



Virginia Herpetological Society Newsletter

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February 2004

President
Mike Clifford

Secretary/Treasurer
Paul Sattler

Vice President
Kory Steele

Catesbeiana Editor
Steve Roble

Newsletter Editor
Shelly Miller

SPRING MEETING INFORMATION INSIDE!!

A MESSAGE FROM THE NEW VHS PRESIDENT

It is a great honor for me to serve as your new Virginia Herpetological Society president. During the next two years, I hope to work with the other officers and the VHS membership to continue the progress towards achievement of our Society's stated purposes:

- To work to perpetuate the conservation of reptiles and amphibians through education and dissemination of scientific information through the facilities of the Society.
- To encourage conservation of wildlife in general, and of reptiles and amphibians in particular.
- To promote research in herpetology by the sharing of information among members and through cooperation with amateur and professional herpetologists.
- To educate the public and members, and to exchange information and resources with other herpetological societies by means of a bulletin and specific activities such as field trips or speakers.

On behalf of all our members, I'd like to thank our out-going president Jason Gibson for his leadership and welcome his involvement in new roles within VHS. And thanks to all of our returning officers and committee chairs for their continued dedication. I've been very much on the sidelines in recent years and am very pleased to see their commitment and enthusiasm. They are the backbone of the Society.

A little about my background...

Not quite a 1958 charter member of VHS, I joined the Society as an enthusiastic teenager in 1964. Still vivid are my memories of that first VHS meeting at the Norfolk Museum in May. Even more vivid are my recollections of the next day's sweltering field trip to the Great Dismal Swamp. Eighteen members and 2.5 million ticks were in attendance, along with a few skinks and a ribbon snake. Since that time, I've accumulated more ticks, a couple of university degrees, several hunting dogs, a few pounds, and a lot more memories. Also co-authored ***Snakes of Virginia*** along the way. After 32 years of service as an Extension 4-H Agent with Virginia Tech, I recently retired to a life of leisure with my wife. The leisure part hasn't really kicked in yet. Teaching GPS classes, working with local conservation organizations, and involvement with state and local 4-H natural resource education programs keep me jumping. My herpetological endeavors tend

towards teaching kids at camps, schools, and club meetings about our little scaly, warty, and slimy friends.

So, that's a nut in a nutshell. We invite your active participation in the Virginia Herpetological Society. Please feel free to contact me with questions and suggestions.

Mike Clifford
mjc4h@vt.edu

A note on the new VHS Vice President, Kory Steele

Kory has been the curator of amphibians and reptiles at the Virginia Living Museum for the past 4.5 years. He is currently finishing his master's degree with Barbara Savitsky in Environmental Science at Christopher Newport University. His thesis topic is "Amphibian Use of Created Wetlands for Reproduction in Gloucester County, VA". Kory is a native Virginian having been born in Gloucester County.

Boldly go where few herpers have gone before...

Join us for the VHS Spring Meeting in Halifax County

<http://fwie.fw.vt.edu/VHS/2004springmeeting.htm>

When: May 22 and 23

Where: The Cove, Ward Burton Wildlife Foundation Reserve;

http://www.twbwf.org/land_mgmt.htm

An alternative site, Staunton River State Park has not been confirmed. Check the VHS website for details and updates including information on lodging, etc. If the web is not available to you, contact Mike Clifford at 434-645-9315.



