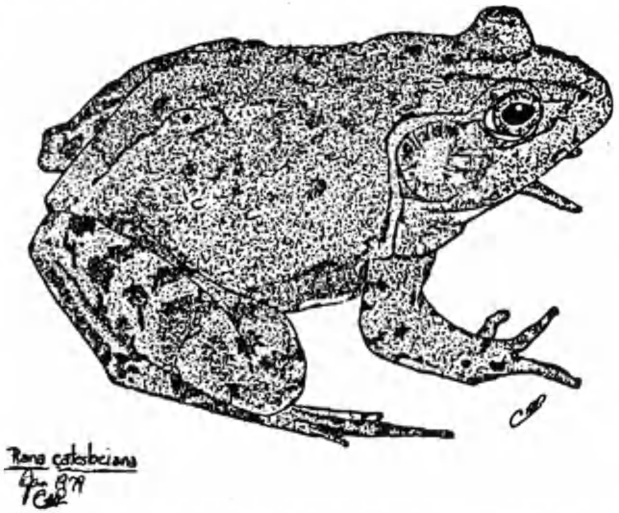
CATESBEIANA



BULLETIN OF THE VIRGINIA HERPETOLOGICAL SOCIETY

ISSN 0892-0761

Volume 13 1993 Number 2

BULLETIN INFORMATION

Catesbeiana is issued twice a year by the Virginia Herpetological Society. Membership is open to all individuals interested in the study of amphibians and reptiles and includes a subscription to *Catesbeiana* and admission to all meetings.

Dues are $10.00 per year and includes a subscription to *Catesbeiana* numbers 1 and 2 for that year. Dues are payable to: Ronald Southwick, Secretary-Treasurer, 408 Franklin Drive, Blacksburg, VA 24060.

EDITORIAL POLICY

The principle function of *Catesbeiana* is to publish observations and original research about Virginia herpetology. Rarely will articles be reprinted in *Catesbeiana* after they have been published elsewhere. All correspondence relative to suitability of manuscripts or other editorial considerations should be directed to Co-editors, *Catesbeiana*, Department of Biology, Liberty University, Box 20,000, Lynchburg, VA 24506.

Major Papers

Manuscripts being submitted for publication should be typewritten (double spaced) on good quality 8½ by 11 inch paper, with adequate margins. Consult the style of articles in this issue for additional information. Articles will be refereed by at least one officer (past or present) of the Virginia Herpetological Society in addition to the editor. All changes must be approved by the author before publication; therefore manuscripts must be submitted well in advance of the March or September mailing dates.

Reprints of articles are not available to authors; however, authors may reprint articles themselves to meet professional needs.

(Editorial policy continued on inside back cover.)

CATESBEIANA

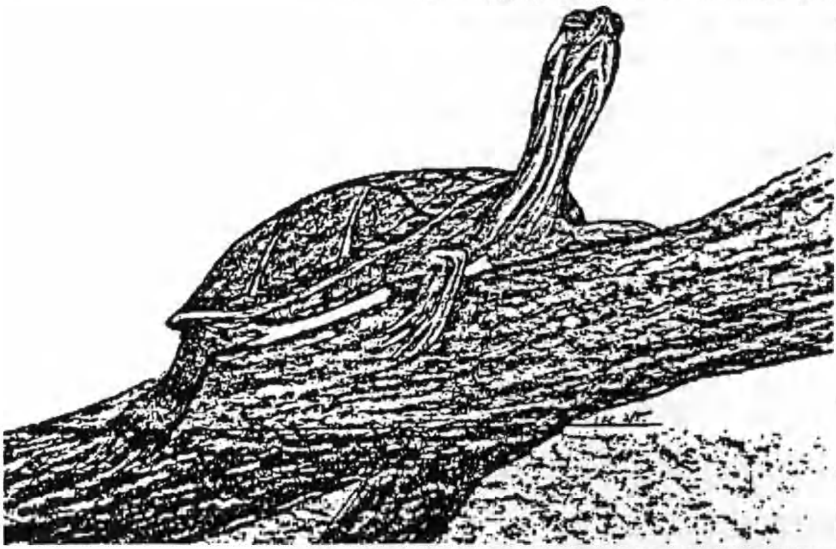
Bulletin of the Virginia Herpetological Society

Volume 13 Fall 1993 No. 2

Contents

MEETING NOTICE

The ~~Spring~~ Fall 1993 VHS meeting will be held on 9 October 1993 at Liberty University in Lynchburg, VA. See page 55 for details.



ANNOTATED CHECKLIST OF THE AMPHIBIANS AND REPTILES OF SHENANDOAH NATIONAL PARK, VIRGINIA

William L. Witt
5823 N. Washington Blvd., #80
Arlington, VA 22205

Within the 195,382 acre area comprising Shenandoah National Park there are four turtles, four lizards, 19 snakes, 14 salamanders, and 10 frogs and toads reported or expected. Much of this diversity is due to the 1137 vertical meter range along the 168 km of the Blue Ridge Mountains in Virginia. Some species barely enter the Park from the Shenandoah Valley to the west or from the Piedmont to the east. Species represented range from those that are widespread to those that are severely restricted in distribution. One snake, the eastern garter snake occurs throughout the eastern half of the country, but the Shenandoah salamander ranges in about a dozen apparently separate populations along a 8 km stretch of the ridge between The Pinnacle and Hawksbill Mountain.

This paper presents a review of the species known to occur in Shenandoah National Park and a summary of the previously unpublished checklists of the park's herpetofauna.

Annotated Species Checklist

Salamanders

Jefferson salamander (*Ambystoma jeffersonianum*)
Known only from Big Meadows swamp. Not reported outside of its late winter breeding period.

Spotted salamander (*Ambystoma maculatum*)
Big Meadows, and scattered ridge top marshes. Found occasionally after heavy rain at lower elevations.

Northern dusky salamander (*Desmognathus fuscus fuscus*)
Banks of streams, under rock, wood. Abundant at all elevations.

Virginia seal salamander (*Desmognathus monticola jeffersoni*)
Partial to spring seeps. Moderately abundant.

Northern two-lined salamander (*Eurycea bislineata*)
Banks of streams under rocks, wood. Away from water in summer. Abundant at all elevations.

Long-tailed salamander (*Eurycea longicauda longicauda*)
In rock crevices, stream bank cover. White Oak Canyon, Big Run. Rare.

Three-lined salamander* (*Eurycea longicauda guttolineata*)
Occurs in all streams along east side of Park.

Northern spring salamander (*Gyrinophilus porphyriticus porphyriticus*)
In streams under rocks. Away from water in summer. Uncommon.

Four-toed salamander (*Hemidactylium scutatum*)
Known only from Big Meadows Swamp but should be in other marshy locations. Rare.

Red-spotted newt (*Notophthalmus viridescens viridescens*)
Efts [terrestrial larval phase] wander freely in the Park, being seen frequently by hikers. Adults seen in overflow pools along Big Run. Moderately abundant.

Red-backed salamander (*Plethodon cinereus*)
Abundant, found in most forested areas of the Park.

Slimy salamander (*Plethodon cylindraceus*)
Our largest commonly seen species. Well drained forest areas. Not abundant but found at all elevations.

Shenandoah salamander (*Plethodon shenandoah*)
This federally endangered species' entire known range consists of about a dozen separate populations in rock slopes along a 8 km stretch of the ridge between The Pinnacle and Hawksbill Mountain. It closely resembles the red-backed salamander.

Northern red salamander (*Pseudotriton ruber ruber*)
Under cover on banks of streams. Away from water in summer. Uncommon.

