Virginia Herpetological Society Newsletter

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4) Fall Meeting results
5) Surveys
6) Snake Force One

1) Message from the President

Susan Watson – (susan.watson@dgif.virginia.gov)

This has been a very busy 50th year for VHS so far, and there are still so many things to do. I am currently working on finishing up the report for last year's survey in Charles City and New Kent Counties, in order to get it in the next issue of Catesbeiana. Some of the other officers and I recently had a rather busy day (though not as hectic as last year) at the 2nd annual Reptile Day at the Virginia Museum of Natural History, in Martinsville. In addition, I am getting things lined up for this year's annual Fall Meeting and 50th Anniversary Celebration.

The Meeting and 50th Anniversary is slowly developing into a wonderful event! We will have Dr. Kurt Buhlmann as the keynote speaker! With Kurt, we should have copies of the new book, Turtles of the Southeast, which he co-authored, and these will be for sale at a discounted rate. Hopefully, purchasers will also get a chance to have Kurt sign them. There are several other speakers scheduled to talk on various herp-related topics. Currently, I am also working on the general announcement for the event, as well as a "call for student papers and posters" announcement that will be sent to several universities and colleges. The event will still feature a silent and a live auction. This year's event will be in the same location as last year, Virginia Commonwealth University (VCU) in Richmond, except that we will have more on a second day at VCU's Rice Center in Charles City County. The second day (probably a half day or so) is planned to include a WildlifeMapping workshop and hopefully a short survey on the Rice Center property. The entire event will be on Saturday, October 4th and Sunday, October 5th . (Saturday will be the main day of presentations, papers, and auctions in Richmond, while Sunday will be the shorter day at VCU's Rice Center.)

There are even other tasks that I am working on as I get small chances, but this has been easier said than done. The surveys this year were great, and they provided great opportunities to see interesting herps and to catch up with the many great herpers in VHS! I always look forward to getting outside at a new site, finding great herps, sharing survey experiences, catching up with friends, and getting to know new faces. We will discuss potential sites for 2009 surveys at the Meeting and 50th Anniversary. Hope to see everyone there! Be sure to start checking the VHS website and Yahoo Group in the near future for updates!

2) VHS Now Accepts Memberships Online

Save time… and paper! The Virginia Herpetological Society now accepts all major credit cards online via PayPal. Using PayPal is not required for a membership. Just visit the membership area of the VHS website, and choose the appropriate membership category where you'll be directed to PayPal's easy and secure site. The VHS can also accept donations via PayPal in any amount. The donation link is located at the membership page as well.
http://fwie.fw.vt.edu/VHS/vhs-membership/membership.html

3) VHS wins Virginia Chapter of The Wildlife Society Award

Scott Klopfer, President-Elect of VA-TWS presented VHS President, Susan Watson with the 2008 A. Willis Robertson Award. The VA-TWS A. Willis Robertson Award was first established in the year 2000 and is awarded annually to the Virginia citizen or organization that has exercised outstanding conservation practices or has made significant contributions to conservation activities in the Commonwealth of Virginia. Susan accepted the award on behalf of the Virginia Herpetological Society at an award ceremony held in Staunton, VA on February 7, 2008.

4) Photo Contest for the 2009 VHS Calendar

We are currently accepting photographic submissions for the 2009 VHS calendar. I will be accepting submissions until September 1, 2008, so be sure to send any pictures you wish to submit right away. There is no limit this year on the amount of submissions one can send in, and all current members are eligible to submit material. All images submitted will need to be high resolution JPG files, and they must be at a minimum of 2000 pixels in width and 1500 pixels in height or larger. If you are unsure about these requirements, feel free to email me and I'll be happy to help you.

Patricia Crane pattiecrane@gmail.com VHS Store Committee

5) Fall Meeting Information October 4 & 5, 2008

VCU Virginia Commonwealth University

The 2008 Fall Meeting will be a celebration of the VHS' 50 years of research and education in Virginia. This meeting will be a 2 day meeting with an added day on Sunday. The Saturday meeting will be a traditional meeting at the VCU campus, centrally located in Richmond. **Kurt Buhlmann** is this year's keynote speaker. Dr. Buhlmann is an associate research scientist at the Savannah River Ecology Lab in South Carolina. His past and present research focuses primarily on turtle conservation and habitat management for herpetofauna in the southeastern United States. Dr. Buhlmann has spent a lot of time herping in Virginia and has published many articles.

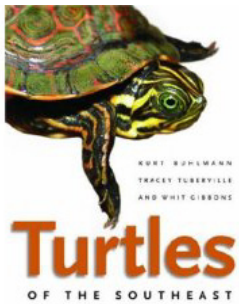
Sunday will be at the VCU Rice Center in Charles City County. There will be a workshop for Wildlife Mapping and a short survey on the Rice Center property.

Location: (Sat) Virginia Commonwealth University, Eugene P. and Lois E. Trani Center for Life Sciences. www.vcu.edu/maps/acmap/trani/lifescfifuture.htm
(Sun) VCU Rice Center http://www.vcu.edu/rice/
Date: Saturday & Sunday, October 4 &5, 2008
Parking: Parking is free along the streets near the Trani building or $5.00 all day parking in the VCU parking decks about a block from the Trani Center for Life Sciences. There are two decks, the West Main Street Parking Deck and the West Cary Street Parking Deck. A map of these and the Trani Center can be found at this website www.vcu.edu/maps/acmap/acmapov/j.htm
Directions: Driving directions can be found at VCU's directions website www.vcu.edu/maps/acmap/acmapd.php
Rice Center: www.vcu.edu/rice/about/location.html
Cost: **Registration is $9.25** which will include a box lunch, drinks, and snacks. If you don't want lunch, the meeting is free. Please fill out and send in a registration form on the VHS website.
Updates: Be sure to check the VHS website and the Yahoo Group frequently for any changes or updates.