Known or likely amphibians of Halifax Co., VA

- [Bullfrog](#) (*Rana catesbeiana*)
 - [Treefrog, Cope's gray](#) (*Hyla chrysoscelis*)
 - [Treefrog, gray](#) (*Hyla versicolor*)
 - [Frog, northern green](#) (*Rana clamitans melanota*)
 - [Frog, eastern cricket](#) (*Acris crepitans crepitans*)
 - [Frog, pickerel](#) (*Rana palustris*)
 - [Frog, southern leopard](#) (*Rana sphenocephala*)
 - [Frog, southeastern chorus](#) (*Pseudacris feriarum*)
 - [Salamander, four-toed](#) (*Hemidactylium scutatum*)
 - [Salamander, marbled](#) (*Ambystoma opacum*)
 - [Salamander, northern dusky](#) (*Desmognathus fuscus*)
 - [Salamander, northern red-backed](#) (*Plethodon cinereus*)
 - [Salamander, spotted](#) (*Ambystoma maculatum*)
 - [Salamander, southern two-lined](#) (*Eurycea cirrigera*)
 - [Salamander, three-lined](#) (*Eurycea guttolineata*)
 - [Toad, American](#) (*Bufo americanus*)
 - [Toad, eastern narrow-mouthed](#) (*Gastrophryne carolinensis*)
 - [Toad, Fowler's](#) (*Bufo fowleri*)
 - [Newt, red-spotted](#) (*Notophthalmus viridescens viridescens*)
 - [Salamander, eastern mud](#) (*Pseudotriton montanus montanus*)
 - [Salamander, northern red](#) (*Pseudotriton ruber ruber*)
 - [Peeper, northern spring](#) (*Pseudacris crucifer crucifer*)
 - [Salamander, white-spotted slimy](#) (*Plethodon cylindraceus*)
- Known or likely reptiles of Halifax Co, VA
- [Lizard, northern fence](#) (*Sceloporus undulatus hyacinthinus*)
 - [Skink, five-lined](#) (*Eumeces fasciatus*)
 - [Skink, southeastern five-lined](#) (*Eumeces inexpectatus*)
 - [Skink, broadhead](#) (*Eumeces laticeps*)
 - [Skink, little brown](#) (*Scincella lateralis*)
 - [Racerunner, six-lined](#) (*Cnemidophorus sexlineatus sexlineatus*)
 - [Copperhead, northern](#) (*Agkistrodon contortrix mokasen*)
 - [Snake, northern scarlet](#) (*Cemophora coccinea copei*)
 - [Racer, northern black](#) (*Coluber constrictor constrictor*)
 - [Snake, eastern worm](#) (*Carphophis amoenus amoenus*)
 - [Snake, northern ringneck](#) (*Diadophis punctatus edwardsii*)
 - [Snake, southern ringneck](#) (*Diadophis punctatus punctatus*)
 - [Snake, corn](#) (*Elaphe guttata*)
 - [Snake, black rat](#) (*Elaphe obsoleta obsoleta*)
 - [Snake, eastern hognose](#) (*Heterodon platirhinos*)
 - [Kingsnake, eastern](#) (*Lampropeltis getula getula*)

- [Kingsnake, mole](#) (*Lampropeltis calligaster rhombomaculata*)
[Snake, eastern milk](#) (*Lampropeltis triangulum triangulum*)
[Snake, queen](#) (*Regina septemvittata*)
[Snake, northern water](#) (*Nerodia sipedon sipedon*)
[Snake, rough green](#) (*Opheodrys aestivus aestivus*)
[Snake, northern brown](#) (*Storeria dekayi dekayi*)
[Snake, northern red-bellied](#) (*Storeria occipitomaculata occipitomaculata*)
[Snake, southeastern crowned](#) (*Tantilla coronata*)
[Snake, eastern garter](#) (*Thamnophis sirtalis sirtalis*)
[Snake, eastern ribbon](#) (*Thamnophis sauritus sauritus*)
[Earthsnake, eastern smooth](#) (*Virginia valeriae valeriae*)
[Turtle, eastern snapping](#) (*Chelydra serpentina serpentina*)
[Turtle, eastern mud](#) (*Kinosternon subrubrum subrubrum*)
[Stinkpot](#) (*Sternotherus odoratus*)
[Cooter, eastern river](#) (*Pseudemys concinna concinna*)
[Turtle, eastern painted](#) (*Chrysemys picta picta*)
[Turtle, eastern box](#) (*Terrapene carolina carolina*)
- ** The species list was extracted from the VDGIF [Virginia Fish and Wildlife Information Service \(VAFWIS\)](#) database.

OTHER HERP EVENTS

VHS members are invited to join us for a ...

GPS ADVENTURE

Workshop for adults and older teens

- **Holiday Lake 4-H Center**
- **February 20-21, 2004**



This Friday evening/all day Saturday workshop will cover the basics of the Global Positioning System, GPS receiver operation, using topographic maps and magnetic compasses in concert with GPS, digital mapping programs, and incorporating GPS in youth education and natural resources activities. Participants will be using our Virginia 4-H GPS Navigation Education Kits and other GPS equipment in both e-classroom sessions and during a variety of field exercises (culminating with *GPS Search & Rescue* of "Bubba" the lost hunter!). We'll also be field testing some of the latest innovations in GPS receiver technology such as acreage measurement and GPS/FRS radio capabilities. The workshop is

sponsored by the Virginia 4-H Natural Resources & Environmental Education (NREE) Curriculum Committee. For more information, contact:

**Mike Clifford, Senior Extension Agent Emeritus,
 c/o Nottoway Extension Office, Nottoway, VA 23955**

Phone: 434.645.9315 (office) 804.561.5411 (home)

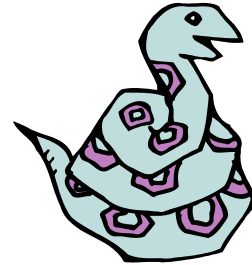
Fax: 434.645.9731 E-mail: mjc4h@vt.edu

Reptiles! Bizarre and Beautiful at the Virginia Living Museum Feb. 21-22

Reptiles are perhaps the most misunderstood and most feared creatures on earth, but the staff at the Virginia Living Museum in Newport News wants the public to see their fascinating and attractive aspects as well. "Reptiles! Bizarre and Beautiful" will be presented at the museum Saturday and Sunday, Feb. 21-22.

Museum visitors can experience a wide variety of reptiles up close and personal, including exotic reptiles from Virginia Reptile Rescue and rare turtles from the Tewksbury Institute of Herpetology in New Jersey.

All three venomous snakes found in Virginia: rattlesnake, cottonmouth and copperhead, plus exotic venomous snakes such as gaboon vipers will be on display. To illustrate the differences between reptiles and amphibians, visitors will also see several amphibians from the museum's collection, including a greater siren, mud puppies, hellbenders, wood frogs, lizards and aquatic salamanders.



Bonnie Keller will display geckos, bearded dragons and other reptiles she has rescued through Virginia Reptile Rescue, a shelter and education program she and her husband, Rich, operate from their home near Richmond. The Kellers attempt to find new homes for pet reptiles and to educate people about the life-long commitment they are making when they purchase a reptile.

The Tewksbury Institute of Herpetology will be displaying rare endangered turtles and tortoises from around the world. Through a combination of private collections and participation in international confiscations, the Tewksbury Institute holds many of the largest unrelated groups of the world's most critically endangered and threatened species of turtles and tortoises. Tewksbury is dedicated to the conservation, reproduction, research, education, and public awareness of the plight of these slow-to-reproduce armored wonders.

A special show, "A Sky Full of...Scales?" will be shown in the planetarium theater. Explore how reptiles use the sun, moon and stars in this live show and then learn how to locate the reptiles that appear in the night sky.

There will be live animal presentations throughout the day with reptiles native to Virginia. Children can make crafts. For an extra fee, visitors can have a keepsake photo taken with a reptile.

A free storytime will be held at 10 a.m., with volunteer Tede Johnson reading "Chameleons are Cool" by Martin Jenkins and displaying a reptile.

Reptile events are included in regular museum admission: \$9 adults, \$7 children (3-12), ages two and under free. Planetarium admission \$3. Combination tickets: \$11 adults, \$9 children.

The Virginia Living Museum is located at 524 J. Clyde Morris Boulevard, Newport News (I-64, exit 258-A). Winter hours are 9 a.m. to 5 p.m. Monday through Saturday and noon to 5 p.m. Sunday.

Call 757-595-1900 for further information or check the web site at www.valivingmuseum.org.

In Fairfax County

February

Ellanor C. Lawrence Park

28 February

Salamander Excursion

(12 yrs. & up), 3:30-8:30pm. Meet a naturalist at Elizabeth Furnace in Front Royal, VA. Witness the first sign of spring by observing Jefferson salamanders, spotted salamanders and red spotted

newts breeding in vernal pools. Bring flashlights and shoes that can get damp. Bring your own dinner and dress for the winter! Reservations required. \$10/person. Call 703/631-0013.

March

Ellanor C. Lawrence Park

6 Saturday

Amphibian walk

(8 yrs. & up), 9:30-10:30am, Ellanor C. Lawrence Park, Walney, 703/631-0013. Enjoy a naturalist lead hike searching for amphibians. Spring peepers, wood frogs, and spotted salamanders are breeding! Assist in collecting, recording important data, and releasing. Wear water-proof boots! Reservations required. \$5

April

Ellanor C. Lawrence Park

3 Saturday

Fantastic Frogs

(12 yrs. & up), 10-11am, Ellanor C. Lawrence Park, Walney, 703/631-0013. Learn some of the frogs that are native to Fairfax County through a live specimen collection. Explore the park's best frog habitats searching for our slippery friends. Reservations required. \$5/person.