Frogs and Toads

Northern cricket frog (*Acris crepitans crepitans*)
Occurs along margins of streams. Reported from Camp Hoover, Black Rock Spring, and the head of Paines Run. Uncommon.

American toad (*Bufo americanus americanus*)
Moderately common at all elevations. Seen in early evening.

Fowler's toad (*Bufo woodhousii fowleri*)
A single report from Big Run. Rare.

Eastern gray treefrog (*Hyla versicolor*)
It is reported from Big Meadows, Skyland, Park headquarters and Simmons' Gap ranger station.

Northern spring peeper (*Pseudacris crucifer crucifer*)
Breeds in the Big Meadows swamp in early spring, but its rarely seen afterward.

Upland chorus frog (*Pseudacris triseriata feriarum*)
Breeds in Big Meadows swamp. Uncommon.

Bullfrog (*Rana catesbeiana*)
Observed in Big Meadows swamp, Big and Jeremey's Runs.

Green frog (*Rana clamitans melanota*)
Abundant in springs and creeks. Tadpoles reported in Big Meadows swamp, around Camp Hoover and along Big Run.

Pickerel frog (*Rana palustris*)
Occurs in springs, wet grass, banks of all water courses. Breeds in overflow pools beside all creeks. Moderately abundant.

Wood frog (*Rana sylvatica*)
This species breeds in large numbers in the Big Meadows region in late winter yet are seldom seen afterward.

Turtles

Snapping turtle (*Chelydra serpentina serpentina*)
Reported from the Big Meadows area, Panorama, and along the Appalachian Trail. This species probably does not nest in the SNP. Records are probably of transients wandering through the park.

Eastern painted turtle (*Chrysemys picta picta*)
Occasionally observed along the Drive.

Wood turtle (*Clemmys insculpta*)
Reported along Dickey ridge to Compton Gap. Occasional reports only.

Eastern box turtle (*Terrapene carolina carolina*)
Only turtle positively known to breed in the Park. Moderately abundant.

Lizards

Northern coal skink (*Eumeces anthracinus anthracinus*)
A single record is known from Sugar Hollow on Pond ridge west of the Charlottesville Reservoir in Albemarle County.

Five-lined skink (*Eumeces fasciatus*)
Reported from Camp Hoover and Old Rag Mountain. Rare.

Northern fence lizard (*Sceloporus undulatus hyacinthinus*)
May be found sunning on open rock faces and dead timber at lower elevations. It is moderately abundant in some areas.

Ground skink (*Scincella lateralis*)
Reported by Staff/visitor in July 1979 from Hightop Mountain.

Snakes

Eastern worm snake (*Carphophis amoenus amoenus*)
An uncommon burrowing snake found in and under logs and rocks. Reported from Camp Hoover and along Big Run.

Northern black racer (*Coluber constrictor constrictor*)
A snake of forest edges and forest clearings. Occurs at all elevations with favorable habitat. Reports from Big Meadows and along U.S. Route 211 in Thornton gap among others. It is not abundant.

Northern ringneck snake (*Diadophis punctatus edwardsii*)
This is the most common snake in the SNP. Look for it under rocks on sunny hillsides.

Corn snake (*Elaphe guttata guttata*)
Scattered reports along Skyline Drive. Easily mistaken for small eastern milk snakes (*Lampropeltis triangulum*). It is uncommon.

Black rat snake (*Elaphe obsoleta obsoleta*)
Frequently seen along the Skyline Drive. It is also found in standing timber and occurs at all elevations.

Eastern hognose snake (*Heterodon platirhinos*)
Burrows in loose soil and sand. Rare.

Eastern king snake (*Lampropeltis getula getula*)
Scattered reports along Skyline Drive. Uncommon.

Eastern milk snake (*Lampropeltis triangulum triangulum*)
Our most abundant king snake. Mistaken for Corn snakes. Reported from all elevations.

Northern water snake (*Nerodia sipedon sipedon*)
Seldom found far from water. Reported from an elevation of 833 meters and below. Not abundant.

Rough green snake (*Opheodrys aestivus*)
Lives among the leaves of bushes and vines. Reported from 1200 meters at Skyland down to Park Headquarters. Uncommon.

Smooth green snake (*Opheodrys vernalis vernalis*)
Hides under deep set rocks. Frequently seen in the Big

Meadows area. Scattered reportes further south, but none north.

Northern pine snake (*Pituophis melanoleucus melanoleucus*)
A single record of this snake from Jarman Gap. Scattered reports along the west side of the south section and along Skyline Drive. Rare.

Queen snake (*Regina septemvittata*)
Reported from Pass run opposite Park Headquarters and along Big Creek just at the western boundary.

Northern red-bellied snake (*Storeria occipitomaculata occipitomaculata*)
Frequently reported from Big Meadows and Limberlost area of White Oak Canyon.

Eastern ribbon snake (*Thamnophis sauritus sauritus*)
Ribbon snakes occur close to water. Observed from Big Meadows to the lowest reaches of Big Run.

Eastern garter snake (*Thamnophis sirtalis sirtalis*)
Garter snakes are moderately abundant at all elevations. Look for them along the edges of open grassy areas, such as Big Meadows.

Smooth earth snake (*Virginia valeriae valeriae*)
Reported from Barry Hollow just east of the SNP boundary

Northern copperhead (*Agkistrodon contortrix mokasen*)
Copperheads are found at all elevations but are most numerous in humid forests below 833 meters. Becoming uncommon in recent years.

Timber rattlesnake (*Crotalus horridus*)
Our largest poisonous snakes, but less often encountered. Partial to drier rocky areas, and most active at dusk into early evening. Increasingly uncommon.

SHENANDOAH NATIONAL PARK SURVEY

Historical Summary of Herpetofaunal Checklists

The first extant checklists of the amphibians and reptiles of the Shenandoah National Park were developed by W. Drew Chick, who was the acting park naturalist 1936-1943. They were both finalized on 22 November 1944. There were apparently two original lists, one on amphibians and one on reptiles, as indicated by the term "Revised" in each of Drew's lists. However, these have not been located and are presumed lost. Paul Favour, who was the chief naturalist in the park following Chick, revised the checklists on 24 April 1951. Witt (1971) further revised these checklists and updated the taxonomy. Shelton (1975) used this version in his natural history book on the Shenandoah National Park. Witt (1992) again updated the 1971 checklist for the park service. A comparison of these checklists (Table 1) shows the development of the amphibian and reptile species lists since about 1940. Future research on the distributions and taxonomy of these animals will produce additional changes in later revisions of these lists.

Table 1. Historical summary of the herpetofauna of Shenandoah National Park as viewed by a sequence of mostly unpublished checklists. Legend: (1) Chick, 1944a, 1944b, (2) Favour, 1951a, 1951b, (3) Shelton, 1975, (4) Witt, 1971, 1992.

