows is an update.

The Tale Continues

Lee (2006) was a rambling account of my frustrations regarding the inadequate management of an amphibian of state conservation concern — the eastern tiger salamander. Several months later the Maryland Herpetological Society reprinted this article (Lee, 2007) and allowed me to add a number of additional facts that had surfaced since, and in many cases as a result of, the original piece published in the *Bulletin of Chicago Herpetological Society*.

The article was widely circulated through various conservation organizations and within various agencies. The staff overseeing the well fare of Maryland's endangered fauna was

obviously not pleased with the article and a number of responses were initiated. The basic statement given a number of times was that many of the facts I pointed out were correct, but others were not. It was never made clear which were which. What follows is a result of DNR's activities, meetings that addressed the issues, and additional material forwarded to me by staff members, legislative aides, newspaper reporters and the general public. I obviously had overlooked some interesting components of the story.

In response to my article DNR staff visited Massey Pond in 2007 and reported that they found 11 egg masses. So it is refreshing to learn that the salamanders are still with us. However, this number is pitifully low. Based on Stine (1984), finding 11 egg masses does not necessarily document a viable population. The average number of eggs per mass is 52. So eleven egg masses would indicate approximately 572 eggs. This is only 4% of and well below the high count of over 14,000 eggs in 1982. DNR held a meeting of their Wildlife Diversity Committee on 24 January 2007 to discuss the tiger salamander issue reported in Lee (2006) and to announce that the species was still extant. At that time they reported on egg count information they had from recent years, the total being 2 egg masses in March 2006. Since 1996, eggs have been reported from Massey Pond on only three occasions: 8–16 masses in 2003 (Stine, pers. comm.), 2 in 2006, and the 11 in 2007. Stine (1984) reports that one female can produce up to 13 masses in a single season. He also notes an average of 350 eggs per female. Thus, egg mass counts in the teens would indicate only one or two adult females remaining in the population. If the number of eggs totaled 572 (this number is based on averages not actual egg counts for 2007) the female population would be 1.63, and based on Stine's calculations of 1.7 males per female the total breeding population was 4.4 adults by 2007. Using these same calculation methods for estimating population size, based on egg mass counts, Stine concluded that in 1982 the adult population was 216.6. This figure included a recruitment calculation of one individual per breeding adult. Thus, using this same calculation method the current population is 8.8 salamanders. This represents only 4% of the total estimated population from just two decades before and at this time we have no current information as to present day hatching success or survival rates of the larvae. Fluctuations in the number of egg masses per year is normal and is dependent on conditions of weather and hydrology, but there is no evidence of anything other than sharp declines since the mid 1990s.

To put this information into perspective, even when the pond was functioning in its prime there was a 4 to 12% mortality in the eggs and only a 3.6% transformation rate of the larvae. No information is available on survival rate from transformation to adult breeding salamanders for Maryland. With the current estimated population size population models would predict that recovery, or even survival of tiger salamanders at this site is at best now unlikely.

In 2006 the state prepared a grant proposal to do some of the badly needed management of the pond by the '08 season, but the project was only ranked 15th in priority and was never funded. In 2007 a similar proposal was prepared and it ranked tenth. If approved and the work is completed this may be beneficial for the '09 breeding season. As in the previous year the majority of the State Wildlife Grant requests were for surveys, inventory and data management; few were for projects that would actually help species. The state seems more interested in mapping and tracking its fauna than in actually helping it.

A meeting with the state's Wildlife Diversity Committee addressed the concerns I presented in the 2006 Chicago Herpetological Society *Bulletin* but as best we can tell nothing constructive came from it.

Other information

Since I wrote about logging adjacent to the Massey tiger salamander site I learned a little more about what may be driving this. This is an agency boasting that decisions are always made on the best available science, yet DNR receives about $3 million a year from selling timber from public lands (Kelly, 2006). Does the agency have a conflict of interest here? This amount is greater than the total they currently spend on nongame species.

Maryland has 400 species of conservation concern, more than most states, and far more than some countries. An unrealistic number of listed species makes it impossible to focus on specific issues. Unwillingness to seek outside expertise, or to take into consideration the well-intended input of knowledgeable people outside of state government is difficult to comprehend. This is especially true now, as the Wildlife and Heritage Service, the division that oversees these lesser creatures has seen a 97% decrease in money approved by the legislature between 2003 and this year (Thompson, 2007).

Massey Pond. Photograph by Charlie Stine

A Massey pond tiger salamander. Photograph by Charlie Stine

Massey Pond tiger salamander larva. Photograph by R. S. Simmons

Maryland DNR did not need to study literature, Google information on the web or even read a 43-page paper that Charlie personally provided to DNR in 1984 that explained the biological needs of the salamander. They found the answers themselves. In a 2005 in-house report on the state's biodiversity they discuss the tiger salamander. Under the topics of habitat preferences, threats, conservation needs, and monitoring needs this report spells out the exact same concerns presented by Dr. Stine and those that were outlined in my previous article. Apparently DNR does not take the time to read their own reports, nor do they have the time to follow up on their own suggestions. Everything from successional change, to shifts in pH and fish stocking was clearly explained. This leads to the logical question why even spend four-plus years preparing a multivolume report? This is not an isolated oversight. Conservation organizations monitor state programs in order to allocate maximum funding to agencies that will make the best use of the money. One noted that regarding conservation planning, "Maryland should have paid more attention to previous work done even with their own DNR."

The state did actually do some on-site management of the pond between 2004 and 2006. This was apparently a response to Charlie's report of our visit there in March of 2004. They removed woody vegetation and stumps and treated the area with two different herbicide applications in October of 2004 and 2006. Charlie was very concerned about the use of chemicals in amphibian breeding ponds. I am not a biochemist but the growing literature on the negative effects of chemicals on native amphibian populations is alarming and concerns over the herbicides they used have been expressed. With a quick search on just one website I found 16 peer-reviewed papers on the effects of glyphosate (the herbicide they used in 2004) on amphibians published between 1999 and 2005. Most were in the journal *Environmental Toxicology and Chemistry*. A general search of the web using the key words "herbicide, amphibians" yields pages and pages of titles of papers and published reports discussing the negative effects of these chemicals on amphibians (and their food sources). Roundup, the brand name for one of the most widely used glyphosate products, is a specific concern and even this product's manufacturer warns to not use this chemical in or near wetlands. Rodeo, the other commonly used glyphosate-based herbicide, had more favorable reviews but there were still a number of concerns regarding this treatment expressed on the internet.