Ellanor C. Lawrence Park

24 Saturday

Serpent Search

(12 yrs. & up), 8-10am. Assist a naturalist with reptile survey. Head out into the outback of Ellanor C. Lawrence Park searching, capturing, identifying and releasing snakes. Learn the habits and preferred habitats of our native snakes. Reservation required \$5/person

Vernal Pools are where it's at!

Hello Vernal Pool friends,

Here is a reminder for this year's Spring Pools Institute workshops:

1. March 15-18 (Central): based at Holiday Lake 4-H Center and exploring ca. 6 counties in the Piedmont
2. March 22-25 (Western): based at Douthat State Park and exploring ca. 4 counties in the Western Highlands

TO REGISTER or for more details on these workshops got to:

<http://www.ext.vt.edu/resources/4h/holiday/springpools.html>

and

<http://www.lynchburgbiz.com/virginiasvernalpools/happenings.htm>

3. Additionally, there will be a weekend version conducted for the Rockbridge Naturalists on March 26-28; there could be openings for this workshop that others might fill (call or write Mike for the waiting list).

4. I will also be in Northern VA (Loudoun & Fairfax Counties area) the first week of March conducting vernal pool wetlands/amphibians-related programs. If I can help any of you there with a related activity during my itinerary, please let me know!

This year promises to be another excellent season for vernal pools and

their obligate wildlife. The abundance of rain and snow will produce productive pools teeming with life this spring. I hope you can join us for a lively learning and exploring experience this March!

Best wishes,

Mike

Michael S. Hayslett, MS

Natural Resource Director

Holiday Lake 4-H Educational Center

Rt. 2, Box 630

Appomattox, Virginia 24522

Ph: 434-248-5444 Fax: -6749

E-mail: mhayslet@vt.edu

www.ext.vt.edu/resources/4h/holiday/nr-ed.html

<http://www.lynchburgbiz.com/virginiasvernalpools/index.html>

From the NY Times, Dec 16, 2003

U.S. Won't Narrow Wetlands Protection

By FELICITY BARRINGER

WASHINGTON, Dec. 16 — Making an abrupt change in its approach to the Clean Water Act, the Environmental Protection Agency announced Tuesday that it would jettison plans to remove federal protection from millions of acres of wetlands.

The agency's administrator, Michael O. Leavitt, made the announcement late in the afternoon in a hastily called news conference. The change effectively repudiated an internal draft regulation that proposed withdrawing federal protections from many isolated wetlands and intermittent streams, including many small waterways in the arid West.

"It's our belief that the best approach is to continue reviewing and learning from the data," Mr. Leavitt said, rather than enter into a potentially lengthy legal process by issuing a rule opposed by most state governments. The legal underpinnings of a regulation narrowing the scope of the Clean Water Act would also have been shaky, he indicated, since recent federal court decisions, including two from the often-conservative United States Court of Appeals for the Fourth Circuit, rejected arguments that in many respects paralleled the lines of argument that the agency had discussed. Mr. Leavitt emphasized that the impetus for the decision was President Bush's determination to preserve streams and wetlands. "At the root of this is a commitment from the Bush administration to achieve the goal of no net loss of wetlands,"

he said, adding that these waters "function as nature's kidneys" and "add immense value to economic and aesthetic bounties of this country."

Environmental groups reacted with qualified praise but clear relief, since most had feared that the Bush administration would gain leverage from a 2001 Supreme Court decision that set some new limits on wetlands protection, using it to restrict the Army Corps of Engineers' right to require permits for construction, landfills and other activities that disturb wetlands.

Jim Murphy of the National Wildlife Federation said of the announcement: "It's a win for water resources and wildlife. It's definitely a positive step. How much celebration we can have over them not doing something bad as opposed to doing something good is a question."

Jon Kusler, the associate director of State Wetland Managers, said most state governments strongly opposed the suggested regulatory changes. He said of the states' reaction, "The comments were overwhelmingly against a broad interpretation" of the Supreme Court's 2001 decision that the Clean Water Act did not allow the Corps to require permits for putting a landfill in an abandoned strip mine.

Representatives of the National Association of Home Builders were keenly disappointed at the day's developments. Chandler Morse, a policy analyst for the group, said that without a new rule, confusing and contradictory interpretations of the wetlands regulations would be likely to continue. "I don't think we're going to see any fundamental solutions to the problems we're facing," Mr. Morse said. "And the problems

that we're facing, the issues that we'd like to see addressed, are the inconsistency and the unpredictability in the permitting process."