Species	1	2	3	4
Salamanders:				
Ambystoma jeffersonianum	?	#	#	#
Ambystoma maculatum	#	#	#	#
Ambystoma opacum			$	
Ambystoma t. tigrinum				$
Desmognathus f. fuscus	#	#	#	#
Desmognathus monticola jeffersoni	#	#	#	#
Desmognathus ochrophaeus		#?	#?	
Eurycea bislineata	#	#	#	#
Eurycea l. longicauda	#	#	#	#
Eurycea l. guttolineata			$	$
Gyrinophilus p. porphyriticus	#	#	#	#

Hemidactylium scutatum	%	%	#	#
Notophthalmus v. viridescens	#	#	#	#
Plethodon c. cinereus	#	#	#	#
Plethodon cylindraceus	#	#	#	#
Plethodon shenandoah	%	%	#	#
Pseudotriton r. ruber	#	#	#	#
Pseudotriton r. niticus			?	
Frogs and Toads:				
Acris c. crepitans	v	#	#	#
Bufo a. americanus	#	#	#	#
Bufo woodhousii fowleri	?	#?	#	#
Hyla v. versicolor	#	#	#	#
Pseudacris brachyphona			$	
Pseudacris c. crucifer	v	#	#	#
Pseudacris triseriata feriarum	v	#	#	#
Rana catesbeiana	#	#	#	#
Rana clamitans melanota	#	#	#	#
Rana palustris	#	#	#	#
Rana sylvatica	%	#	#	#
Scaphiopus h. holbrookii	?	%	%	%
Turtles:				
Chelydra s. serpentina	#	#	#	#
Chrysemys p. picta	#	#	#	#
Clemmys guttata			$	
Clemmys insculpta	%	#	#	#
Sternotherus odoratus			$	
Terrapene c. carolina	#	#	#	#
Lizards:				
Eumeces a. anthracinus	%	%	#	#
Eumeces fasciatus	*	#	#	#
Eumeces inexpectatus			$	
Eumeces laticeps			$	
Sceloporus undulatus hyacinthinus	#	#	#	#
Scincella lateralis				%*

Snakes:

Agkistrodon contortrix mokasen	#	#	#	#
Carphophis a. amoenus	%	#	#	#
Cemophora coccinea copei			$	
Coluber c. constrictor	#	#	#	#
Crotalus h. horridus	#	#	#	#
Diadophis punctatus edwardsii	#	#	#	#
Elaphe g. guttata	#	#	#	#
Elaphe o. obsoleta	#	#	#	#
Heterodon platirhinos	%	#	#	#
Lampropeltis c. calligaster			$	
Lampropeltis g. getula	%	#	#	#
Lampropeltis t. triangulum	#	#	#	#
Nerodia s. sipedon	#	#	#	#
Opheodrys aestivus	#	#	#	#
Opheodrys v. vernalis	%	%	#	#
Pituophis m. melanoleucus	#	#	#	#
Regina septemvittata	#	#	#	#$
Storeria d. dekayi	?	#?	#?	
Storeria o. occipitomaculata	%	%	#	#
Tantilla coronata			$	
Thamnophis s. sauritus	%	#	#	#
Thamnophis s. sirtalis	#	#	#	#
Virginia v. valeriae			$	$

---

presence confirmed
* tentatively identified
? doubtful identification [my opinion of the checklist entry]
% new or unreported species [not known to some authors]
v voice record [frogs and toads]
$ possible species; known to occur near border (Witt, 1971; Sheldon, 1975)

Acknowledgments

I am grateful to the Shenandoah National Park staff for numerous courtesies and for permission to study amphibians and reptiles in the park over many years. Joseph C. Mitchell produced the final version of this paper.

Literature Cited

Chick, W. D. 1944a. Revised list of amphibians in the Shenandoah National Park, Virginia. Unpublished report in Shenandoah National Park files, Luray, VA. 4 pp.

Chick, W. D. 1944b. Revised list of reptiles in the Shenandoah National Park, Virginia. Unpublished report in Shenandoah National Park files, Luray, VA. 5 pp.

Favour, P. 1951a. Revised list of amphibians in the Shenandoah National Park, Virginia. Unpublished report in Shenandoah National Park files, Luray, VA. 2 pp.

Favour, P. 1951b. Revised list of reptiles in the Shenandoah National Park, Virginia. Unpublished report in Shenandoah National Park files, Luray, VA. 2 pp.

Shelton, N. 1975. The Nature of Shenandoah. Natural History Series, National Park Service, U.S. Dept. of the Interior, Washington, D.C. 113 pp.

Witt, W. L. 1971. Checklist of the amphibians and reptiles of Shenandoah National Park. Unpublished report to Shenandoah National Park, Luray, VA. 4 pp.

Witt. W. L. 1992. Checklist of the amphibians and reptiles of Shenandoah National Park. Unpublished report to Shenandoah National Park, Luray, VA. 4 pp.

SURVEY OF LOUDON COUNTY, VIRGINIA FOR THE STATE THREATENED WOOD TURTLE, *CLEMMYS INSCULPTA*

Sue A. Bruenderman
Virginia Department of Game and Inland Fisheries
2206 South Main Street, Suite C
Blacksburg, Virginia 24060

The Virginia Herpetological Society's 16-17 April, 1993 spring meeting provided VHS members and others with a unique opportunity to assist the Virginia Department of Game and Inland Fisheries in efforts to protect and conserve one of Virginia's rarest reptile species. High levels of turbidity and increased stream velocities from storm events the week prior to the survey precluded the discovery of our target species, the state endangered wood turtle, *Clemmys insculpta*. Nevertheless, participants identified potential habitat, as well as unsuitable habitats, of the wood turtle in Loudon County, thereby reducing area and search requirements needed for this species in future surveys in this county. Results of the survey also increased our knowledge of the herpetofauna of Loudon County, having documented the occurrence of numerous species of amphibians, reptiles, and other animals.

Wood turtles hibernate in aquatic environments during fall and winter months and in Virginia and are known to begin emerging from clear brooks and streams during the month of April (Ernst 1986). Therefore, we chose mid-April to conduct our survey. The rationale was that the likelihood of success in finding these rare animals would be increased during this time, as they would be relatively confined in the stream environment, are easy to visually locate from the stream bank in the clear water which they seem to prefer (pers. observ.), and would have just begun to move about, basking on logs, and perhaps even foraging about within riparian areas of streams. During later months of spring, summer, and even early fall, these animals are known to travel extensively on land in search of food and nest sites, thus decreasing chances of finding them. Nine sub-watersheds of the Potomac River Basin were pre-selected for survey efforts with input from a wood turtle expert (John McBreen, pers. comm.), and other biologists familiar with both the drainage and the biology of the species (Phil Stevenson, and Kurt Buhlmann, pers. comm.).

Methods

On 17 April, 1993, instream habitat and riparian areas were searched within reaches of eleven tributaries of the Potomac River in Loudon County. Where possible during stream investigations, long-handled dip-nets were used to probe and search log jams, woody debris, overhanging root systems and banks, muskrat burrows and any other instream habitat encountered. Because wood turtles in other parts of their range inhabit marshy fields and woodland bogs, and are known to wander extensively on land in search of food and appropriate nesting sites, riparian areas adjacent to targeted streams also were searched. Riparian habitats that were investigated included small pools and tributaries, moist areas, and any understory vegetation which potentially could conceal a wood turtle. Nine survey teams ranged in size from 2 to 9 persons; average team size was six individuals. Except for one 15 minute search which ended prematurely due to steep terrain and absence of a floodplain, search time per team/per site ranged from 0.5 to 3 hours, with an average of 1.6 hours. Water temperatures ranged from 12-14°C; weather was partly cloudy, breezy and cool (air temperature roughly 16°C).

Results

To follow is a list, by stream, of the herpetofauna and other animals observed and subsequently released by survey participants at 19 sampling stations within the Potomac River Basin. Sites that contained habitat conditions suitable for wood turtles, which warrant further investigation for the potential occurrence of this state threatened species, are labeled **"high"**. Area covered per survey site (longitudinal stream length) is indicated in parentheses. Area of floodplain habitats that were searched varied between groups and sites, were not recorded consistently and thus are not reported here. Sites labeled **"low"** were considered to be of poor quality and should not be revisited during the next survey for wood turtles in Loudon County, Virginia. **"Moderate"** sites should be visited if time, funding, and personnel allow; priority, however, should be given to targeting other unexplored, potentially high quality areas in Loudon County.