NEW BOOK AVAILABLE!

Turtles of the Southeast, a book written by Kurt Buhlmann, Tracey Tuberville, and Whit Gibbons, will be available to VHS members for a discounted price. The new book, published in February of 2008, has a retail price of $22.95. The VHS has obtained a limited number of copies and will be selling them at the 2008 Fall Meeting for only $15, a savings of over 30%.

More Info: www.ugapress.uga.edu/0820329029.html



6) Research Committee Plans

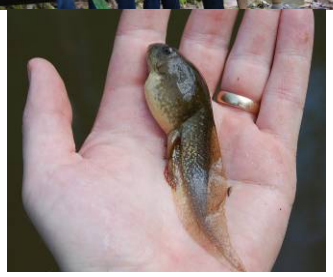
Knowledge of the basic health status of reptiles and amphibians is an increasingly important component of the conservation of these creatures. However, only a minimal amount of this data is available. The VHS research committee is developing a disease/malformation document to include in our

herp surveys. The objective of this is to record evidence of malformations, parasites, and disease or disease symptoms among the herps we capture at the different sites. We will try to keep the data sheet simple, using check points to record observations. If you are currently or planning to study diseases or abnormalities in any herps and would like to offer suggestions for the data sheet, please send them to Joy Ware at jware@mcvh-vcu.edu. Likewise, if we initiate this at the upcoming surveys, we will probably need one person in each search group willing and able to inspect for these disease characteristics. Contact Dr. Ware if you are interested in assisting.

7) Survey Summaries

Annual Survey at Colonial National Historical Park.
May 16-18, 2008

Resource Ramble II at Camp Powhatan
Blue Ridge Scout Reservation
June 13-15, 2008



BioBlitz at Dan Daniel Park
May 10, 2008

HerpBlitz at Grayson Highlands State Park
June 27-29, 2008

"*These foul and loathsome animals are distinguished by a heart with a single ventricle and a single auricle, doubtful lungs and a double penis. Most are abhorrent because of their cold body, pale color, cartilaginous skeleton, filthy skin, fierce aspect, calculating eye, offensive smell, harsh voice, squalid habitation and terrible venom; and so their creator has not exerted his powers in making many of them.*" - Carolus Linnaeus

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(757) 599-7501 **www.envspgroup.com**

Herp Trivia

1. A person who has Ophidiophobia is:
A) afraid of reptiles B) afraid of snakes C) afraid of amphibians
D) afraid of reptiles and amphibians

2. The Two-Toed Amphiuma (*Amphiuma means*) is closely related to the Greater Siren (*Siren lacertina*).
A) True B) False

3. How do you tell the difference between a two-toed amphiuma and a greater siren?
A) The greater siren has a slight yellow stripe along its tail
B) The amphiuma has no hind legs and only one external gill
C) The siren has more than one external gill and no hind legs

4. Northern water snakes (*Nerodia sipedon sipedon*) may attempt to corral small fish into shallow water or even beach them.
A) True B) False

5. Which of the following species are Virginia state endangered (choose all that apply)?
A) Southeastern crowned snake B) Red bellied ribbonsnake
C) Chicken turtle D) Chumley's forest peeper

6. Which of the following best describes the call of the squirrel tree frog (*Hyla squirrela*):
A) A lower frequency, melodious trill lasting one to three seconds and ending abruptly
B) A duck-like but nasal, harsh trill, repeated 15 to 20 times per second
C) A high-pitched, rapid screetch that only happens when you're trying to sleep

7. Which of the following frogs are Virginia state endangered?
A) Barking tree frog (*Hyla gratiosa*)
B) Upland chorus frog (*Pseudacris feriarum*)
C) Little grass frog (*Pseudacris ocularis*)

8. Mole salamanders belong to which family?
A) Pseudobranchia B) Proteidae C) Cryptobranchidae D) Ambystomatidae

9. How many amphibian species native to Virginia lay their eggs in saltwater?
A) 5 B) 3 C) 1 D) None

10. The first major groups of amphibians developed during which geologic period?
A) Devonian B) Cretaceous C) Carboniferous D) Permian E) Cambrian

Bonus Question: What do we call the study of how fossils are formed?

Answers can be found on page 15

Events

1) Reptile Expos 2) Educational Programs

1) Reptile Expos

	Manassas	Richmond	Timonium, MD
	Northern Va Reptile Expo	Richmond Reptile Expo	Mid-Atlantic Reptile Show
Dates	December 13, 2008	October 26, 2008	September 13 & 14, 2008
Location	Prince William County Fairgrounds Manassas, Virginia 20108	The Holiday Inn Select 1021 Koger Center Blvd. Richmond, VA 23235	Days Hotel 91615 Deereco Rd. Timonium, MD 21093
Admission	$6	$7	$9
Time	9 am to 3 pm	10 am to 3 pm	10 am to 5 pm
Contact	www.kingsnake.com/nva	www.kingsnake.com/richmond	www.reptileinfo.com

2) Educational Programs

Ellanor C. Lawrence Park
5040 Walney Road, Chantilly, VA 20151
703-631-0013

- Snake Search August 12, 2008

(8 yrs. and up), 9-11am, Ellanor C. Lawrence Park, Walney, 703-631-0013. Assist a naturalist with a reptile survey. Head out into the outback of Ellanor C. Lawrence Park to search for, capture, identify and release reptiles. Learn the habits and preferred habitats of our native snakes. Reservations and advanced payment required by 8/8. $5

- Lizards! August 17, 2008

(Families) 10-11am, Ellanor C. Lawrence Park, Walney, 703-631-0013. Watch a short movie on our native lizards and see some of our lizards close up. Join a naturalist on a short hike to try and find some of these elusive reptiles. Reservations and advanced payment by 8/13. $10/family.