Charlie Stine at work in Massey Pond. Photograph by David S. Lee

It needs to be mentioned that Charlie visited the site twice after DNR's 2004–2006 restoration effort and thought that the vegetation encroachment was actually more pronounced than when we visited the pond in early 2004 and collected the introduced sunfish.

As a result of public exposure to the issue and a new administration in state government, Maryland DNR has now agreed to share information and to consult with Dr. Stine on a regular basis and to include him in future management decisions for this site. Charlie, on the other hand, has by now concluded that state conservation appears to be based more on politics than science. He questions if there is any value in trying to work with DNR. As of July 2007 however, the state had still not been in contact with Charlie, so I guess we lost yet another season. They reported at one meeting (January 2007) that "a tiger salamander breeding site or two" still exists, and on another occasion (March 2007) they passed on through a third party that 3–4 sites Maryland were still viable.

Part of this information sharing allowed the Maryland Natural History Society access to the state's previously well-guarded reptile and amphibian database. The current database shows that they surveyed eight known tiger salamander localities in three Eastern Shore counties between 1978 and 1999. Of these sites one was destroyed and at another no salamanders

were encountered after 1995. Two sites had not been revisited since 1983; one had been visited only once; and another was last checked in 1990. Both interesting and curious was that the state's records had no indication that Massey Pond had been surveyed for tiger salamanders at all during this entire period. It's difficult to interpret what this actually means as DNR noted that their database was not up to date.

Checking the same database for Maryland reports of barking treefrogs, *Hyla gratiosa*, it seems they have reports of this treefrog from six sites in three counties. Dates of occurrence ranged from 1989 through 1996. Yet, none of the reports in the database they provided were from Massey Pond. Recall that the presence of this endangered treefrog at the Massey site was one of the reasons given that the state could not clear the emergent vegetation from the pond. But again the database provided was not up to date.

So the good news is the status of eastern tiger salamanders in Maryland is not as bleak as I believed it to be, but there are still serious concerns, and its exact status is still in question. The state DNR is aware of the issue and is committed to correct it, and in part because of this specific issue new, independent, private sector watchdog groups are now being formed that may help to prevent similar threats to the state's faunal diversity.

September 2007 Update

Since the above was written the state has begun to work more closely with Dr. Stine. Apparently DNR did obtain funding to restore the pond. When Charlie visited the pond in mid-September the encroaching woody vegetation had been cut back and invasive exotic plants were being removed from the site. DNR has attempted to restore one portion of the pond as an experiment to see how the salamanders respond during the 2008 breeding season. Dr. Stine's main concern is that the substrate of the pond is no longer gravel and sand but silt that accumulated over the years. Instead of removing the silt to restore the original substrate and depth of the pond, the state has raised the pond's water level. Will this lessen the probability that the pond will dry up during the late summer and fall? This is periodically needed to prevent the establishment of a number of aquatic predators.

The state's unwillingness to scrape the silt from the pond is the probably result of a common misconception in conservation efforts. People tend to think that the condition of a site when they first saw it is the baseline to manage toward. When the current staff of Maryland DNR first saw this pond it was already silted and had changed considerably since the 50s to early 70s when the pond was at its prime.

We are pleased to see that Maryland DNR has responded to our concerns and we all hope that their stewardship will allow a robust population of tiger salamanders to again become established at this site. Dr. Stine has agreed to monitor the population over the next few years and to provide an independent assessment of the salamanders' response to the pond's restoration

Literature Cited and References

Californians for alternatives to toxics. http://www.alternatives2toxics.org/

Kazyak, P. F., J. V. Kilian, S. A. Stranko, M. K. Hurd, D. M. Boward, C. J. Millard and A. Schenk. 2005. Maryland biological stream survey 2000–2004, Volume 9: Stream and riverine biodiversity. Maryland Department of Natural Resources, Monitoring and Non-tidal Assessment Division, Annapolis, Maryland PUB # DNR 12-0305-0106 EA-05-6.

Kelly, E. 2006. Maryland Department of Natural Resources faces lawsuit over public records. www.mdgreens.org (22 April 2006).

Lee, D. S. 2006. Those rare and endangered state-listed species: Who is minding the store? Bull. Chicago Herp. Soc. 41(12):217-224.

————————. 2007. The continued decline of rare and endangered state listed species: Tiger salamanders in Maryland. Bull. Maryland Herp. Soc. 43(1):14-29.

Maryland DNR. 2006. State wildlife grants FY 07. Ranked projects (in house document). 2 pp.

————————. 2007. State wildlife grants FY 08. Ranked projects (in house document). 2 pp.

Stine, C. J. 1984. The life history and status of the eastern tiger salamander, *Ambystoma tigrinum tigrinum* (Green) in Maryland. Bull. Maryland Herp. Soc. 20(3):65-108.

Thompson, C. 2007. On the outdoors: The future is drifting away from DNR. Baltimore Sun (28 Jan. 2007).

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What You Missed at the September CHS Meeting

by John Archer
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I was visiting the Field Museum two days before the September meeting with my wife and daughter. The CHS had some material stored there that the Field had asked us to pick up, and I thought I'd take the opportunity to do so. Inquiries at the admissions desk had me greeted by Tom Anton, a longtime member of the CHS who also works at the Field, and Tom not only assisted me in finding and hauling the materials to my car, but also took the time to show me around the museum's collections. I realize that many of you would not find that particularly interesting or novel, but I have never been behind the scenes of a major, or minor, museum, and I followed Tom around with total fascination. During the process, I finally got to meet John Murphy, another longtime member of the society who has written many articles, papers and books on herps, and who will be speaking at our February meeting. It was a serendipitous afternoon that I thoroughly enjoyed, and which would simply not have happened had I not been a member of this society. That's one of the many benefits of a membership in the CHS: opportunities that for many of us would not otherwise arise. Thanks, Tom, for a great afternoon.

That material added to the normal chaos of the September meeting. As I was distributing stuff to the right people and discussing stuff with other people, I began to realize why, at the first few meetings I attended, I sometimes felt a little out of things. It seemed as though everyone was talking with someone, but no was talking with me. Of course, no one was deliberately avoiding me, but it's easy for older members to find themselves occupied with the press of business and attempts to catch up with people not seen for a while. That means that we sometimes pay less attention to new members than we should. I'm going to try and be more interactive with the folks I don't know. The ones that know me are trying to avoid me anyway. Make new friends and encourage new members.