Piney Run - from Rt. 686 bridge crossing and upstream for ~0.8 km (~0.8 km distance; Harper's Ferry 7.5' quad). Search effort: 5 persons, 1.5 hr per person. **Potential for wood turtles: high.**

snapping turtle (*Chelydra serpentina*) juvenile
painted turtle (*Chrysemys picta*) male, crossing road
box turtle (*Terrapene carolina*)live individual plus partial plastron

Piney Run - headwaters at Rt. 687 crossing (~500 m distance; Harper Ferry's 7.5'quad). Search effort: 5 persons, 0.5 hr per person. **Potential for wood turtles: low.**

Redback salamander (*Plethodon cinereus*)
slimy salamaner (*Plethodon cylindraceus*)

Dutchman Creek - Rt. 674 crossing, near mouth and upstream from confluence with Potomac River (~200 m distance; Harper's Ferry 7.5' quad). Search effort: 8 persons, 2 hr per person. **Potential for wood turtles: high.**

eastern ribbon snake (*Thamnophis sauritus*)
redback salamander (*Plethodon cinereus*)
redbelly turtle (*Pseudemys rubriventris*) juvenile
northern two-lined salamander (*Eurycea bislineata*)
beaver

Sugarland Run - ~0.8 km. N. of Co. Rt. 1208 (Thomas Ave.) crossing, ~.8 km north of Herndon Junction (~0.8 km distance; Seneca MD-VA 7.5'quad) **Note:** this reach was severely impacted by recent diesel oil spill (Colonial Pipeline, 29 March, 1993, at Reston, VA). Floodplain tree species: sycamore, river birch, sweetgum. Herbaceous cover was flooded (diesel fuel still a major component of water column, as judged by strong diesel odor). Rocks along several bank areas were checked for signs of animal life; 2 earthworms were the only live animals found in 0.8 km reach surveyed. Search effort: 7 persons, 1.25 hr per person. **Potential for wood turtle habitat: low.**

dead crayfish
Asiatic clam (dead valves only)
raccoon and deer tracks observed
earthworms (n=2)

North Fork Catoctin Creek - at Rt. 690 bridge crossing, southeast of Hillsboro, downstream for ~1.5 km (~1 km distance; Purcellville 7.5' quad). Search effort: 7 persons, 1.5 hr per person. **Potential for wood turtle habitat: high. Flagging observed indicative of potential encroaching development.**

redback salamander (*Plethodon cinereus*) lead and red varieties
spotted salamander (*Ambystoma maculatum*) live & dead eggs
pickerel frog (*Rana palustris*)
eastern garter snake (*Thamnophis sirtalis*) n=3
eastern box turtle (*Terrapene carolina*)

North Fork Catoctin Creek - at Rt. 752 crossing, upstream to Rt 287 bridge crossing (~2.5 km distance; Purcellville 7.5' quad). Search effort: 7 persons, 1.25 hr per person. **Potential for wood turtles: high**

spring peeper (*Pseudacris crucifer*)
black rat snake (*Elaphe obsoleta*) 1.5'long, missing an eye
eastern garter snake (*Thamnophis sirtalis*)
pickerel frog (*Rana palustris*)
redback salamander (*Plethodon cinereus*) lead variety; abundant

Little River - from Rt. 776 crossing (2 km sw of Middleburg) downstream to 0.3 river km downstream of Facquier/Loudon Co. line (~1.5 km distance; Middleburg 7.5'quad). Search effort: 7 persons, 3 hr per person. **Potential for wood turtles: high.**

eastern garter snake (*Thamnophis sirtalis*)
queen snake (*Regina septemvittata*)
pickerel frog (*Rana palustris*)
green frog (*Rana clamitans*)
spring peeper (*Pseudacris crucifer*)
eastern elliptio (freshwater mussel)
Atlantic spike (freshwater mussel)

Beaverdam Creek - From Rt. 630/790 intersection downstream to Rt. 790 bridge crossing (~0.8 km distance; Bluemount, VA 7.5'quad). Search effort: 2 persons, 2 hr per person. **Potential for wood turtles: high.**

green frog (*Rana clamitans*)
box turtle (*Terrapene carolina*)
water snake (*Nerodia sipedon*)
pickerel frog (*Rana palustris*)

spotted salamander (*Ambystoma maculatum*) eggs in floodplain pool
wood frog tadpoles (*Rana sylvatica*)
painted or spotted turtle (i.d. uncertain)

Beaverdam Creek - Rt. 623 crossing, ~0.8 km south of Howardsville (~0.8 km distance; Bluemount 7.5' quad). Search effort: 2 persons, 1 hr per person. **Potential for wood turtles: moderate, but note:** local farmer claimed "having seen a few wood turtles from time to time".
green frog (*Rana clamitans*)

Beaverdam Creek - just downstream from Rt. 626 crossing, 0.8 km southeast of Unison (~1.5 km distance; Bluemount 7.5' quad). Search effort: 2 persons, 1.5 hr per person. **Potential for wood turtles: high.**
green frog (*Rana clamitans*)
box turtle (*Terrapene carolina*)

S.F. Catoctin Creek - Rt. 698 crossing at Waterford (~1.5 km distance; Waterford 7.5' quad). Search effort: 7 persons, 1 hr per person. **Potential for wood turtles: high.**
american toad (*Bufo americanus*) DOR

Catoctin Creek - 200 m west of Rt. 15 bridge over Potomac River, at Point of Rocks (~1.5 km distance; Point of Rocks 7.5' quad). Search effort: 7 persons, 2.5 hr per person. **Potential for wood turtles: moderate**
northern water snake (*Nerodia sipedon*)
redback salamander (*Plethodon cinereus*)

Potomac River - immediately downstream from U.S. 15 bridge at Point of Rocks (~0.8 km distance; Point of Rocks 7.5' quad). Search effort: 7 persons, 1 hr per person. **Potential for wood turtles: moderate.**
redback salamander (*Plethodon cinereus*)
northern two-lined salamander (*Eurycea bislineata*)
american toad (*Bufo americanus*)

Potomac River - south bank of river from Algonquin Regional Park west to unnamed tributary of Potomac River (~1.5 km distance; Sterling VA-MD 7.5'quad). Search effort: 7 persons, 2 hr per person. **Potential for wood turtles: low (however, unnamed tributary to Potomac River: high).**
redback salamander (*Plethodon cinereus*) n=13
marbled salamander (*Ambystoma opacum*) n=1

northern brown snake (*Storeria dekayi*) DOR in park; n=1
eastern garter snake (*Thamnophis sirtalis*) n=1
pickerel frog (*Rana palustris*)
green frog tadpole (*Rana clamitans*)
spotted salamander (*Ambystoma maculatum*) in floodplain pool

North Fork Goose Creek - Rt. 611 stream crossing and extending downstream for 0.8 km (~ 0.8 km distance; Lincoln 7.5' quad). Search effort: 7 persons, 3 hr per person. **Potential for wood turtles: moderate.**

eastern garter snake (*Thamnophis sirtalis*)
Nerodia sp.