As a regulatory tool, the Clean Water Act along with three decades of legislative, regulatory and legal decisions that have resulted from it form a complex web of sometimes confusing restrictions.

The Clean Water Act is also an important symbol, since it was one of the signal early pieces of environmental legislation. Any major change, particularly one that state governments find threatening to the environment, could carry large political consequences.

A spokeswoman for the E.P.A. said there were 100 million acres of wetlands in the continental United States and 160 million in Alaska.

In conjunction with the original E.P.A. notice that the extent of protected wetlands might be curbed, the agency's Washington

headquarters sent a notice to staff members and Army Corps of Engineers offices around the country to check with the central office before asserting jurisdiction over a wetland. Asked if that guidance to the national staff remained in effect, G. Tracy Mehan III, the assistant administrator, said, "The guidance is still in effect, although we have been engaged with the Army Corps of Engineers to make sure that we track not just cases where we assert jurisdiction but questions of how we decline jurisdiction."

One issue in deciding to revise the regulatory strategy, Mr. Mehan said, was the possibility of unintended consequences of a rule change.

Because various parts of the law and the definitions in them are linked, Mr. Mehan said, "playing around with" the definitions under the wetlands permitting provisions "could affect the whole program," and eventually "extend to the fundamental architecture of the Clean Water Act."

Job opportunities

Field assistants for amphibian surveys

The University of California Sierra Nevada Aquatic Research Laboratory (SNARL) is seeking 4 field assistants to conduct alpine lake amphibian surveys in Sequoia-Kings Canyon National Park during Summer 2004. The objective of these surveys is to quantify amphibian population trends and characterize the distribution of amphibian diseases amongst populations.

Employment will start on or near June 15, 2004 and will end on or near September 1, 2004. Field work includes backpacking in some of the most spectacular wilderness in the country, conducting visual encounter surveys for amphibians, and assessing disease status of frog populations. Two person crews will typically be in the field for 10-14 days at a time. The field work is frequently conducted under difficult conditions that include inclement weather, cold temperatures, and voracious mosquitoes. In addition, most of the backpacking is cross-country over demanding terrain and requires excellent routefinding skills.

Applicants **MUST** have extensive backpacking experience at high elevations (>10,000Æ). In addition, applicants should be highly motivated and in excellent physical condition, have their own backpacking equipment, be prepared for working long hours under difficult conditions, and at a minimum be enrolled in an undergraduate degree program in biology, ecology, or related field. Research experience is a definite plus.

Additional skills sought in crew leaders include wilderness first aid training (e.g., Wilderness First Responder), extensive routefinding experience, and leadership experience or outdoor leadership training (e.g., NOLS). All positions will be filled with individuals having a keen interest in field research and enthusiasm for working as a part of a team.

Crew leaders and crew members will be paid \$15/hr and \$12/hr, respectively. Travel, per diem, and housing will also be covered.

Applications must be received by February 20, 2004, and should include a resume, cover letter, and undergraduate transcripts (unofficial copies are sufficient). The resume should include names, addresses, telephone numbers, and email addresses of three references familiar with the applicant's educational and/or research background. The cover letter should detail research and backpacking experience and explain career goals. Successful applicants will be notified by March 1, 2004. Send applications to Dr. Roland Knapp, Sierra Nevada Aquatic Research Laboratory, HCR 79, Box 198, Crowley Lake, CA 93546. A more detailed job description is available at <http://nrs.ucop.edu/jobs/jobs.html>

Herpetologists needed in Honduras and Indonesia (several jobs)

Operation Wallacea is looking for herpetologists to help with surveys this coming summer in Honduras or in Indonesia. Operation Wallacea (see www.opwall.com) is an organisation funded by paying volunteers, which establishes extensive monitoring programmes in remote areas for assessing changes in factors such as socio-economics, forest structure, biodiversity (using indicator groups such as herpetofauna) and population levels of key species. In Indonesia the programme has been running for 8 years and has now attracted substantial funding from GEF. In Honduras we are in the process of establishing a similar programme and the results from the surveys in 2004 are being used as a baseline against which future changes can be assessed.