NOTICE: Submissions for *Catesbeiana* Vol. 28 No. 1 are due September 1, 2008!
Please support the VHS by submitting any papers, field notes, or artwork for *Catesbeiana* to: Dr. Paul Sattler, Editor, *Catesbeiana,* .pwsattle@liberty.edu.

Conservation Key

Tim Christensen - VHS Conservation Committee Chair

Dilemmas in Conservation: Removal and Release of Native Herpetofauna

How often do you hear about a snake or turtle that someone removed from their yard and dropped off at some other location? This probably occurs with some degree of frequency and certainly, someone meant well assuming the animal would be better off elsewhere. There are other examples “removal and release”. Injured animals such as box turtles are taken to veterinarians/wildlife rehabilitators and subsequently release into new areas following treatment. Good

Samaritans remove snakes or turtles from roads sometimes a fair distance from where they were found. Some wildlife management strategies may involve removal to better habitat (often referred to as relocation, repatriation and translocation (RRT) programs).

The question is whether removing and releasing reptiles and amphibians elsewhere can be considered actually humane or whether such actions will be biologically successful (or appropriate). Some terms require definition before attempting to answer this question. The term "release" could actually fall into the categories of relocation, repatriation and translocation. Dodd and Seigel (1991) provide definitions of these terms. Relocation comprises moving an individual animal (or a population) away from an area where they are threatened (ie, from habitat loss) to a location where such threats are not expected. Repatriation is defined as releasing individuals to an area currently or formally occupied by that particular species. Translocation involves releasing individuals into areas not historically used or occupied by that particular species. Whether the "release" is by citizens/good Samaritans or professional wildlife managers, any of these three categories might apply.

Griffith et al. (1989) reports a 44% success rate in programs for relocation mammals but with a success rate of 19% for reptiles. This point opens the door to potential concerns as to whether this is an appropriate action to take in terms of being humane or successful (success being defined here as the individual animal surviving the release without adversely impacting the components of the new site or the establishment of a sustainable population as the result of an intentional RRT program).

Let's consider what a given reptile or amphibian might face when placed in a new, unfamiliar area. The organism must now find the resources needed for survival and possibly be required to do so in a manner that increases the risk of predation (in other words the animal may need to move more often or further to find the resources). Such resources include food, cover/concealment (shelter), hibernacula and water assuming such resources do in fact exist at this new location. Did the animal(s) have sufficient energy levels to search for these resources when it was first released? Will the animal(s) have enough time to find hibernaculum before ambient temperatures fall below operating levels? Does the location contain conspecifics? If so, are there sufficient resources to accommodate the additional individual(s) and the existing population? Will spacing be appropriate and would this disrupt breeding? Does the animal(s) contain infectious diseases that could be transmitted? Are soil conditions appropriate for species that must dig nests? Does the site contain a larger number of predators (either in terms of numbers or species)? Do naturally generated barriers (such as tree blow-down from storm events) exist that might preclude movement or could heavy precipitation in the very near future create flooded conditions leading to drowning? Is the new location characteristic of thick invasive vegetation stands that channelize, restrict or even prevent movement? These are just a few issues that might need to be considered.

Eastern box turtles (Terrapene carolina carolina) are species that may be frequently removed/released elsewhere for various reasons (removal from highways by concerned citizens, removal from suburbia over concerns about suitable habitat, release after treatment of injured specimens, entrapment in railroad tracks, etc). Additionally, this once common species is declining as a result of habitat loss from urban sprawl making relocation programs popular conservation opportunities (Dodd 2001, Bowen et al. 2004). Interestingly, researchers observed a higher mortality amongst relocated Eastern box turtles than that of resident individuals during a study involving 10 relocated and 10 resident box turtles (Hester, Price and Dorcas 2008). Four relocated turtles died while all resident turtles survived the duration of the study.

This study also concluded that relocated box turtles had average home ranges 3 times larger than those of the resident individuals, and the authors concluded that relocation is not a viable strategy for conservation of this species. By comparison, Plummer and Mills (2000) and Rittenhouse et al. (2007) reported larger home ranges for Eastern hognose snakes (Heterodon platirhinos) and three-toed box turtles (Terrapene carolina triunguis), respectively, after translocation of these two species.

Needless to say, any sort of RRT program should be left to the wildlife management professionals. Much exhaustive study of the objectives and the risks versus benefits is necessary. In some cases, captive-reared specimens may be involved and the additional issues of disease and genetics must be weighed. Dodd (2005) suggests long-term monitoring following introducing species to new habitats to determine whether success was achieved.

What is the best course of action to take with individual herpetofauna that might be removed/released elsewhere? First, consider

whether this is really necessary. A non-venomous snake such as an Eastern ratsnake or Eastern gartersnake pose no threat to persons and even more so represent excellent biological pest control. Even venomous species pose little risk if left alone especially if precautions are taken. In such cases, educating the property owner/concerned party on the risks of removing/releasing and the benefits of retaining the animals (as well as describing their roles in the local ecology) should be attempted. In some cases owners of garden ponds may express concern of watersnakes consuming their koi. While this is possible, larger fish will probably not be on the dinner menu while other wildlife such as herons and raccoons probably represent greater threats.

In some cases snakes will enter homes or garages. In these instances, the animals can be simply placed outside in the immediate area if the weather conditions are appropriate. Various species of turtles are often rescued from potential death on roads. Foremost, we need to be mindful of our own safety and especially that of young children. Furthermore, attempting to rescue a cantankerous snapping turtle from a busy highway is particularly dangerous for obvious reasons. If turtles can be safely removed from the highway, move them off the road in the direction they were traveling.

Overall, this is a challenging and controversial issue. Think carefully about the issue should you be confronted with the dilemma. Are helping or hurting herpetofaunal?

Literature Cited

Bowen, K.D., Colbert, P.L., and Janzen, F,J. 2004. Survival and recruitment in a human-impacted population of ornate box turtles, terrapene ornate, with recommendations for conservation and management. Journal of Herpetology 38: 562-568.