North Fork Goose Creek - from confluence with Goose Creek, upstream to ~ 1.2 km above confluence with Crooked Run (4.5 km distance; Lincoln 7.5' quad). Search effort: 5 persons, 1 hr per person. **Potential for wood turtles: high.**

green frog (*Rana clamitans*) n=3
redback salamander (*Plethodon cinereus*) n=33+
spring peeper(*Pseudacris crucifer*)
box turtle (*Terrapene carolina*) carpaces only; n=3

Goose Creek - 0.3 km east of Rt.733/763 intersection, just upstream of unnamed tributary at Marble Quarry Road (old ford); surveyed right ascending bank only (survey terminated prematurely because steep slopes and lack of floodplain precluded further progress; Lincoln 7.5' quad). Search effort: 5 persons, 15 min per person. **Potential for wood turtles: low.**

no animal observations reported

Goose Creek - from confluence with N.F. Goose Creek upstream to intermittent tributary (~ 1.2 km distance; Lincoln 7.5' quad). Search effort: 5 persons, 0.5 hr per person. **Potential for wood turtles: high.**

no animal observations reported

Milltown Creek - Rt. 691 crossing, 1.5 km west of Rt. 287, 1st house on right after beaver dam swamp (~ 100 m distance; Purcellville 7.5' quad). Search effort: 8 persons, 1 hr per person. **Potential for wood turtles: moderate.**

no animal observations reported

Comments and Recommendations

Water levels were approximately 2-3 m above normal on the survey date, and as judged by fresh floodplain debris observed, many streams exceeded full-bank just prior to the survey. The number of animals observed and recorded at each of the sites surveyed is not a valid indicator, by itself, of the potential presence or absence of wood turtles. Observed physical condition of habitats, and existing level of commercial and/or residential development and other threats, weighed heavily in judging whether survey sites had the potential to support wood turtle populations.

Because the VHS meeting dates, accommodations, etc. were fixed, we did not have the luxury of postponing our survey. As was made obvious during our survey attempt, good weather conditions are crucial for achieving success in attempts to find wood turtles. The benefits of having a large group of energetic volunteer surveyors (many eyes, great effort, opportunity to educate many people about rare animals) must be weighed against the inflexibility that is associated with employing such a method (inability to postpone survey).

It is the opinion of the author that, for reasons stated previously, mid-April is an appropriate time to conduct a survey for wood turtles in Loudon County. However, stream conditions during this time of high discharge are subject to rapid fluctuations. An alternative sampling time which could be chosen is in the fall, when water levels typically are low, more predictable, and when mating activities of the wood turtle are occurring (Ernst and McBreen 1991). In addition, alternative sampling methods should be considered in addition to or potentially in replacement of, those used during this survey. Snorkeling techniques in stream environments has been shown to be an effective method for finding rare stream fishes and mollusks (Ensign et al., pers. observ.), and may be suitable for wood turtle surveys as well.

Acknowledgements

Many thanks to the VHS and especially to survey team members:

Piney Run R. Southwick, D. Mackler, P. Poore, B. Hawley, S. Bruenderman

Dutchman Creek, Milltown Creek P. Sattler, T. Spohn, K. Harris, B. Tiet, A. Quinn, M. Bowling, R. McGarvey, J. Barron

Sugarland Run, Potomac R. J. Mitchell, R. Hughes, S. Bartram, G. Mathews, E. Shepard, R. Shepard, K. Maderis

N.F. Catoctin Creek M. Hayslett, B. Jennings, G. Wilson, B. Moyer, J. Sorenson, C. Benton, J. Scranton

Little River R. Smogor, K. Leftwich, P. Lookabaugh, R. Speenburgh, C. Wieking, C. Kelley, M. Ferguson

Beaverdam Creek N. Gilmore, S. Roble

S.F. Catoctin, Catoctin Creek, Potomac River C. Ernst, J. Babin, J. Wilgenbusch, T. Boucher, B. Johnson, D.O., K. Vang

N.F. Goose Creek M. Donahue, D. Young, B. Horne, B. Hogan, D. Chapman, R. Rageot, M. Norman

Goose Creek, N.F. Goose Creek P. Stevenson, T. Kahn, B. Grant, G. Grant, C. Saunders

Literature Cited

Ernst, C.H. 1986. Environmental temperatures and activities in the wood turtle, *Clemmys insculpta*. Journal of Herpetology 20:222-229.

Ernst, C.H., and J.F. McBreen. 1991. Wood turtle, *Clemmys insculpta*. pp. 455-457 In K.Terwilliger (Coordinator), Virginia's Endangered Species. McDonald and Woodward Publishing Co., Blacksburg, Virginia.

RESULTS OF THE 1993 VHS SPRING MEETING & FIELD TRIP

Michael S. Hayslett
Liberty University, Lynchburg, VA

The VHS held its spring meeting at Prince William Forest Park in southern Prince William County on April 16-18, with a great show of members and participants in attendance. The VHS meeting made its base for operations at Cabin Camp 1 on the north side of the park. Herpetological forays were conducted around the base area by early arrivers on Friday, and resulted in the following finds:

From a pond near Cabin Camp 1 came the American Toad (*Bufo americanus*), Northern Cricket Frog (*Acris c. crepitans*), Eastern Painted Turtle (*Chrysemys p. picta*), Green Frog (*Rana clamitans melanota*), and the Red-Spotted Newt (*Notophthalmus v. viridescens*), and a Northern Ringneck Snake (*Diadophis punctatus edwardsii*) was found on the west side of the dining hall. American Toads were also found along a section of Quantico Creek near the Burma Fire Road, as was a Marbled Salamander larva (*Ambystoma opacum*), and unidentified salamander eggs were discovered under a log. Search along VA 234 on the north boundary of the Park (NW of base) revealed both red and lead variants of the Redback Salamander (*Plethodon cinereus*) under moist cover, and an egg mass of the Wood Frog (*Rana sylvatica*) was found in a roadside ditch. Back at camp, another "Leadback" salamander was seen by Cabin D1 and the Red Eft land form of the Red-Spotted Newt and two more Redbacks were spotted on the trail near Camp D. As the reader may already infer, the Redback Salamander did appear to be the most frequently encountered species of herpetofauna within the Park, with at least 18 sightings being reported during the meeting weekend.

A highly informative workshop was conducted after dinner on Friday evening to provide participants with an orientation to the biology of the endangered Wood Turtle (*Clemmys insculpta*), and to familiarize those who would be involved with the survey for this animal on Saturday, of the field techniques involved in the search.

A night search was made around a pond on the east side of Burma Fire Road and the surrounding woodland plain along a Quantico Creek tributary. In addition to 4 species of herps previously encountered on Friday (10 red and lead phases of the Redback Salamander, an adult Marbled Salamander, 3 Green Frogs, an American Toad, and a Northern Ringneck), the crew also encountered 4 larval and adult Northern Two-

Lined Salamander (*Eurycea bislineata*), a Three-Lined Salamander (*Eurycea longicauda guttolineata*), a Northern White-Spotted Slimy Salamander (*Plethodon cylindraceus*), and a Spring Peeper (*Pseudacris crucifer*).

In the early morning hours of Saturday, April 17, meeting participants heard both Spring Peepers and American Toads calling near the cabins. Of course, the anticipated focus of Saturday was the Wood Turtle Survey-the highlight event for the meeting weekend-which was conducted with over 53 participants who converged in systematic fashion upon Loudon County for a great day of Herpetological experience. Although weather conditions from rain events the previous week prevented the teams from seeing any specimens of the target species, the outings were nonetheless very enjoyable, and a great host of herpetofauna and other natural elements were observed and recorded. See Sue Bruenderman's article on pages 36-43 for a complete report on this aspect of the meeting.

Back at the Park, other herp species were observed on Saturday, including the following: one other Redback Salamander in the camp area, another Redback and a Five-Lined Skink (*Eumeces fasciatus*), at a woodpile along the dining hall path, and an Eastern Worm Snake (*Carphophis a. amoenus*) under a pathside log, Additionally, 5 species were observed by the dam on Quantico Creek in the camp vicinity: the Red-Spotted Newt, Green Frog, Spring Peeper, Pickerel Frog (*Rana palustris*), and the Bullfrog (*Rana catesbeiana*).