In Honduras we are operating four camps within the Merendon Mountains along the northern border with Guatemala. One camp is in a lowland forest valley, one at 1200m in the buffer zone of the Cusuco National Park and two at 1700m in the core zone of the National Park. We are looking for a herpetologist to man each of the camps for a 10 week period starting 26 June. We are intending to have an extensive network of pitlines established at each of the sites covering areas of undisturbed forest through to highly disturbed and open areas. In addition there will be a network of cover boards at each of the sites and the herpetologists will need to complete opportunistic transect searches each day. These posts are not funded but on site costs will be covered. This is however, an excellent opportunity for graduates or postgraduates with an interest in herpetology and previous experience of handling poisonous snakes to gain experience of Central America fieldwork.

There is one further herpetology post that we are looking to fill in Honduras. This is to complete a population study of the pink subspecies of Boa Constrictor which lives only on the two islands of the Cayos Cochinos. This sub species is protected under Honduran legislation but there appears to be a flourishing illicit trade in the sale of these animals to collectors. The objective of this project which runs from the same dates would be to obtain an estimate of the population size on both islands. The snakes are fairly easy to capture and these would then be pit tagged and released. Given the relatively small size of the islands it is possible to search a fairly large part of them for the snakes, which should give fairly precise population estimates. In addition this study would also complete an assessment of the other herpetofauna species on the island from pit lines and opportunistic searching.

In addition to these posts though we are looking for a herpetologist with a strong publication record to help set up the surveys in the field and then to utilise the information collected for one or more publications. In this case the costs of flights as well as the on site costs will be covered. If the herpetofauna project runs well this season then we might be interested in running the project in 2005 by funding a PhD student as we have done for many of the Indonesian marine projects.

In Indonesia we are designing the survey work as a precursor to a full GEF monitoring programme. I have attached the GEF project description and the appendix which describes how the monitoring programme is used to assess performance against various socio-economic, forest structure, biodiversity and population levels of key species criteria. We will be working at 9 sampling nodes (3 in undisturbed forest, 3 in moderately disturbed forest and 3 in disturbed forest). The nodes will be spread right across the Lambusango Forest Management Area in central Buton Island. The science teams will visit each of the nodes for a week on a rolling programme starting 17 July. The herpetofauna work which will be co-ordinated through the

Arthur Rylah Institute in Melbourne will involve a postdoc (for preference) or a postgrad with Asia Pacific herpetology experience running pit traps and cover boards at each of the sampling nodes and completing opportunistic search transects. This project will cover the field costs and a \$500 travel grant. The successful applicant will need to be on site for a 10 or 12 week period starting on 25 June 2004 in Makassar.

Dr Tim Coles; Project Director; Operation Wallacea; Hope House; Old Bolingbroke; Spilsby, Lincolnshire PE23 4EX
Tel: 01790 763194
Fax: 01790 763825
<http://www.opwall.com>

Amphibian responses to forest fragmentation -- Field Assistant needed.

Full time, temporary (approximately 1 March to 1 June 2004) Project Assistant is needed for a project studying the impacts of forest fragmentation on amphibian communities in the northeastern U.S. PA will work in small teams conducting amphibian surveys in forest fragments. Base location is the Institute of Ecosystem Studies in Millbrook, NY, but field sites include NY, NJ and CT. Experience with identifying northeastern amphibians and knowledge of northeastern forest ecology are highly desirable. Prior field ecology experience, strong work ethic, meticulousness, and ability to work both independently and in small teams, are required. Every attempt is made to make this project a learning experience, particularly with regard to the interface between community ecology and infectious disease.

Closing date for applications is Feb. 20, 2004. To apply, please email a brief cover letter, a resume, and the names and full contact information (including email addresses) for three professional references to:

Richard S. Ostfeld, Ph.D.; C/O Jessica Greenstein; Manager of Human Resources; Institute of Ecosystem Studies; Millbrook, NY 12545
GreensteinJ@ecostudies.org

Two Seasonal Herp Positions in Maryland

The Jug Bay Wetlands Sanctuary in Lothian, Maryland, is accepting applications from university students to participate in on-going studies of reptiles and wetlands. Three intern positions are currently available.

Interns assist with on-going group studies, but also work independently on individual projects. Applicants should enjoy fieldwork and long hours outside under uncomfortable conditions, and should have a high degree of self-motivation. Mud, high humidity, thunderstorms, biting insects and poison ivy are all a part of the natural environment here! So are 40 species of reptiles and amphibians, and more than 250 bird species. River Otter, beaver, muskrat and common.