Dodd, C.K. 2005. Population manipulations. Amphibian declines: the conservation status of united states. University of California Press.

Dodd, C.K. and Seigle, R.A. 1991. Relocation, repatriation, and translocation of amphibians and reptiles: are they conservation strategies that work? Herpetologica 47(3): 336-349.

Griffith, B., Scott, J. M., Carpenter, J.W. and Reed, C. 1989. Translocation as a species conservation tool: status and strategy. Science 245: 477-480.

Hester, J.M., Price, S.J., and Dorcas, M.E. 2008. Effects of relocation on movements and home ranges of eastern box turtles. The Journal of Wildlife Management 72(3): 772-777.

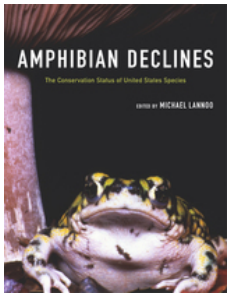
Plummer, M.V., and Mills, N.E. 2000. Spatial ecology and survivorship of resident and translocated hognose snakes (*Heterodon platirhinos*). Journal of Herpetology 34: 565-575.

Rittenhouse, C.D., Millspaugh, J.J., Hubbard, M.W., and Sheriff, S.L. 2007. Movements of translocated and resident three-toed box turtles. Journal of Herpetology 41: 115-121.

Book Review

1) **Amphibian Declines**
2) **Life in Cold Blood**
3) **Dictionary of Herpetology**
4) **A Snake Hunting Guide**

1) *Amphibian Declines: The Conservation Status of the United States*. 2005. ed. Michael Lannoo. University of California Press. 1,115 pp.



I always feel depressed whenever the topic “amphibian declines” is addressed. Nonetheless, this topic is critically important and certainly the more knowledge we can obtain the better equipped we are to combat the problem. Equally important is that a better understanding of this catastrophe could shed more light on what our own actions hold in store for us in the not-too-distant-future.

Amphibian Declines: The Conservation Status of the United States is organized into two parts, Conservation Essays and Species Accounts. Part One includes some very interesting discussions as to the causes of declines in a fairly comprehensive manner based on the opinions of the scientific community and includes topics of global change, ultraviolet radiation, xenobiotics, pesticides and parasites. Most of this information is presented in a manner to be useful to all readers. Thought-provoking discussions on conservation and surveys/monitoring follow this section.

The book does not include any color photos of native amphibians and would not serve as a source for identification purposes; however, Part Two comprises a very exhaustive account of all anuran and caudate species in the United States. It serves as an excellent desk reference for anyone who needs a

quick review of life histories, habitat, longevity, feeding behavior, predators, and diseases and parasites observed in any given species. The species accounts comprise about half of the book. Some additional useful information is presented in appendices including an alphabetical listing of scientific names organized by Family (though be aware that some amphibian genera and species changed recently and therefore the book will not be current in this respect), species with terrestrial eggs, species exhibiting some degree of parental care, species breeding in seeps, springs or streams, species found in caves and federally listed species.

The book was a little pricey when it was first published ($95) but is now down to $76. Nonetheless, whether you are interested in the amphibian decline phenomena or like the idea of a comprehensive species account reference, this book may useful. *By: Tim Christensen*

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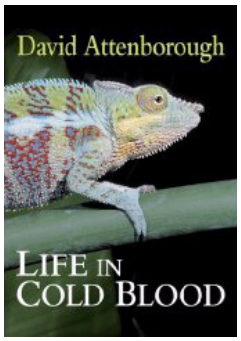
2) Attenborough, David. 2008. *Life in Cold Blood.* Princeton University Press. 288pp. ISBN 978-0-8493-3675-1



The book “Life in Cold Blood” by naturalist David Attenborough is both well-written and filled with amazing photographs. For example, there is a photograph of a paradise tree snake traveling through the air between trees! Topics covered include selected amphibians and reptiles from around the world. Among the herpetological features covered are physiology and reproductive traits of reptiles and amphibians; the meaning of “cold-blooded”; and altered conservation conditions of these animals. The content is scientifically accurate, but written in a clear and understandable manner. The book will be of interest to children and adults. The book is available from Amazon.com for $19.77. *By: Joy Ware*

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3) Lillywhite, H.B. 2008. *Dictionary of Herpetology*. Krieger Publishing Co. 376pp

Following the historical precedent of Peters (1964), this new updated DICTIONARY OF HERPETOLOGY provides a comprehensive, single-volume dictionary, with selected cross-referenced entries to clarify the many technical terms and concepts that pertain to herpetology. The DICTIONARY contains a complete collection of words that are central to understanding the biology of amphibians, turtles, reptiles, and crocodilians, and offers concise and easy-to-use readable definitions in an A-to-Z format. This invaluable reference is essential for academic herpetologists, or anyone who is interested in herpetology and its many ancillary aspects. This new DICTIONARY emphasizes terminology related to anatomy, physiology, systematics, evolution, and other disciplines, including newly-emerged fields that are relevant to the study amphibians, turtles, reptiles, and crocodilians. $113 at www.krieger-publishing.com.

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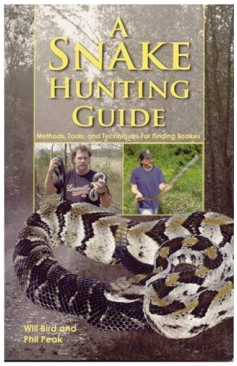
4) Bird, W., Peak, P. 2007. *A Snake Hunting Guide: Methods, Tools, and Techniques for Finding Snakes*. ECO, Living Art, and Serpent's Tale. 85pp.



About the authors: Both Will and Phil are passionate field herpetologists and founding members of the Kentucky Herpetological Society. Professionally, Phil works a "real job" and Will is employed by the Louisville Zoological Gardens.