On Sunday, April 18, the remaining enthusiasts visited a woodland stream hollow along Mary Byrd Branch and Trail 11, near the center of the Park. Here a temporal pool on the floodplain of the stream contained evidence of 3 species of amphibians: larvae of Wood Frog, egg chains of American Toad, and egg masses of the Spotted Salamander (*Ambystoma maculatum*).

Those who ventured out for the 1993 Spring Meeting gained some enjoyable herpetological experiences in the Piedmont forest of the Park and the camaraderie of the Wood Turtle Survey, not to mention the comfortable lodging and the delicious food prepared by Bob Hogan and his family.

THANKS BOB, AND THANKS VHS!

FIELD NOTES

Terrapene carolina carolina (Eastern Box Turtle): VA: Isle of Wight County, 1.8 km NW of county road 668 on county road 665. 30 March 1993. Don Schwab

A male (carapace 120.5 mm) was found crossing the road. The day was clear and warm, and the turtle was collected. In reviewing the literature this turtle has not been reported form Isle of Wight County. The specimen has been preserved, cataloged in the author's personal collection with number D-655-93. The turtle will be given to Dr. J. Mitchell for deposition in an appropriate public collection.

Don Schwab
Virginia Wildlife Division
Post Office Box 847
Suffolk, VA 23439-0847

Pseudotriton montanus (Eastern Mud Salamander): VA: Pittsylvania County, ca 7 km NE of Axton, along South Prong Sandy River at Soapstone. 13 May - 15 June 1992. VMNH survey. Richard Hoffman.

An adult (140 mm TL), typically marked individual (VMNH 6506) of this species was recovered form a drift fence capture system operated by the VMNH during an inventory of terrestrial arthropods. A network of four pitfalls connected by fences 4 m. in length had been installed at the end of March 1992, and retrievals in April and May yielded numerous arthropods and annelids but no salamanders of any species.

The collection site is a small floodplain habitat adjacent to the upper reaches of Sandy River's South Prong, which is here entrenched 1-2 m. into the terrace level, with overall clean sandy-gravelly bed and appreciable current. Forest cove is dominately tulip-poplar (*Liriodendron*) with a wide variety of herbaceous understory plants. The substrate is deep sandy loam, exploited by moles and woodchucks. The capability of the Mud Salamander to survive in a biotype so markedly different from the "normal" coastal plain swamp habitat characteristic of this species is noteworthy in implying a much greater Piedmont distribution than currently perceived. In the present instance, possibly a true flood plain swamp existed prior to settlement and cultivation of the region, which could have greatly accelerated entrenchment of the stream course and contingent lowering of the water table. Of course it is still implied that *montanus* is capable of breeding and larval development in

clear running water, there being at present no trace of even temporary lentic habitats near the capture site.

Although the great majority of known Virginia localities for this species (east of the Blue Ridge) are either in the Coastal Plain or immediately adjacent to the Fall Line, a scattering of Piedmont sites exists, notably for Appomattox, Charlotte, and Nottoway counties (Tobey, 1985, Virginia's Amphibians and Reptiles, p. 49). Future discoveries may show that a line between Fairfax and Martinsville approximates the western limits of *montanus* in the eastern part of its Virginia range (I have seen nothing in the material personally collected in southwestern Virginia to substantiate the validity of the nominal subspecies *P. montanus diastictus* Bishop).

Richard L. Hoffman
Virginia Museum of Natural History
Martinsville, VA 24112

Eurycea longicauda longicauda (Long-tailed Salamander): VA: Craig Co., Barbours Creek at Co. Rd. 617, 5.25 km NE of Co. Rd. 611. 16 June 1993. Paul Sattler and Gordon Wilson.

While on a collecting trip for *Desmognathus* in Craig County, we captured a single specimen of *Eurycea longicauda longicauda*, which constitutes a new county record. The long-tailed salamander was found under a rock approximately 0.3 m from the edge of Barbours Creek. The creek at this locality has a rocky bottom with a small floodplain which is also rock strewn. The habitat is quite typical for *Eurycea*, and indeed *Eurycea longicauda longicauda* has been reported from every adjacent county in the state (Toby, F.J. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey, VHS, Purcellville, VA 114 pp.). The absence of previous reports from Craig County for this and many other species of herps must be due to a lack of searching. This suggests that Craig County is long overdue for an exerted effort to survey its herpetofauna. The specimen is being given to Joseph Mitchell for deposition in an appropriate national museum.

Paul Sattler, and Gordon Wilson
Liberty University
Department of Biology
Lynchburg, VA 24506

PRESIDENT'S CORNER

This is my last column as President of VHS. I have occupied this office for five years. During this time, as well as in the previous 25 years since I joined this society, one thing stands out about VHS. That is, the personal dedication of some of our members. Volunteers make organizations like ours what they are. I must single out Franklin J. Tobey, who was one of the original organizers. Frank was secretary from 1958-1979 and edited the Bulletin of the VHS during that entire time. He, along with the late John T. Wood, Roger de Rageot, and Costello Craig, promoted our society in the early years and established its philosophy.

A recent experience made me realize just how dedicated some of our members are. The Spring meeting was one of the largest ever held by the VHS. Some 70 members attended and many spent one to two nights in Prince William Forest Park. This meeting was recently described in our new newsletter, edited by Sue Bruenderman. The meeting could not have taken place without the dedication of Bob Hogan, his wife Erline, and her mother, Lucille Porter. They provided the excellent food for all our meals and supervised all cleanups. And I don't mind telling you that there were many long hours of work involved. The VHS is very grateful for their support.

It is because of people like these that the VHS stands out from most state and regional herpetological societies. These and other members have focused their energies almost solely on the natural history of Virginia's amphibians and reptiles. We have never been diluted by serving too many interests. Our focus on Virginia herps has allowed us to meet some of our goals in education and the advancement of herpetology in the Commonwealth. The VHS is a recognized scientific entity by public and state governmental agencies.

Our efforts in the early years were focused largely on producing the newsletter and organizing meetings. Meetings were annual, or nearly so, and usually occurred over a weekend. My first VHS meeting was in the fall of 1963 at Camp Showandossee in Chesterfield County. This was a girl scout camp at the time, but it no longer exists as such, as far as I am aware. I was a real novice at age 15 and this was my first real field trip. I hitchhiked a ride from Richmond with a friend. My mom made a cloth pouch sort of like a carpenter's apron to accommodate four peanut butter jars with holes punched in the lids. My uncle, Costello Craig, gave me a homemade snake stick earlier that summer. I recall walking around in the woods carrying my trusty snake stick and wearing all these jars with several snake bags looped through my belt thinking, "I really don't need to be carrying all this junk. Nobody else was doing

it." So my first lesson in field herpetology was not to carry so much stuff. It only hindered my movements and, for the most part, the cloth snake bags served my needs. I don't remember much else about the meeting except there were a few talks and several people had snakes and other herps on exhibit in their homemade cages. And it was great to be out herping.

I attended several other meetings in the 1960s. Many were field trip oriented and took place in boy scout camps. A few of the meetings were held in more urban settings and were oriented around talks on the biology of amphibians and reptiles. At most of these meetings, several members brought their captive herps for display and educational talks. There was always a lot of camaraderie. Like the meetings in the 1980s and 1990s, those who attended in the early years were a mix of college teachers, museum people, serious amateurs, and people who had a passing interest in herpetology.