During all the pre-meeting confusion, Mike Dloogatch introduced me to our speaker for that night. Wearing longish hair, a short beard and mustache, Hawaiian shirt and blue jeans, Dr. Daniel D. Beck talked with a laid-back voice and moved in a relaxed manner that caused me to think, surfer-dude! I don't mean that in a derogatory way. I'm always impressed with the accessibility of our speakers, and Dan is certainly no exception. A professor at Central Washington University and a leading expert on the Helodermatidae, Dr. Beck came across as someone with whom you'd like to have a beer. In fact, I did that very thing! Very few of my professors in college were that likable. Dan maintained his easy manner as he began his presentation.

Biology of Bumpy Lizards—New Icons of the Value of Diversity

I like the way that Dr. Beck refers to these two species as bumpy lizards or just monsters. His dedication to the study of these lizards and his sense of humor were evident during the talk. His pictures were some of the most extraordinary we've seen in a presentation, many taken by the professional wildlife photographer Thomas Wiewandt. Early on he said that he hoped his presentation would help answer the question that he's frequently asked about his research, "What good is it?"

The family is divided into two species, the Gila monsters (*Heloderma suspectum*) and the beaded lizards (*Heloderma horridum*). These are the only two species of lizards that produce enough venom to be considered dangerously venomous. Gila monsters range from extreme southwestern Utah to northern Mexico where their range overlaps with the northern range of the beaded lizards. Beaded lizards range in western Mexico from the north to the southern state of Chiapas, with a disjunct population in Guatemala. Gila monsters are primarily desert dwellers and beaded lizards can be found in tropical dry forests. Three slides were shown that would have made spectacular posters. They each had groupings of colorful lizards arranged by subspecies and locales. I think many of Dan's slides would make great posters, such as the one of a Gila monster wandering through the desert leaving tracks in the pink sand and captioned with the quote from a Kris Kristofferson song, "He's a walking contradiction. Partly truth and partly fiction. . . ." That was the other theme of Dan's talk, the many contradictions that surround the monsters.

These animals forage widely, covering large amounts of territory while hunting for their prey, which consists primarily of eggs and neonate mammals, and yet most spend ninety-five percent of their time in their shelters. They move very slowly, particularly for a lizard, but have tremendous endurance, often walking for hours. Their venom is not used to incapacitate or predigest prey as in most venomous reptiles, but rather for defense. They are certainly not as ferocious as they are depicted in literature, and may be more sociable than previous research has suggested. Dan offered some explanation for these contradictions with some intriguing graphs and study results, always showing great photos of the animals.

Photograph by Daniel Beck.

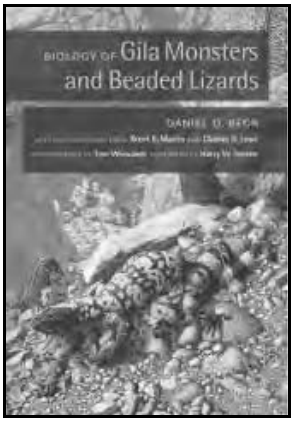
Male combat in Gila monsters in some ways resembles that of snakes. Photograph by Daniel Beck.

The wide home range but infrequent sojourns may be explained by the monsters' ability to eat close to a third of their body weight in one meal, and Dr. Beck had cool shots of monsters doing just that. The large meals probably mean that they need only three or four meals a year for basic maintenance. The high endurance but slow movement probably allows the hours-long wrestling matches that the males have when battling over a female. She is inevitably in a nearby shelter while these proceed. Dan had some great shots of these matches, pointing out the similarity of the intertwined bodies to snake combat. These animals are fiercely loyal to their shelter sites, particularly the overwintering sites, and they're frequently found in pairs in these shelters. The recurrent use of the shelters means that most monsters will die when relocated, a fact that has implications in the continuing encroachment of civilization into these animals' habitat. The Gila monster has very high cutaneous water loss for a desert animal. Monsters seek different shelters during different times of the year, and probably because of this high water loss, they seek shelters with high relative humidity during the driest times. Both Gila monsters and

Photograph by Daniel Beck.

beaded lizards are closely related to snakes, and both have the forked tongues that allow them to know their world in ways it's difficult for us to imagine. Dr. Beck pointed out that the Gila monster has a black tongue and the beaded has a pink tongue.

After some very neat slides of monster depictions in movies and books, Dan moved on to explanations of the venom. He explained the chemical composition of the venom and the effects of the various components. The venom is extremely painful, but rarely, if ever, deadly. Then he moved into a small pharmacological tale about the history of the study of monster venom, concluding with the discovery in 1985 by Dr. John Eng of the Bronx VA Medical Center that a peptide in the venom had implications for the treatment of diabetes. Now marketed as Byetta, the synthesized peptide has become one of the leading drugs for the treatment of Type II diabetes. The venom continues to be studied for additional uses in the treatment of other disorders. This tale nicely concluded with Dan's discovery that the venom that was used in Dr. Eng's research came from lizards that he had captured for study in southern Utah. While most of us certainly see great value in all the animal research going on, it's nice to have answers such as this when our harshest critics ask, "What good is that?" Thanks, Dr. Beck, for an inspiring and beautiful presentation.



Biology of Gila Monsters and Beaded Lizards by Daniel D. Beck was published in 2005 by the University of California Press. It contains many of the spectacular photographs that we saw in Dan's program. I recommend this book to anyone interested in these lizards. Remember to go through the CHS web site if you buy it from Amazon. You may also want to look at Thomas Wiewandt's web site at www.wildhorizons.com. Neat photographs!

Notes from the CHS Kentucky Zoos Trip

Well, whoever didn't come missed all these things! We got to go behind the scenes of a REAL zoo. We saw an albino alligator, an alligator snapping turtle — a HUGE one, and an albino turtle. We saw Chinese alligators. And we fed Aldabra tortoises behind the fence while people were watching. Well, I felt like I was in the desert actually feeding celery to the Aldabra tortoises. Ummmm . . . this celery makes me hungry. And I did almost lose my finger feeding it celery . . . NOT!

When we were at the Kentucky Reptile Zoo, we saw a king cobra, an American alligator, different-colored mambas, and a reticulated python. We saw a green anaconda, a Burmese python and gaboon vipers. Jim talked about snakes and extracting venom from snakes. I can't believe he was selling the small container of venom for nothing! It was cool that Jim does this and earns no money.