This book is a fun read. Lots of information and ideas are jammed into its small and easy to read format. Its true value lies in realizing how much data and information can be collected by getting outside and enjoying weekends. The book clearly demonstrates that responsible and intelligent field work can add greatly to the body of scientific data.

Almost all the information in the species accounts is based on data from the author's field sites in and around Kentucky. Despite the regional nature of the work, the application of their methods is practical worldwide.

Snake hunting has become a pastime enjoyed by thousands. What was once considered a subculture is now recognized as a mainstream interest. The opportunity to experience snakes first hand in the field and to observe and photograph them in their native

haunts holds great appeal. A SNAKE HUNTING GUIDE provides the reader with detailed information on how, when, and where to find snakes. Some of the topics covered include methods for finding snakes, tools used in snake hunting, and how to develop and enhance snake hunting sites. $15 at Amazon.com.

Herpcetera

The Virginia Reptile Rescue is now under new leadership!

WWW.VAREPTILERESCUE.ORG

Martainn and Dawn Lenhardt have more than 10 years of experience caring for reptiles. In their 7 years of marriage, they have cared for iguanas, ball pythons, bearded dragons, leopard geckos, corn snakes, a nile monitor, and a skunk gecko. Martainn and Dawn both graduated from Longwood College in 2002. Martainn has a BA in Accounting and is getting ready to complete his MBA this fall. Dawn has a BS in Biology and Anthropology and is currently enrolled in Blue Ridge Community College's Veterinary Technology Program. Martainn has been employed at McKesson Medical Surgical in Richmond for 6 years and is currently a manager in Operations Accounting. Dawn was a zoologist at Maymont Park in Richmond for nearly 3 years before deciding to go to Vet Tech. School and is now working for the Veterinarian who cares for Maymont's animals.

A couple of months ago, Martainn and Dawn discovered that Bonnie Keller, founder of VA Reptile Rescue, was going to shut down the rescue due to personal reasons. Since there is nothing else out there that is close to what Bonnie had established, Martainn and Dawn decided to take over leadership of the rescue to keep it in operation. This is a new and exciting adventure for them and they have learned very quickly that educating the public is key to running a successful rescue. The rescue takes in abandoned or surrendered reptiles and cares for them until they are adopted out to a new permanent home. The rescue also does educational programs for groups in and around Richmond in hopes to raise awareness on what it takes to be a responsible reptile owner. In addition, the educational programs help to provide basic knowledge of reptiles to the general public. Bonnie and Rich Keller will remain part of the rescue as consultants. If you are interested in adopting a rescued reptile or have questions about the organization, go to www.vareptilerescue.org.

Deer-netting Detrimental to our Dearest Snakes

Herpetofauna face many threats daily – many of which are created by the actions of humans. The photograph presented here was taken by Tim Christensen at his neighbor's yard recently. This Eastern ratsnake became entangled in deer fencing material that lined a split rail fence to keep a dog in its yard. He was able to free the snake and have the animal examined by a veterinarian. With no injuries evident, it was released back into the immediate area where it was found. The deer fencing material was removed by the neighbors. The VHS has also encountered this situation during the 2006 HerpBlitz. The second picture is of past President Jason Gibson extracting an Eastern ratsnake from netting used to bundle pallets of firewood.

Buy a Duck Stamp, Save a Herp

VHS is promoting the sale of Federal Duck Stamps. Why? That's because 0.98 cents of every dollar generated by this program goes towards purchasing and leasing of wetlands in the National Wildlife Refuge System. It's not just for ducks! This historic perpetuating conservation program creates critical habitat for many species of herpetofauna.
For more information, visit the VHS website at fwie.fw.vt.edu/VHS/Conservation/duckstamps.html and the U.S. Fish and Wildlife Service website at www.fws.gov/duckstamps/stamps.htm!

Hop on over to the Post Office and buy one!

Online Resources

1) Life in Cold Blood
2) VHS Website
3) Herp Husbandry Websites
4) Save the Frogs!

1) *Life in Cold Blood* is a BBC nature documentary series written and presented by David Attenborough. A study of the evolution and habits of amphibians and reptiles, it is the sixth and last of Attenborough's specialized surveys following his major trilogy that began with Life on Earth.

The series comprises five 50-minute programs, each one followed by Under the Skin, a 10-minute section that features Attenborough interviewing the scientists whose work has led to the sequences included in the main program. It also examines the challenges faced by the crew and reveals some of the techniques used to film the series.

The series' website offers clips from the documentary and numerous supporting videos and text that are not found on the videos. There is a section on filming techniques, extras such as computerized chameleons and behind the scenes footage. A DVD release of the serious will drop on August 5, 2008 for $35.

http://www.bbc.co.uk/sn/tvradio/programmes/lifeincoldblood

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2) VHS Website: www.vaherpsociety.com

Over the last several months the VHS website has undergone some major re-origination and a switch in development software. These changes should help to improve the aesthetics and functionality of the site. To date the switch to the new platform is about 80% complete.
Other recent improvements:

- Replaced low fidelity frog/toad calls with high fidelity calls.

Special thanks to Lang Elliott of Nature Sound Studio, www.naturesound.com for allowing us to use his recordings.

- Additional animal photos added.
- New front page menu arrangement.
- Summaries of past 2008 events posted.

Location of 100 website visitors

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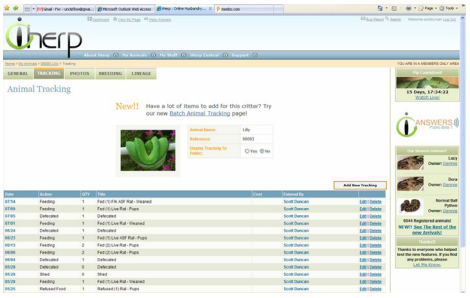
3) Herp Husbandry Websites Reviewed *By: Scott Duncan*

Several free, online communities for herp enthusiasts have recently made a splash on the internet. Two of these sites are reviewed below. Their main focus is captive animal husbandry, but other herpetology topics are also addressed. Both sites are growing at an astonishing rate.