So, in some ways, the VHS has not changed very much from what it was 30 years ago. However, two threads have maintained continuity throughout the history of the VHS. One is the society's focus on Virginia's herpetofauna, rather than on buying, selling, and trading herps from around the world. The other is the dedication of a few select people who volunteer their time and energy to the society. It is those people who keep societies such as ours from dying.

One of the things that is missing from our meetings today, with the exception of our educational programs in the fall meetings, is the display of native herp species. Why don't we open up the meetings to members who want to bring in their captives for display? These displays could energize the members, especially the younger ones. We may have to set some guidelines, but I think it would be more beneficial to have such displays than not. After all, the objects of our attention are the herps of Virginia.

Another thing that was a big part of the early years of the VHS that has been missing in recent years is the focus on a large-scale project. From 1958 to 1979, during the years Frank Tobey was Secretary, VHS members made it a point to accumulate distribution records for all the amphibians and reptiles in the state. That effort culminated with the publication of the distribution maps by Tobey in 1985. We have engaged in no other large-scale project. In my opinion, the VHS has progressed little beyond its publications and its meetings since then. A large-scale project in which all members participate could unite us in several ways and contribute to the advancement of herpetology. For example, we could expand the distributional survey, help determine where breeding

populations of herps are located, or monitor selected communities of frogs and salamanders in association with the worldwide efforts to determine what is going on with the decline of amphibians. I personally think such a project could benefit us today, benefit herpetologists in the future, and help the herp resource. A conservation project might be appealing to many people. It would also allow us to realize all of the parts of our motto: conservation, education, and research.

As outgoing President, I recommend that the VHS engage in a long-term project and focus more on education of the public, especially young people. I have a personal fear that we are not reaching many young people these days. Where are the teenagers interested in herpetology who will go on to become the next generation of professionals, people who work to advance the science of herpetology? Where are the teens and young adults who will educate kids and the rest of the public about the value of amphibians and reptiles to our natural ecosystems? I urge all of us to cultivate any young person who shows an interest in amphibians and reptiles.

So here is my final challenge. Let's have displays of and educational programs on live herps at every meeting. Let's focus on a long-term project that will advance Virginia herpetology. And let's get more young people involved in herpetology. It is they who will ensure that the VHS will be a viable society well into the next century.

Joseph C. Mitchell
President, VHS
21 August 1993

Obituary

John Thornton Wood (1919-1990)

Dr. John Thornton Wood was a founding member of the Virginia Herpetological Society and its first President (1958-1960). He moved to Virginia in 1948 from New Jersey where he worked in the education program at the American Museum of Natural History in New York. Wood worked in the education department of the Virginia Fisheries Laboratories (now VA Institute of Marine Science) from 1948-1951. He obtained a Master's degree in biology from the College of William and Mary in 1951. His thesis was on the reproductive ecology of the four-toed salamander (Hemidactylium scutatum) in the lower York-James peninsula. Wood published over 50 papers in herpetology, many of them based on his work in Virginia.

Wood then entered medical school at the University of Virginia, receiving his medical degree in 1955. After interning in Roanoke during 1955-1956 he became a country physician in Nottoway County from 1956 to 1960. Afterwards he moved to Michigan and became a psychiatrist. He ultimately settled in Victoria, British Columbia where he worked at a medical health center until he retired in 1984. He died of cancer on August 9, 1990.

John Thornton Wood contributed substantially to the science of herpetology in Virginia and to the creation of the Virginia Herpetological Society.

Joseph C. Mitchell

MINUTES OF THE SPRING 1993 VHS MEETING

President Joe Mitchell opened the meeting at 8:30 p.m. Forty-four people were in attendance which included 21 VHS members. bob Hogan, wife Arlene, and mother Lucille Porter were recognized by the group for the outstanding job they did in planning and preparing the meals for the Spring meeting. Joe requested that the group take field notes of Park herp observations so a species list could be prepared for P.W.C.P. Joe talked about a new society in Virginia - "the Virginia Natural History Society" and it's new journal *Banisteria.* Anyone interested in becoming a charter member should contact Joe Mitchell.

Ron Southwick gave the Treasurer's Report and discussed travel reimbursement procedures for this who attended the meeting. The report was accepted as presented.

Paul Sattler presented the Editor's Report. A total of 170 copies of *Catesbeiana* were printed at a cost of $139.49. Eighty six were mailed to members for $44.06. Paul said he depleted all the available material for the next issue and requested that members send him any manuscripts, notes, etc.

Newsletter editor Sue Bruenderman said she would get the next newsletter out by June. Sue will be coming up with a new format, and asked membership for help to put the newsletter together. Several volunteers came forward to help Sue. Ron Southwick asked about devoting a part of the newsletter for captive breeders/hobbyists. One member suggested forming a Captive Breeders Committee to address that group's interests.

There was no old business to discuss.

Under new business, Ron Southwick brought up the need for service awards. The purpose for the awards would be to recognize those who have served the Society in various capacities. A motion to establish such awards was passed by the membership. The EXCOM will develop an awards process and report back to the membership at the Fall meeting. There was no other business, and the meeting was adjourned at 9:30 p.m.

VIRGINIA HERPETOLOGICAL SOCIETY
TREASURER'S REPORT
Spring 1993 Meeting

The balance in the treasury reported at the Fall 1992 Meeting was $2377.44.

Expenditures since that time included:

11/03/92	Returned check #1	$ 2.50
11/09/92	New VHS checks	11.06
12/19/92	Returned check #2	2.50
1/11/93 ck. #101	Newsletter & postage	104.00
3/05/93 ck. #102	Mailing envelopes	5.84
3/05/93 ck. #103	Postage stamps	58.00
3/13/93 ck. #104	Prince William Forest Park	350.00
3/24/93 ck. #105	*Catesbeiana* & postage	181.35
4/08/93 ck. #106	Food for Spring meeting	900.00
Total Expenditures		$1615.25

Receipts	
Dues payments	$854.50
Raffle (Fall meeting)	43.00
Repayment of bad check fees	5.00
Total Receipts	$902.50
Balance in checking as of 04/08/93	$1664.69

The Society has a current membership of 83 members.

Respectfully submitted,

Ron Southwick
Secretary and Treasurer

ANNOUNCEMENT
FALL 1993 MEETING OF THE
VIRGINIA HERPETOLOGICAL SOCIETY

The Fall 1993 VHS meeting will be held on 9 October at Liberty University in Lynchburg, Virginia.

Schedule:	9:00 am	Herp Educational Workshops Begin
	10:30 am	Business Meeting
	12:00 pm	Lunch
	1:30 pm	Announcements
		Election of Officers
		Afternoon Sessions
		Social and Auction

This year Doug Eggleston and Mike Hayslett will conduct the educational workshop. If you would like to help and/or bring some of your favorite Virginia captives, please call Doug Eggleston at 804-376-5229 if you would like to help with reptiles or Mike Hayslett at 804-845-4505 to help with amphibians.

There will be an auction held during the afternoon social. Please bring a contribution of food or drink to share at the social. This is a great time for interacting with our widely dispersed membership. Please plan on joining us.

If you would like to present a paper during the afternoon session, please call Paul Sattler at 804-582-2209 or 804-385-6605, or send a note giving your title to the co-editors of *Catesbeiana*. Presentations should be about 15 minutes in length.