And when we went out looking for herps, Jason found this tin and picked up two kingsnakes. When we went over by the Natural Bridge State Park, Steve found a toad and an eastern newt. I thought this trip was super fun . . . the BEST!

Joey Robinson, 8 years old, 3rd grade

Those are the reflections of my 8-year-old son from a trip I doubt he will forget. I shared with Joey that Jim and his wife, Kristen, are two individuals that we will read about in a history book someday. Thank you so much for organizing this trip for everyone in CHS.

It has been an amazing experience to see how much Joey has learned from the dedicated individuals in the Chicago Herpetological Society who have befriended my son, and shared so many interesting facts about reptiles and amphibians with him. He truly enjoys going to the monthly meetings and learning why we should care so much for these special creatures.

Gayle Rovai

Three A.M. is way too soon to wake up most of the time, but on September 15 I didn't mind. It was a crispy 45° outside. Do I get out my snowsuit? I decided a sweatshirt would do. Mike Dloogatch picked me up at 4:00 A.M. along with Steve Sullivan and Alex Kislaitis who were also riding with us.

We headed out to our first stop at Holly and Roger Carter's home in Zionsville, Indiana. They were joining us on our herp safari. Holly gave us the grand tour of their collection which included their alligator in the backyard.

We then met up with a carful of fellow CHS members who had left last evening and spent the night at a motel in Indianapolis. Had a much-enjoyed breakfast at a nearby restaurant before heading off to Louisville. Needed to keep our strength up.

Arrived at the Louisville Zoo around 12:30 P.M. Our tour of the reptile house was to start at 2 P.M., so we made the best of our extra time, walking to the different exhibits at this lovely zoo. The zoo is in the heart of Louisville with numerous small hills and valleys and beautiful vegetation. All our members met at the herp aquarium where keeper Will Bird started our tour behind the scenes.

The indoor exhibit had many interesting herps and fish which included "King Louie" the white alligator and a wild-caught xanthic snapping turtle. We then went to the outdoor

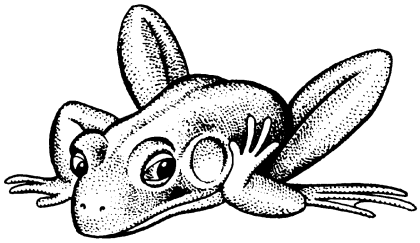
exhibit of Aldabra tortoises and all of us were allowed inside the enclosure and got to feed celery to two of the males who weighed over 400 pounds each. Everyone was taking many photos and enjoying these magnificent animals. After more walking to other exhibits, it was time to leave the zoo and head to our hotel in Mt. Sterling about 80 miles east of Louisville. We all decided to eat at a local restaurant in Mt. Sterling to wind up the day which had included perfect weather.

The next morning we headed to the Kentucky Reptile Zoo in Slade. This small herp zoo is set among rocky cliffs and a short distance from the Natural Bridge State Park. Jim Harrison and his wife Kristen gave us the tour of their collection which has many snakes both venomous and nonvenomous from locales around the world. They have alligators, turtles and lizards, as well as the cobras, mambas, rattlesnakes and vipers. Jim gave us a close-up demonstration of his procedure of extracting venom from rattlesnakes. Many thanks to Jim and Kristen for their time and hospitality. We also met up with some members from the Cincinnati and Kentucky herp clubs. After leaving the KRZ, we did some herping in the area around Slade. I was hoping to see some copperheads, but it was not to be. However, just flipping tin and boards and enjoying the rock formations in the area, was enough for me. I did manage to "capture" some rocks for my backyard collection. We then headed back to Mt. Sterling for dinner. Several of us decided to go back to the Slade area and do some night road running in two separate cars. The only wildlife we saw was a small fox. But climbing rocks to a waterfall on the side of the road in pitch darkness (no Chicago street lights out there) proved to be quite an adventure. Back again to Mt. Sterling for a good night's sleep.

On Monday we started out for home about 7:30 A.M. Once in southern Indiana, we did some more herping along the way at several different spots. Mike did find an eastern milksnake and at another spot some heavy lifting uncovered a ringneck snake and a red eft. Our last stop was Lake Monroe, where Jason and Alex found a baby watersnake and some frogs. We stopped again at Holly and Roger's for awhile and then continued on our way back to Chicago. The most dangerous part of the trip was traversing the Dan Ryan Expressway during the end of the rush hour.

Nancy Kloskowski

The Tympanum



Jenny Vollman
Chicago Herpetological Society
2430 N. Cannon Drive
Chicago, IL 60614

5 September 2007

Dear Jenny,

As you know, Lt. Governor Pat Quinn is committed to educating and activating the citizens of Illinois. Many events from past year's fairs have led to new directions for the Lt. Governor's initiatives. Likewise, many of the events at this year's fair showcased the accomplishments of those initiatives . . . .

Thank you again for joining us at the 2007 Illinois State Fair. Again this year the reptiles and amphibians you brought were a huge hit! They were a wonderful addition to our tent and our State Fair lineup. I look forward to more partnerships, and of course the next Illinois State Fair (August 8–17, 2008). Please don't hesitate to contact me.

Sincerely, **Navonna M. Bunn, State of Illinois, Office of the Lieutenant Governor. Navonna.Bunn@illinois.gov**

September 18, 2007

Chicago Herpetological Society
Jenny Vollman
2430 N. Cannon Drive
Chicago, IL 60614

Dear Jenny,

Thank you for your participation in the Morton Grove Historical Museum's Natural History Day on Saturday, July 28, 2007. We appreciate the precious time that you spent in our community. Please extend our gratitude to all of your members, especially the volunteers present at this event.

Over 250 members of the community visited the exhibits throughout the day. We have enjoyed numerous positive comments from residents about this event. It was truly a pleasurable and educational experience for all. We hope that you also benefited from participating in this event. We look forward to working with you in the future. . . .

Sincerely, **Mary Busch, Curator, Morton Grove Historical Museum. mbusch@mortongroveparks.com**

Herpetology 2007

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editor assumes full responsibility for any errors or misleading statements.

KINGSNAKE DECLINE?