Reptile Geeks (http://www.reptilegeeks.com) is a free online community of herp enthusiasts, a bit like MySpace for herpers. Each user creates a custom home page that others may visit. You can

post pictures and videos, publish blogs, comment on other members' content, chat with people, send messages, participate in specialized groups and events such as broadcasts, or post messages in various forums. The site also features quizzes, polls, and a video game arcade. The site has grown rapidly, so its response time has suffered in recent months, but management assures me that they are tackling the problem. This reviewer participates on Reptile Geeks incognito and enjoys the blog feature in particular. His home page can be found at http://reptilegeeks.com/uncle_flo.

iHerp.com (http://www.iherp.com) exploded onto the scene just a few months ago and so far it's a big hit. It is another free online community for herp enthusiasts and contains basic photo gallery, messaging and blogging features, but what really makes it interesting is that it is designed to be an online husbandry tracking tool. It allows users to enter their animals into the database and to capture all kinds of husbandry information, such as feeding, shedding, defecation, reproduction milestones, and much more. These records can be kept private or marked visible to the public. Users can view a dashboard page which lists animals in order of longest duration since their last meal, so that you can quickly see at a glance who needs to be fed. This reviewer has actually taken advantage of this feature from his BlackBerry. iHerp also allows one member to loan an animal to another member, so that the person taking care of the animal has the ability to update its husbandry data. This reviewer is currently using this feature with an albino ball python that was loaned to him by a friend for breeding purposes, and the albino's owner knows everything that's going on with his snake. Several features are still in beta testing, most notably a lineage tracker that promises to make animals' ancestry more transparent, and also a husbandry FAQ/knowledge base experiment called "iHerp Answers" that allows members to pose and tag questions, and other members can answer the questions. Answers are scored by the community, the idea being that the most helpful and informative threads will rise to the top and be easiest to find. The web site's creator is still working out a few usability kinks, but overall this reviewer has found the site to be extremely useful and its users friendly and pleasant. His home page on iHerp.com is http://tinyurl.com/5jhrfn



SAVE THE FROGS!™
A Nonprofit Organization Dedicated to Amphibian Conservation

4) A new website entitled www.savethefrogs.com has been created by the nonprofit organization that founded it. SAVE THE FROGS! is an international team of scientists, educators, policymakers, and naturalists dedicated to protecting the world's amphibian species. We conduct and fund scientific research that directly benefits amphibian populations. We also engage in educational activities aimed at increasing the public's awareness of environmental issues to ensure that amphibian conservation becomes, and remains, a top priority for current and future generations.

Ed: The executive director, Dr. Kerry Kriger is a Virginia resident, currently living in Manassas, Va. Also, ***Jeff Streicher****, a former VHS member currently residing in Texas pursuing a PhD, is on the Advisory Committee. Jeff attended last year's survey at the Northwest River State Park in Chesapeake, Va.*

News

1) **Skink Chivalry**
2) **Golf Course Habitat**
3) **Relocation of Box Turtles**
4) **Copperhead Snakebite**

1) Skinks put on rare show, probably over lady lizard

Broadhead skink fight on the forest floor is a rare look at territorial behavior

By LAURA MOYER
Date published: 6/9/2008
VIRGINIA BEACH

First we heard the rustling of dry leaves on the forest floor. Then we saw squirming motion and thought, snake? But as a writhing ball of reptile tumbled toward us two weeks ago on the Long Creek Trail at First Landing State Park (Virginia Beach), we realized we were looking at not one but two creatures.

They were lizards of some type, big ones about 8 or 9 inches long, with green-brown bodies and diamond-shaped orange heads. Later we learned that they are broadhead skinks. But at that moment, we knew only that we were watching and photographing a vicious fight. Each skink had its mouth locked on the other's midsection. When one would manage to free itself, its adversary would bite somewhere else. They flipped each other over, showing white bellies, then flipped back. But for a good 20 minutes, they were never entirely separate. Except for the rustling of leaves, they made no sound.

Suddenly the fight was over. The skinks broke apart, and one skittered away. Later, I e-mailed pictures to several biologists who confirmed that the reptiles were both male broadhead skinks. The fight was probably over territory and breeding rights, said **J.D. Kleopfer**, wildlife diversity biologist for the state Department of Game and Inland Fisheries. Such fights have been documented between male broadhead skinks in South Carolina. But Kleopfer didn't know of previous observations in Virginia.

Two male broadheaded skinks battle on the forest floor at First Landing State Park in southeastern Virginia. Males fight over territory and over female skinks during breeding season. Broadheaded skinks grow up to a foot long; these two were 8 or 9 inches long.

"This is very infrequent that people get to encounter this kind of behavior," he said. Still, it's not uncommon to see an individual skink. In Virginia, broadhead skinks live mostly in the Coastal Plain geographic region. But they've also been documented throughout our region, the Piedmont, and in isolated populations west of the Blue Ridge Mountains.

Maybe because of their size--they can grow to nearly 13 inches from snout to tail--broadheads have been feared in the past. They've been wrongly called "scorpions" by people who believed their bites were poisonous or that their tails contained stingers. Neither is true, Kleopfer said.

Virginia has no wild poisonous lizards, and, in fact, there are only two venomous lizard species in the world--the Mexican beaded lizard and the Gila monster. But though they are not poisonous, broadheads "can give you a pretty strong bite," Kleopfer said. Their powerful jaws are designed to crunch through crickets, grasshoppers, snails and smaller lizards. And broadheads can separate from their tails to escape a predator, Kleopfer said. The tails continue to wriggle after they've detached, he said, which occupies the predator and gives the skink time to get away. The tail shape and vigor after detaching may give people the false impression of a stinger, Kleopfer said. Once it loses a tail, a broadhead skink can regenerate it once. After that, Kleopfer said, "they cannot continuously grow a new tail back." And a skink without a tail--like one of the two we saw--can lose speed and agility in hunting. Its long tail gives it balance and is also a source of body fat in lean times.