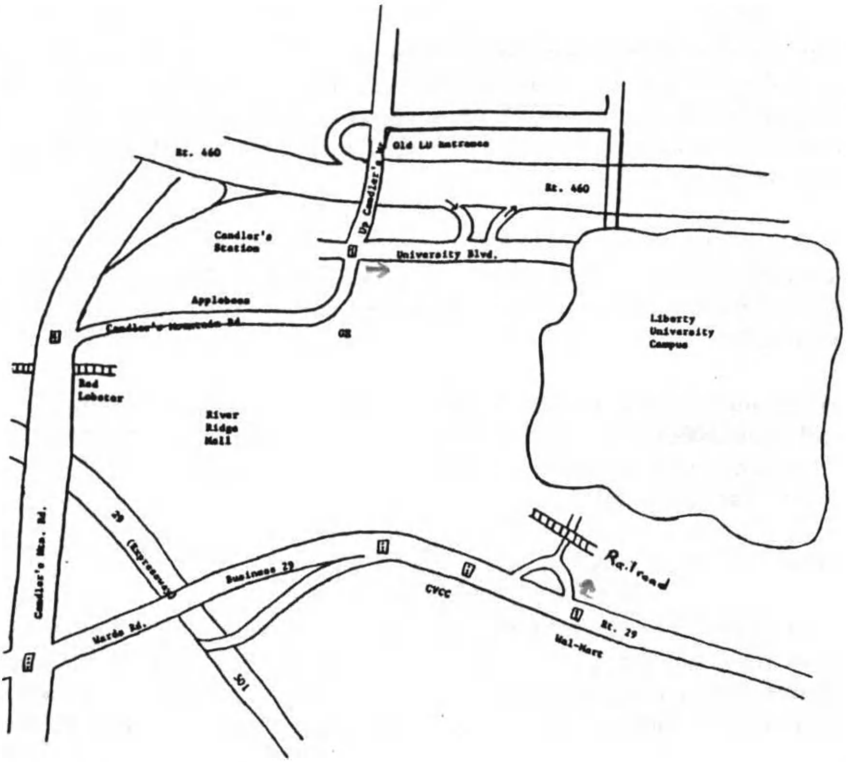
Directions to Liberty University:

From 29 North of Lynchburg take the second Candlers Mountain Road exit (marked for Liberty University), follow the sign for Liberty University turning right just past River Ridge Mall, turn right at the second traffic light and follow the VHS signs on campus to Science Hall.

From 460 East of Lynchburg take the Candlers Mountain Road exit (marked for Liberty University), and turn left at the first traffic light, then right at the second light after that one, following the VHS signs on campus to Science Hall.

From 460 West of Lynchburg take the bypass towards Appomattox instead of the Lynchburg Expression. Take the Candlers Mountain Road exit (marked for Liberty University). At the exit's stop sign, go straight onto the campus and follow the VHS signs to Science Hall.

From 29 South of Lynchburg you may turn right onto the unmarked back entrance just after the Super Clean Car Wash and before the River Ridge Auto Body Shop (across from Wal Mart) and cross the Railroad tracks onto camput, following the VHS signs to Science Hall.

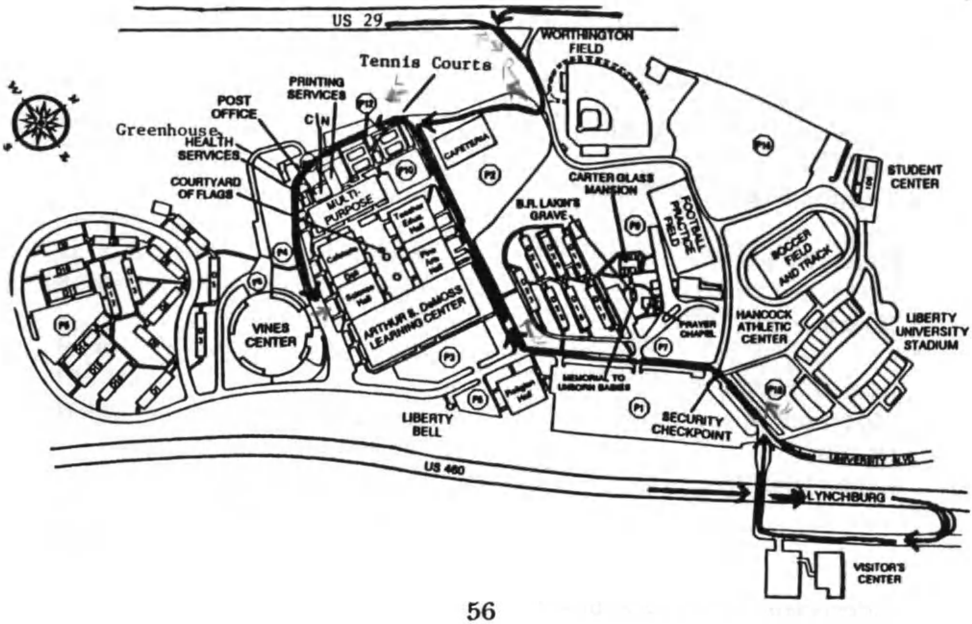


ITEMS TO BE AUCTIONED AT THE FALL 1993 MEETING OF THE VHS

The following framed plates were donated by Ned Gilmore:

1. The frog Trigonophrys rugiceps from Hallowell: On Trigonophrys rugiceps. Journal of the Academy of Natural Sciences, Philadelphia. Vol. 3, part 4, page 367. 1858.
2. A snake, Dinophis Hammondii from Hallowell: On some new reptiles from Oregon and the western coast of Africa. Journal of the Academy of Natural Sciences, Philadelphia. Vol. 2, part 4, page 301. 1854.
3. A snake, Onchyocephalus nigro-lineatus from Hallowell: On some new reptiles from Oregon and the western coast of Africa. Journal of the Academy of Natural Sciences, Philadelphia. Vol. 2, part 4, page 301. 1854.

These are excellent examples of natural history drawings from the mid-1800s. They are matted, framed (about 13 x 17 inches), and ready for hanging. We thank Ned for his contributions to the VHS. Other items will be included in the auction. Please come and bid on these items.



MEMBERSHIP APPLICATION

I wish to ____ initiate ____ renew membership in the Virginia Herpetological Society for the year 19____.

___ I wish only to receive a membership list. Enclosed is $1.00 to cover the cost.

Name _____

Address _____

_____ Phone _____

Dues Category: ___ Regular ___ Family ___ Under 18 ___ Life
($10.00) ($12.50) ($6.00) ($150)

Interests: ___ Reptiles ___ Amphibians ___ Captive Husbandry
___ Distribution ___ Research
___ Specifically _____

Make checks payable to the Virginia Herpetological Society and send to the treasurer: Ronald Southwick, 408 Franklin Drive, Blacksburg, VA 24060

Field Notes

This section provides a means of publishing natural history information on Virginia's amphibians and reptiles that does not lend itself to full-length articles. Observations on geographic distribution, ecology, reproduction, phenology, behavior, and other areas are welcomed. Reports can be on single species or fauna from selected areas, such as a state park or county. The format of the reports is species' scientific name (common name): State abbreviation: County, locality. Date. Observer(s) or collector(s). Report or observations given one line below the data mentioned above. Author(s) name and address are given one line below the report or observation. Consult published notes or the editor if your information does not readily fit this format.

If the note contains information on geographic distribution, a voucher specimen or color slide should be sent for verification and deposited in a permanent museum or sent to the Virginia Herpetological Society. Species identification for observational records should be verified by a second person.

The correct citation format: Tobey, F.J. 1989. Field notes: *Coluber constrictor constrictor*. *Catesbeiana* 9(2):35.

Herpetological Artwork

Herpetological artwork is welcomed. If the artwork has been published elsewhere, we will need to obtain copyright before we can use it in an issue. We need drawings and encourage members to send us anything appropriate, especially their own work.