C. T. Winne et al. [2007, Copeia 2007(3):507-519] point out that although recent reports of global amphibian declines have received considerable attention, reptile declines have gone largely unreported. Among reptiles, snakes are particularly difficult to quantitatively sample, and thus, most reports of snake declines are based on qualitative or anecdotal evidence. Recently, several sources have suggested that eastern kingsnakes (*Lampropeltis getula*) have declined over a substantial portion of their range in the southeastern United States, particularly in Florida. However, published evidence for *L. getula* declines or their potential causes are limited. The status of a population of *L. getula* on the U.S. Department of Energy's Savannah River Site in Aiken, South Carolina, was monitored from 1975 to 2006. Herpetofaunal populations on the Savannah River Site have been protected from the pressures of collecting and development since 1951 due to site access restrictions. This study documents a decline in both abundance and body condition of *L. getula* inhabiting the vicinity of a large isolated wetland over the past three decades. Because this *L. getula* population was protected from anthropogenic habitat degradation, collection and road mortality, these factors can be excluded as possible causes of the documented decline. Although the definitive cause of the decline remains enigmatic, natural succession of the surrounding uplands, periodic extreme droughts, shifts in community composition (e.g., increased *Agkistrodon piscivorus* abundance), introduced fire ants or disease are all potential contributors to the decline.

TAXONOMY OF THE BOOBY CAY IGUANA

J. J. Bryan et al. [2007, Copeia 2007(3):734-739] note that *Cyclura carinata*, a Bahamian rock iguana, currently has two recognized subspecies. *Cyclura c. carinata* is found on numerous islands and cays throughout the Turks and Caicos Islands. The second subspecies, *C. c. bartschi*, is now only known to exist on Booby Cay, a small island off of Mayaguana Island, Bahamas, which is also within the subspecies' historic range. Support for subspecific status is weak. Geographic isolation appears to be the only strong indicator of genetic isolation. Recent conservation attempts made on the species behalf have raised questions regarding the validity of subspecific designations. The authors used mtDNA sequence data to ask whether there is any genetic variation that distinguishes *C. c. bartschi* from ten sampled populations of *C. c. carinata*. Findings show that the Booby Cay population is fixed for a common mtDNA haplotype found in Caicos Island populations of *C. carinata*. In contrast, four different haplotypes were found among populations designated *C. c. carinata*. The authors conclude that there is insufficient evidence to support *C. c. bartshi* as a subspecies and recommend that the Booby Cay population be included in ongoing conservation efforts currently focused on the Turks and Caicos Islands.

BOG TURTLES AND LIVESTOCK

J. Tesauro and D. Ehrenfeld [2007, Herpetologica 63(3):293-300] note that the bog turtle *Glyptemys* (= *Clemmys*) *muhlenbergii* is an inhabitant of groundwater-fed sedge meadows in the northeastern and southeastern United States. Observations of bog turtle habitats throughout the species' range demonstrate that livestock grazing has been an important factor in staving off successional processes and abating large-scale invasions by tall-growing, competitively dominant plants—many of which are exotic in origin. The demise of small-scale dairy farming over the past three decades has led to the pastoral abandonment of the majority of bog turtle habitats in the Northeast. As a consequence, habitats are being degraded by the growth of invasive flora, changes in hydrology, and loss of turtle microhabitats created by livestock. This study compared the number of bog turtle captures, bog turtle demographic parameters, bog turtle densities, and vegetation at sites that are currently grazed (n = 12) and at sites in which grazing had recently ceased (n = 12). This analysis demonstrated that grazed sites contained greater numbers of turtles, greater turtle density and greater frequency of occurrence for juvenile turtles. Grazed sites also contained greater cover of low-growing herbaceous vegetation and lower heights of tall-growing exotic and/or invasive vegetation than the formerly grazed sites. The authors hypothesize that nutrient enrichment from manure and agricultural run-off has promoted the establishment and growth of invasive plant species at many of the sites, but livestock grazing has kept these plants in check. When livestock are removed, invasive species proliferate, and the hummocky microtopography maintained by the livestock traffic is often reduced to a mat of vegetation. This investigation showed that efforts to preserve viable populations of bog turtles may depend on the preservation of low-intensity, pasture-based dairy and beef farming.

LIFE HISTORY OF THE SOUTHERNMOST GECKO

N. R. Ibargüengoytía and L. M. Casalins [2007, J. Herpetology 41(1):72-80] report that the southernmost nocturnal gecko, *Homonota darwini*, from Patagonia, Argentina, exhibits a long cycle of gametogenesis, and females usually skip a year of reproduction. This annual to biennial cycle for females and a fixed clutch size of one egg results in a mean annual reproductive output of 0.75, which is one of the lowest values found in lizards. The life-history traits summarized here for *H. darwini* are closer to phylogenetically distant species from similar latitudes (Argentina, South Africa, New Zealand and Tasmania) than with congenerics from lower latitudes in Argentina. The authors postulate that the affinities found among different reptile lineages living at similar latitudes in the Southern Hemisphere are the result of convergence. The short activity seasons and the low mean temperatures seem to select for prolonged reproductive cycles, low reproductive output, long lifespan, late maturity, and enhanced parental care of fewer offspring.

INTEROBSERVER DIFFERENCES IN CALL SURVEYS

B. A. Pierce and K. J. Gutzwille [2007, J. Herpetology 41(3): 424-429] note that auditory surveys are being used increasingly to monitor amphibians and assess amphibian declines. Inter-observer differences in detected number of species during amphibian call surveys have not been widely studied, yet previous studies have assumed these differences are minimal. The authors examined interobserver variation in 269 frog call surveys conducted along 20 standardized routes in central Texas. Two trained observers, listening simultaneously 10 m apart, agreed on number of species calling in 79.4% of 5-min surveys and 78.6% of 30-min surveys. The level of observer agreement varied among species. Observers in the present study were more likely to disagree about the presence of a species when only one or a few frogs called from distant sites. Wind and road noise had no significant effects on interobserver variation. Presence of moonlight was negatively associated with interobserver agreement. Because sampling variation and biases arising from observer effects may lead to inappropriate inferences and misdirected conservation efforts, it is important to control for interobserver differences during the design and analysis phases of research.