Though broadheads are voracious insect-eaters, people who see them around their homes sometimes call Kleopfer in great agitation. They want to know how to get rid of the skinks.

"I ask, 'Why?'" Kleopfer said. "They're eating spiders. They're eating crickets. They're keeping your house cleaned up--free labor."
http://tinyurl.com/68kjdg

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2) Boone, Michelle D., Raymond D. Semlitsch, and Cory Mosby. 2008. Suitability of Golf Course Ponds for Amphibian Metamorphosis When Bullfrogs Are Removed. Conservation Biology, Volume 22, Issue 1, Page 172-179

Abstract: Managing areas designed for human recreation so that they are compatible with natural amphibian populations can reduce the negative impacts of habitat destruction. We examined the potential for amphibians to complete larval development in golf course ponds in the presence or absence of overwintered bullfrog tadpoles (*Rana catesbeiana*), which are frequently found in permanent, human-made ponds. We reared larval American toads (*Bufo americanus*), southern leopard frogs (*R. sphenocephala*), and spotted salamanders (*Ambystoma maculatum*) with 0 or 5 overwintered bullfrog tadpoles in field enclosures located in ponds on golf courses or in experimental wetlands at a reference site. Survival to metamorphosis of American toads, southern leopard frogs, and spotted salamanders was greater in ponds on golf courses than at reference sites.

We attributed this increased survival to low abundance of insect predators in golf course ponds. The presence of overwintered bullfrogs, however, reduced the survival of American toads, southern leopard frogs, and spotted salamanders reared in golf course ponds, indicating that the suitability of the aquatic habitats for these species partly depended on the biotic community present. Our results suggest that ponds in human recreational areas should be managed by maintaining intermediate hydroperiods, which will reduce the presence of bullfrog tadpoles and predators, such as fish, and which may allow native amphibian assemblages to flourish.

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3) Hester, Joy M., Steven J. Price, and Michael E. Dorcas. 2008. Effects of Relocation on Movements and Home Ranges of Eastern Box Turtles. J. of Wildlife Management. vol 72;3, pp. 772-777.

Abstract: To examine effects of relocation on eastern box turtles (*Terrapene carolina*), we compared home ranges and movement patterns of 10 resident and 10 relocated box turtles in Davidson, North Carolina, USA. Home ranges of relocated turtles were approximately 3 times larger than those of resident turtles when measured by minimum convex polygons, 6 times larger than resident turtles when measured with 95% kernels and 7.5 times larger than resident turtles when measured by 50% kernels. Relocated turtles also moved a greater average distance per day than resident turtles. Additionally, 5 relocated turtles experienced mortality or disappearance compared to no mortality or disappearance of resident turtles. Our results raise questions about the success of relocation as a management strategy for eastern box turtles.

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4) Stafford County Resident Recovering From Snakebite

Linda Fellers was bitten on the leg by a copperhead at her Stafford County home after clearing brush from her yard. She stepped off of her deck at 8pm when she was bitten on the ankle. She described the snake as “brown and seemed to be about 6 feet long”. Mrs. Fellers also described the bite as excruciating and said the snake “hit me full force”. and “he went for me”.

Mrs. Fellers experienced pain, bruising and swelling, and treatment consisted of 6 vials of antivenom. The full story can be found at http://tinyurl.com/5vmlsr

Answers from page 5

Herp Trivia Answers

1. A person who has Ophidiophobia is:

A) afraid of reptiles **B) afraid of snakes** C) afraid of amphibians
D) afraid of reptiles and amphibians

2. The Two-Toed Amphiuma (*Amphiuma means*) is closely related to the Greater Siren (*Siren lacertina*).

A) True **B) False They are in different families (Amphiumidae vs. Sirenidae)**

3. How do you tell the difference between a two-toed amphiuma and a greater siren?

A) The greater siren has a slight yellow stripe along its tail
B) The amphiuma has no hind legs and only one external gill
C) The siren has more than one external gill and no hind legs

4. Northern water snakes (*Nerodia sipedon sipedon*) may attempt to corral small fish into shallow water or even beach them.

A) True **B) False**

5. Which of the following species are Virginia state endangered (choose all that apply)?

A) Southeastern crowned snake B) Red bellied ribbonsnake
C) Chicken turtle D) Chumley's forest peeper **(B and D don't exist)**

6. Which of the following best describes the call of the squirrel tree frog (*Hyla squirrela*):

A) A lower frequency, melodious trill lasting one to three seconds and ending abruptly
B) A duck-like but nasal, harsh trill, repeated 15 to 20 times per second
C) A high-pitched, rapid screetch that only happens when you're trying to sleep

7. Which of the following frogs are Virginia state endangered?

A) Barking tree frog (*Hyla gratiosa*)
B) Upland chorus frog (*Pseudacris feriarum*)
C) Little grass frog (*Pseudacris ocularis*)

8. Mole salamanders belong to which family?

A) Pseudobranchia B) Proteidae C) Cryptobranchidae **D) Ambystomatidae**

9. How many amphibian species native to Virginia lay their eggs in saltwater?

A) 5 B) 3 C) 1 **D) None**

10. The first major groups of amphibians developed during which geologic period?

A) Devonian B) Cretaceous C) Carboniferous D) Permian E) Cambrian

Bonus Question: What do we call the study of how fossils are formed? **Taphonomy**

Thanks to Scott Duncan!

Send your suggestions for Herp Trivia to the newsletter editor, Kory Steele, colchicine@gmail.com.