Each intern completes an independent research project. An oral presentation and written report on the independent project are required at the end of the field season. Funding for this project is provided by the Friends of Jug Bay, Chesapeake Bay National Estuarine Research Reserve, Anne Arundel County government, and the Rauch Foundation. Interns work under the supervision of the sanctuary director.

To learn more about the Sanctuary, visit www.jugbay.org

STIPEND AND HOUSING: Each student intern receives a \$2,000 stipend and free on-site housing. The Friends of Jug Bay, a citizens group that supports Sanctuary programs, provides this scholarship award. Housing conditions in a three-bedroom, 100-year-old farmhouse are adequate but not luxurious. The house location, however, is spectacular - on the edge of a

broad tidal river with views of eagles, herons, geese and other birds. The location is somewhat remote so an automobile is a definite plus. Bicycles are welcome. On occasion other researchers, volunteers and visitors use the house.

DATES: The intern position is for a 90-day period. The start date is May 15 and the completion date is August 15.

WORK SCHEDULE: Interns work at least five full days a week. Weekends and evenings are required on occasion.

QUALIFICATIONS: Applicants must be a junior, senior or recent graduate majoring in the life sciences. Must be motivated, capable of independent work and must have a serious interest in learning about the natural world. Work is often in wet and muddy habitats. Experience in small boats, kayaks and canoes is a plus. Applicants should be physically fit and capable of walking in knee-deep mud.

DEADLINE: Application materials must be received by March 15, 2004.

APPLICATION PROCEDURES: Send resume, cover letter (include summary of field experience, research experience, relevant coursework, and career goals), transcripts (need not be official) and names, email addresses and phone numbers of 3 professional references (post mail only; no emails) to:

Christopher Swarth

Jug Bay Wetlands Sanctuary

1361 Wrighton Rd., Lothian, MD 20711.

For questions, call (410) 741-9330 or cswarth@starpower.net or jugbay@toad.net

Seasonal Field Herpetologists (MD DNR)

Maryland Department of Natural Resources Natural Heritage Program

POSITIONS: (2) Seasonal Field Herpetologists

PERIOD: April 7 - September 21, 2004

PAY: \$12.93/hr plus housing. 40+ hours/week.

LOCATION: DNR-owned Chesapeake Forest (CF) located on Maryland's Lower Eastern Shore. CF is a 58,000 acre managed forest spread over 5 counties. Job will involve travel throughout 5 counties in the heart of Chesapeake country.

DUTIES: 1) Conduct time-constrained surveys of reptiles & amphibians and nocturnal anuran chorus surveys within established forest and wetland plots to determine baseline for long-term monitoring project.

2) Conduct focused reptile and amphibian surveys within designated Ecologically Significant Areas.

3) Compile & maintain data in Microsoft Excel.

TO APPLY: Mail, fax or e-mail resume, names and contact information for 3 references, a copy of your college transcripts (official or unofficial), and a cover letter explaining why you are the best candidate for a position to

Scott Smith & Chris Frye/Natural Heritage Program/DNR-Wildlife & Heritage Services

P.O. Box 68/Wye Mills, MD 21679

Phone: 410-827-8612/Fax:410-827-5186/E-mail: sasmith@dnr.state.md.us

CLOSING DATE: Postmarked by Feb. 20, 2004

New Book on Amphibian Declines

Amphibian Decline: An Integrated Analysis of Multiple Stressor Effects (2003) edited by Greg Linder, Sherry K. Krest, Donald W. Sparling. Published by SETAC Press, Pensacola, FL (ISBN 1-880611-55-4, Hardcover, 368p), \$98 for non-SETAC members, \$60 for members.

The book can be ordered from SETAC at 888-899-2088 and, once the SETAC website is updated, the book will be available online at the SETAC website:

<http://www.setac.org/pubs.html>

The Question of Reptile Enrichment: Or Just How Many Branches and Vines Does a Herp Need in Their Cages? And Are the Plants and Waterfalls Just for our Enjoyment?

From HerpDigest

Recently on the PARC listserv this question was brought up and Dennis Desmond (Director of Operations/Northern Virginia Reptile Rescue 525K East Market Street., #308/Leesburg, VA 20176/540.554.8233 NVR01@HOTMAIL.COM)was kind enough to put together a list of sources people sent in. When going through this list be prepared to find that most of the information covers mammals and birds except in the first section below.

Specific Reptile Related Articles From The Shape of Enrichment Journal

:

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