CANTIL TAXONOMY

R. W. Bryson and F. Mendoza-Quijano [2007, J. Herpetology 41(3):536-539] state that the taxonomic placement of cantils from Veracruz and Hidalgo, Mexico, has remained uncertain based on the small number of samples available from these areas. The authors examined the scutellation and color pattern of three new specimens of *Agkistrodon taylori* from northeastern Hidalgo and adjacent Veracruz and compared these results with the morphology of other *A. taylori* and the single specimen of *Agkistrodon bilineatis lemosespinali* from the coastal area of central Veracruz. Results indicate very little morphological deviation from the range of variation previously reported for *A. taylori*. In addition, the single specimen of *A. b. lemosespinali* does not appear to represent *A. taylori*, contrary to a previous report. However, whether or not it deserves formal recognition as a subspecies distinct from other *Agkistrodon bilineatus* remains questionable. The presence of *A. bilineatus* along the eastern coast of Mexico in Veracruz provides support for a previous hypothesis of transcontinental dispersal of *A. bilineatus*.

SIZE OF MALE PACIFIC TREEFROGS

M. F. Benard [2007, J. Herpetology 41(2):317-320] notes that despite the large amount of work on frog mating systems, the potential role of predators as an agent of selection on breeding adults has received very little study. The author uses data from multiple populations of Pacific treefrogs (*Pseudacris regilla*) to demonstrate that sexual selection from mating success favors larger males, but natural selection from predation by giant water bugs favors smaller males. Additionally, no relationship was found between male body condition and mating success or predation risk. This result demonstrates that predation is a potentially important agent of selection that counteracts sexual selection in anurans.

HERPETOFAUNA OF SYRIA

Z. Amr et al. [2007, Herpetozoa 20(1/2):21-26] give further localities for, together with some notes on, two species of amphibians [*Hyla savigny*, *Triturus* (*O.*) *vittatus*] and fourteen of reptiles [*Blanus strauchi*, *Testudo graeca*, *Chelonia mydas*, *Mauremys caspica*, *Asaccus elisae*, *Cyrtopodion scaber*, *Laudakia stellio*, *Trapelus ruderatus*, *T. persicus*, *T. pallidus*, *Eumeces schneideri*, *Ophisops elegans*, *Varanus griseus*, *Coluber* (*H.*) *nummifer*]. All were collected or observed in Syria during field visits in the years 2004 to 2006. Emphasis on trade in reptiles in Syria revealed that at least five species are threatened due to excessive trade, including the Middle Eastern spur-thighed tortoise, *Testudo graeca terrestris*, the striped-necked turtle, *Mauremys rivulata*, the Mediterranean chameleon, *Chamaeleo chamaeleon*, the dabb, *Uromastyx aegyptia* and two snakes: *Natrix* sp. and *Coluber jugularis*.

HIGH JUVENILE SURVIVAL IN A ROCK IGUANA

J. B. Iverson [2007, Copeia 2007(3):740-744] has been studying the population biology of the Allen Cays rock iguana (*Cyclura cychlura inornata*) in the Bahamas on an ongoing basis since 1980, and most aspects of the reproductive biology and demography of this taxon have been elucidated. Recapture data were used to produce the first estimate of juvenile survival. Of 16 juveniles captured and marked at age 0.5 years, nine were alive at age 12.5 yrs (typical age at maturity), an annualized rate of 95.3%. Of four other juveniles marked at age 1.5 yrs, three were still alive ten years later, an annual rate of 97.2%. These rates are the highest recorded for juveniles of any lizard. A life table generated for this taxon demonstrates extreme longevity, very high survival throughout life, greatly delayed maturity (longer than for any studied lizard), extreme iteroparity, and low reproductive output. Net reproductive rate (R_0 = 3.4) and cohort generation time (21 yrs) match the 3.2-fold population size increase estimated between 1982 and 2004.

CAVE SALAMANDERS: EGGS AND GROWTH

A. M. Ringia and K. R. Lips [2007, Herpetologica 63(3): 258-268] describe oviposition site, clutch characteristics and breeding phenology of a population of *Eurycea lucifuga*, the cave salamander, from southeast Missouri, to understand the impact of biophysical and biotic conditions on a troglophilic species. In the field oviposition occurred in underground rimstone pools over 6 mo, with most reproduction occurring from August to October. Individual females deposited 1–31 eggs per pool, hatching after approximately 10–20 d. Larvae remained in the pools as long as 6 mo before moving into the stream. Survival, growth, and development under three temperature regimes were compared for eggs and larvae of *E. lucifuga* raised in the lab. Embryonic growth was slowest at cooler temperatures and produced larger larvae; typical summer surface stream temperatures resulted in high mortality. The authors suggest that the cool, predator free habitats of midwestern caves allow for a longer reproductive season in *E. lucifuga*, but that the unpredictable hydrology and limited food supply of these cave environments has expanded the breeding period and slowed embryonic and larval development.

Unofficial Minutes of the CHS Board Meeting, September 21, 2007

The meeting was called to order at 8:05 P.M. at the home of Linda and Andy Malawy. Board members Kira Geselowitz, Deb Krohn, Steve Sullivan and Erik Williams were absent.

Officers' Reports

Recording Secretary: Cindy Rampacek read the minutes, which were accepted as read.

Treasurer: Andy Malawy reviewed the August financial reports.

Membership Secretary: Mike Dloogatch reported a slight increase again in August. Walter Allen from the California Turtle and Tortoise Club recently passed away, and sympathies were expressed.

Vice-president: Steve Sullivan has asked John Murphy to speak in February about Thai herps and about his research on homalapsid snakes. For the winter months there will be parking available in the lot for the boat-launch area across the street from the Notebaert.

Corresponding Secretary: Cindy Rampacek reported a lot of students returning to college looking for homes for herps and gave some feedback from her trip to Daytona with side trips on behalf of the CHS to both Gatorland and St. Augustine Alligator Farm.

Sergeant-at-arms: Jason Hood reported attendance at the August general meeting was 63.

Committee Reports

Shows:

- Garfield Park Conservatory, Creatures of the Night—October 27, 10–4.
- Kids Expo will be in March 2008, the weekend before the Chicagoland Family Pet Expo, which moves back to Arlington Park this year.
- Milwaukee Public Museum's annual Snake Day will be held November 10, 2007. CHS volunteers should contact Cindy Rampacek ASAP.• We need staffing for several events in both October and December. Those interested in volunteering should contact Jenny Vollman.

Discussion of sales of various items at shows ensued. Mike Dloogatch moved to allocate money to Cindy Rampacek for the purchase of "I love my Reptile" magnets to sell at events. Jenny Vollman seconded the motion and it passed unanimously.

Nominating Committee: Mike Dloogatch mentioned that the slate will be announced at the September general meeting.

Grants Committee has been formed.

Adoptions: Donations of supplies are always welcome.