Virginia Literature

These selections represent articles published or in press, January to July 2008. Included are articles focused primarily on (1) studies performed within Virginia environments, (2) studies on reptiles or amphibians found within Virginia, or (3) additional herpetological topics that are of interest in terms of research and/or conservation of reptiles and amphibians. Compiled by Dr. Joy Ware.

Amphibians

Ware, J.L., C. Viverette., J.D. Kleopfer, L. Pletcher, D. Massey, and A. Wright. 2008. Infection of spotted salamanders (*Ambystoma maculatum*) with Ichthyophonus-like organisms in Virginia. J Wildl Dis.;44(1):174.

Widder, P.D. and J.R. Bidwell. 2008. Tadpole size, cholinesterase activity, and swim speed in four frog species after exposure to sub-lethal concentrations of chlorpyrifos. Aquat. Toxicol. 88(1): 9.

Karraker, N.E., J.P. Gibbs, and J.R. Vonesh: 2008. Impacts of road deicing salt on the demography of vernal pool-breeding amphibians. Ecol Appl 18(3): 724-734.

Schock, D.M, T.K. Bollinger, V. G. Chinchar, J. K. Jancovich, and J. P. Collins. 2008. Experimental evidence that amphibian ranaviruses are multi-host pathogens. Copeia. 2008 (1): 133-143.

Woodhams, D.C., R.A. Alford, C.J. Briggs,M. Johnson, L.A. Rollins-Smith. 2008. Life-history trade-offs influence disease in changing climates: strategies of an amphibian pathogen. Ecology. 89(6):1627-39.

DR and Gunzburger, MS. 2008. Effects of Predatory Fish on Survival and Behavior of Larval Gopher Frogs (*Rana Capito*) and Southern Leopard Frogs (*Rana Sphenocephala*) J. of Herpetology Volume 42, Issue 1.

Reptiles

Todd, B.D. and K.M. Andrews. 2008. Response of a reptile guild to forest harvesting. Conserv Bio 22(3):753-61.

Browne, D.R. 2008. 2008. Terrestrial Activity of *Chrysemys picta* in Northern Virginia. Copeia. (2): 306-310

Todd, B.D., J.D. Williams, C.T. Winne, R.D. Semlitsch and J.W. Gibbons. 2008. Ecology of the Southeastern Crowned Snake, *Tantilla coronata*. Copeia. (2): 388-394.

What can you find on the VHS website?

- ►Stay up-to-date on the new taxonomic revisions.
- ►Submit a picture for Photo of the Month
- ►Get historical VHS publications- for the last 50 years!
- ►How to get a grant to fund your research.
- ►IDs, pictures, and ranges maps for all of Virginia's native herps.
- ►The latest information on VHS events.

Remember! The 2008 Fall Meeting October 4 & 5 at the Va Commonwealth University.

Virginia Native

The purpose of **Virginia Native** is to highlight native species that are deserving of recognition. Additional information can be found on the website of the Virginia Department of Game and Inland Fisheries (VDGIF). http://www.dgif.virginia.gov/wildlife/information.

PYGMY SALAMANDER (*Desmognathus wrighti*)

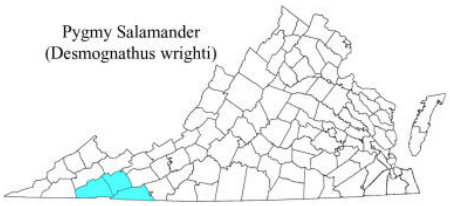
Characteristics

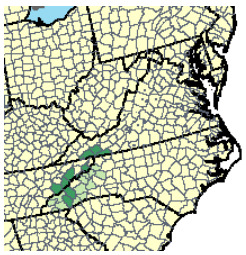
This is one of the smallest North American salamanders, reaching a total length of 1.5 to 2 in. Coloration is chestnut or coppery-colored but variable, with a dark herringbone pattern down the center of the back. Between the eye and the mouth there is a light stripe. The eggs are laid in small cavities amid the rocks of spring seeps in pockets of gravel and mud. The courtship sequence includes a behavior not previously reported for any Plethodontid salamander. A male may approach and grab a female, holding her tail, body, or head in clamped jaws. The male may restrain a female for up to several hours before proceeding with subsequent courtship activity. This salamander inhabits streams, stream banks, and is generally found in seeps, which are used for nesting and hibernation. This species lives in moss and leaf litter on the forest floor.

Distribution

This species occurs in the spruce-fir forest of Whitetop Mountain, Mount Rogers, and Pine Mountain, where Grayson, Washington, and Smyth counties meet. The entire Virginia range occurs within the Mount Rogers National Recreation Area. On foggy, rainy nights they may be found up to 7 feet above ground level on tree trunks. The greatest abundance are in the fraser fir-red spruce forest. They are present but not as common below the spruce-fir forest.

Source: http://tinyurl.com/6n7tkl





Common Name: Pygmy Salamander

Scientific Name: Desmognathus wrighti

Genus: ***desmos*** is Greek for "ligament", ***gnathos*** is Greek for "jaw" - This refers to the bundle of ligaments holding the jaw.

Species: ***Wrighti*** is in honor of George Melendez Wright (1904-1936).

NOTICE to Members: If you have an email address, please send it to Pattie Crane (pattiecrane@gmail.com). Then, for future issues of the newsletter, you will be notified via email upon its release on the website along with a link. Thank you for helping to save some trees, or should we say herp habitat!

MEMBERSHIP APPLICATION

Please sign me up for membership in the Virginia Herpetological Society for the year(s) of _____. Membership begins and ends on a calendar year.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Daytime phone: (_____) _____

E-mail address: _____

Check Membership Type

Under 18	**$8.00**	____
Regular	**$15.00**	____
Family	**$20.00**	____
Life	**$225.00**	____

Make check or money order payable to:
Virginia Herpetological Society

VIRGINIA HERPETOLOGICAL SOCIETY
Patricia Crane, VHS Treasurer
71 Jefferys Drive
Newport News, VA 23601-2709