Old Business

Kentucky Zoo Trip was a fun trip for all. Joey Robinson will be doing the September meeting "short" on the trip.

"25 Years of Spot Cartoons" is now available via mail order and is being advertised in the *Bulletin*.

New Business

John Archer has agreed to chair ReptileFest 2008. He announced that there are new business-card-size promotional handouts, which he proceeded to distribute.

We are looking for ideas for thank-yous for nonmember volunteers who help out at our events. Suggestions are welcome.

The board discussed licensing CHS materials and redesigning a few of our older style shirts to offer new items to members.

Meeting was adjourned at 10:13 P.M.

Respectfully Submitted for the Recording Secretary by Cindy Rampacek

Advertisements

For sale: rats and mice—pinkies, fuzzies and adults. Quantity discounts. Please send a SASE for pricelist or call Bill Brant, *THE GOURMET RODENT*, 6115 SW 137th Avenue, Archer FL 32618, (352) 495-9024, E-mail: GrmtRodent@aol.com.

For sale: from **The Mouse Factory**, producing superior quality, frozen feeder mice and rats. We feed our colony a nutrtionally balanced diet of rodent chow, formulated especially for us, and four types of natural whole grains and seeds. Mice starting from: pinks, $.17 each; fuzzies, $.24 each; hoppers, $.30 each; weanling, $.42; adult, $.48. Rats: starting with pinks at $.45 each, to XL at $1.80 each. Discount prices available. We accept Visa, MC, Discover or money orders. PO Box 85, Alpine TX 79831. Call **toll-free** at (800) 720-0076 or visit our website: < http://www.themousefactory.com> .

For sale: **high quality frozen feeders**. Over a decade of production and supply. Seven sizes of mice availabe: small newborn pinks up to jumbo adults. Prices start at $25 per 100. Feeders are separate in the resealable bag, not frozen together. Low shipping rates. Free price list. Kelly Haller, 4236 SE 25th Street, Topeka KS 66605, (913) 234-3358 evenings and weekends.

For sale: Graptemys.com T-shirts, 100% cotton, pre-shrunk, pigment-dyed shirts with the Graptemys.com embroidered logo. These are very high quality shirts with that stylish faded look. Sizes S-M-L-XL-XXL. Colors: Pacific blue, nautical red, brick red, plum, granite, khaki green and putty. All profits made from these shirts goes directly to in situ *Graptemys* research. $20 each with $3.00 shipping. Email: chris@graptemys.com or call (239) 437-4148 to order. You can look at the shirts at http://www.graptemys.com/shirts.htm

For sale: books. *The Outdoor Traveler's Guide—Australia* by Gerry Ellis and Sharon Cohen, 1988, 400 pp., many excellent color photos, detailed essays on national parks and other natural areas organized by states and territories, an excellent reference on the history, geology, vegetation and wildlife, softbound, $16; **Reptiles of Australia** by Charles Barrett, 1950, 168 pp., many b&w photos, figs., drawings, no DJ, hardbound, $80; *Amphibians and Reptiles of Texas* by James R. Dixon, 1987, 434 pp., 20 b&w photos of Texas herps, 18 figs. (drawings), 156 range maps, 32-page bibliography of complete references of Texas herpetology from 1852 to 1982, softbound, $15; *The Snakes of Arizona* by Jack Fowlie, 1965, 164 pp., b&w photo of each subspecies, range maps, signed by author, hardbound, $40; *Boy's Book of Snakes* by Percy Morris, 1948, 185 pp., many b&w photos, a few ink marks at bottom of introductory pages, hardbound, $10. All books are in excellent condition except as noted. Postage and handling $2.50 for orders under $25, free for orders $25 and over. William R. Turner, 7395 S. Downing Circle W., Centennial CO 80122; phone (303) 795-5128; e-mail: toursbyturner@aol.com.

For sale: I am trying to downsize my collection as I move into my new apartment in Chicago and am looking to sell two of my more recent acquisitions. Both are about 2 years old now. I have a female Chihuahuan mountain kingsnake (*Lampropeltis pyromelana knoblochi*) for $100 and a beautiful male jungle carpet python (*Morelia spilota cheynei*) for $200. Please contact me at (217) 390-7672 or mroconnoDVM@gmail.com if you would like to see pictures or purchase them.

Herp tours: Adventure trips to **Madagascar**! Journey somewhere truly unique to seek and photograph nature on the world's least-studied mini-continent. For maximum herp fun and discovery, join Bill Love as we go where few people will ever venture in their lives. Let his experience assure a comfortable tour finding the most colorful and bizarre species on the planet! Get all the details at Blue Chameleon Ventures' comprehensive new website: < http://www.bluechameleon.org> , E-mail: bill@bluechameleon.org, or call (239) 728-2390.

Herp tours: The beautiful Amazon! Costa Rica from Atlantic to Pacific! Esquinas Rainforest Lodge, the Osa Peninsula, Santa Rosa National Park, and a host of other great places to find herps and relax. Remember, you get what you pay for, so go with the best! GreenTracks, Inc. offers the finest from wildlife tours to adventure travel, led by internationally acclaimed herpers and naturalists. Visit our website < http://www.greentracks.com> or call (800) 892-1035, E-mail: info@greentracks.com

Virtual Museum of Natural History at www.curator.org: Free quality information on animals—emphasis on herps—plus expedition reports, book reviews and links to solid information. Always open, always free.

Line ads in this publication are run free for CHS members—$2 per line for nonmembers. Any ad may be refused at the discretion of the Editor. Submit ads to: Michael Dloogatch, 6048 N. Lawndale Avenue, Chicago IL 60659, (773) 588-0728 evening telephone, (312) 782-2868 fax, E-mail: MADadder0@aol.com

News and Announcements

2008 CHS HERPETOLOGICAL GRANTS PROGRAM

The Chicago Herpetological Society announces the 2008 CHS Herpetological Grants Program to award financial support for herpetological research, education and conservation. Several awards of up to $500 each will be available. Interested parties may apply for a grant in any one of the following categories:

1. Illinois Herpetology
2. Graduate Student Research in Herpetology
3. Undergraduate Research in Herpetology
4. Conservation
5. Captive Management, Husbandry, and Propagation

An attempt will be made to award grants in each category, but depending on the applications received, not all categories may receive awards. Some categories may receive more than one award. The CHS Grants Committee reserves the right to reassign the category under which a given proposal is submitted.

To qualify for a grant, the applicant must be a member of the Chicago Herpetological Society as of December 31, 2006. In accepting a grant, the recipient agrees to abide by all state and federal laws, and to acknowledge the Chicago Herpetological Society in any publications or public presentations (e.g., posters, papers at symposia, etc.) that result from the subsidized research. Recipients should inform the CHS Grants Committee when their funded projects are completed, and will be encouraged to submit their work as an article for the CHS *Bulletin*, or will be invited to present a program at a CHS general meeting.

Proposals should include the following:

1. Statement of the objectives of the proposal, and a statement assigning the proposal to one of the five categories listed above.
2. Description of materials and methods.
3. Complete budget, not to exceed $500.
4. Brief résumé of the applicant, if an individual. If the applicant is an organization, background information on that organization should be included.
5. Letters of support from collaborating partners or institutions are encouraged; student applicants must include a letter of support from a faculty adviser (see further instruction below).
6. Anticipated completion date for the project.

Proposals may be submitted either by postal mail at the address below or as E-mail attachments. Letter(s) of support sent by postal mail should be included with the other application materials but in a separate, smaller sealed envelope. Letters of support may be E-mailed, but then should include a postal address and phone number at which the writer can be contacted. Proposals must include the applicant's name and address on the first page. Proposals should be typed using a common font (e.g., Arial, Times, Courier) no smaller than 10pt, and should be double-spaced. When submitting proposals by mail, send two copies of the entire package (i.e., including résumé, budget, letters of support, etc.) in the same envelope. Applications should be brief and simple. Avoid inclusion of color images or large tables unless absolutely necessary. Complete proposal packages should not exceed five double-spaced pages (excluding literature citations, applicant's résumé and letter[s] of support). Applications must be received by 31 December 2007, and awards will be announced by 15 February 2008.

Submit paper applications to:

Chicago Herpetological Society
Grants Program
2430 North Cannon Drive
Chicago IL 60614

Electronic submissions should be E-mailed to: CHSGrants@aol.com.

Questions should be directed to Mike Dloogatch, (773) 588-0728 eves., or CHSGrants@aol.com.

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16. Publication of Statement of Ownership
Required. Will appear in the October 2007 issue of this publication.

17. Signature of Editor Michael Dloogatch

UPCOMING MEETINGS

The next meeting of the Chicago Herpetological Society will be held at 7:30 P.M., Wednesday, October 31, at the Peggy Notebaert Nature Museum, Cannon Drive and Fullerton Parkway, in Chicago. **Zachary Marchetti**, a keeper and lecturer for Clyde Peeling's Reptiland in Allenwood, Pennsylvania, will speak about his adventures with herps from Ecuador to Reptiland to the Nature Museum. Zach is in Chicago accompanying the Peeling Productions traveling exhibit, "Reptiles — The Beautiful and the Deadly," which will be featured at the Notebaert Nature Museum from October 12 through January 13.

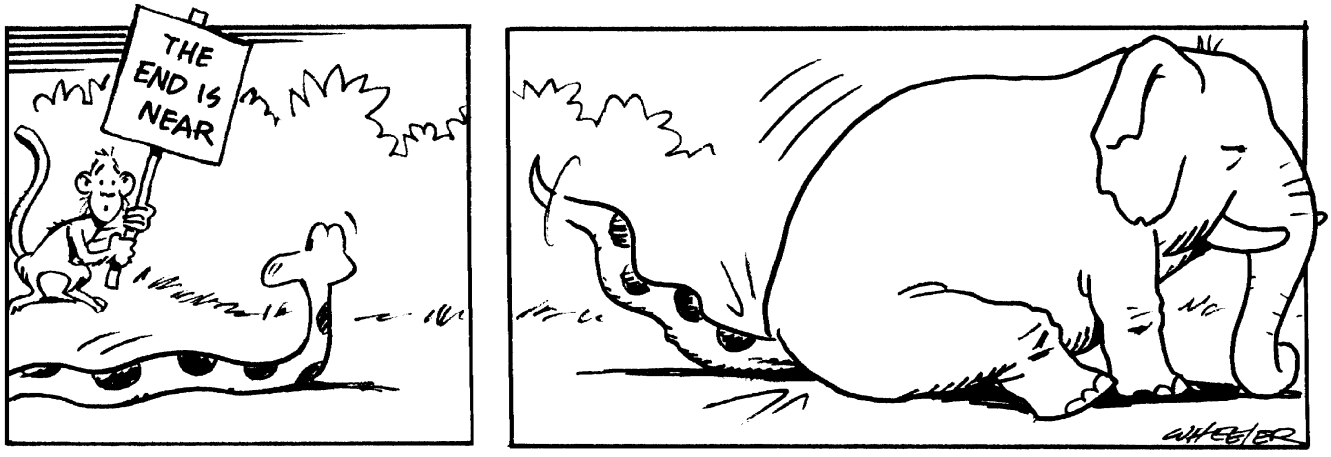
The November 28 meeting will include the annual election of officers and members-at-large of the CHS Board of Directors. Also at this meeting **Rob Carmichael**, of the Wildlife Discovery Center, Elawa Farm, will report on the foxsnake research he has been doing. And as a special bonus, beginning at 6:00 P.M., CHS members will be able to view "Reptiles — The Beautiful and the Deadly," the exhibit of live turtles, crocodilians, lizards and snakes being hosted by the Notebaert Nature Museum

The regular monthly meetings of the Chicago Herpetological Society take place at Chicago's newest museum — the **Peggy Notebaert Nature Museum**. This beautiful new building is at Fullerton Parkway and Cannon Drive, directly across Fullerton from the Lincoln Park Zoo. Meetings are held the last Wednesday of each month, from 7:30 P.M. through 9:30 P.M. Parking is free on Cannon Drive. A plethora of CTA buses stop nearby.

Board of Directors Meeting
Are you interested in how the decisions are made that determine how the Chicago Herpetological Society runs? And would you like to have input into those decisions? If so, mark your calendar for the next board meeting, to be held November 16. For information as to where the meeting will be held and directions, call Mike Dloogatch evenings at (773) 588-0728.

The Chicago Turtle Club
The monthly meetings of the Chicago Turtle Club are informal; questions, children and animals are welcome. Meetings normally take place at the North Park Village Nature Center, 5801 N. Pulaski, in Chicago. Parking is free. For more info visit the CTC website: http://www.geocities.com/~chicagoturtle.

THE ADVENTURES OF SPOT



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