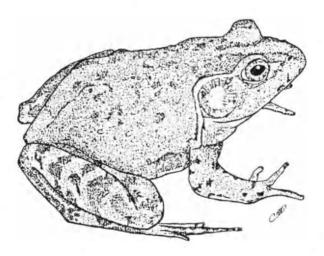
CATESBEIANA



BULLETIN OF

THE VIRGINIA HERPETOLOGICAL SOCIETY

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BULLETIN INFORMATION

The Bulletin of the Virginia Herpetological Society 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 \$5.00 per year and include *Catesbeiana* numbers 1 and 2 for that year. Dues are payable to: Laura Crews, Secretary-Treasurer, Route 1, Box 411, Hayes, VA 23072. See page 18 for additional membership information. Herpetological societies desiring exchange of publications should send copies of their society publications to Charles Neal, Dept. of Biology, Radford University, Radford, VA 24142.

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 Charles Neal or Eugene Gourley, Coeditors, Department of Biology, Radford University, Radford, VA 24142.

*(Continued on inside back cover.)

CATESBEIANA

Bulletin of the Virginia Herpetological Society

VOLUME	8	SPRING 1988	NO.	1
Spring	1988 Mee	ting Notice		1
Waters	hed. Jame	phibians Observed in the Ware of City County, Virginia		3
		the Timber Rattlesnake		9
Field 1	Notes		1	3
VaHS Me	embership	Information	1	8

MEETING NOTICE

The spring meeting of the VaHS will be held April 16, 1988, at the Elm Hill Wildlife Management Area, Mecklenburg County. Don Schwab will be hosting the meeting. See page 17 for details.

Cover: Rana catesbeiana by Christopher A. Pague



REPTILES AND AMPHIBIANS OBSERVED IN THE WARE CREEK WATERSHED, JAMES CITY COUNTY, VIRGINIA

by

Don Schwab Commission of Game and Inland Fisheries 4010 West Broad Street Box 11104 Richmond, VA 23230

The following annotated list was compiled while I was assisting with a Habitat Evaluation Procedure (HEP) conducted by the U.S. Fish & Wildlife dealing with a proposed water reservoir for James City County. The collections and observations were made July 21-25, 1986. For a more complete list of the amphibians and reptiles of James City County, see Pague (unpublished ms.).

The Ware Creek, Cow and Frances' Swamps are located in the northwest corner of James City Co. on the coastal plain of Virginia. The land is rolling slopes with interspersed wetlands ranging from freshwater streams and beaver ponds to brackish tidal waters all flowing into the York River. The vegetation ranges from hardwood uplands (oaks, beech, hickory) and pine stands adjoining the wetlands, wooded, shrub and herbaceous freshwater habitats to brackish marshes closer to the York River. For further description of the vegetational communities of Ware Creek see the Army Corps of Engineer Environmental Impact Statement (1985). The herptiles in the brackish marshes were not considered during this portion of the HEP study.

The following publications were used in identification of specimens: Ballinger and Lynch (1983), Conant (1975), and Martof et al. (1980). The common and scientific names are from Collins et al. (1982). Although the primary purpose of the survey was not to investigate herptiles, many logs and pieces of debris were turned in search of these animals. A total of 24 daylight hours was spent on the project area. The lack of salamanders, especially the Plethodons, was most likely the result of the warm, extremely dry conditions.

Ware Creek Survey

CLASS AMPHIBIA

Order Caudata

Notophthalmus v. viridescens (Rafinesque) Red-Spotted Newt

The specimen found was the terrestrial eft stage. Martof et al. (1980) and Tobey (1986) indicate that this life stage of the newt is uncommon or lacking on the coastal plain. The specimen was found on a slope adjoining Cow Swamp, with pines and laurel as the predominant vegetation.

Order Salientia

Bufo woodhousii fowleri Hinckley Fowler's Toad

This toad was very common and found on upland areas of both Cow and Frances' Swamps.

Acris crepitans Dumeril and Bibron Northern Cricket Frog

Heard on all wetlands in the project. Few were observed.

Hyla chrysoscelis Cope Gray Treefrog

Specimens were not collected and only identified by call. Heard in wooded and shrub-covered wetlands within the project.

Hyla cinerea (Schneider) Green Treefrog

Found in shrub wetland on blades of narrow-leaf cattail. Quite common on the Frances' Swamp, but probably found throughout area.

Hyla crucifer Wied Spring Peeper

Common in all areas, found within and well upslope from wetlands. The presence of numerous size classes indicates that the rate of reproduction and survival of the young are high.

Schwab

Rana catesbeiana Shaw Bullfrog

Heard only in Cow Swamp, however, most likely found on larger ponds throughout study area.

Rana clamitans melanota (Rafinesque) Green Frog

Very common on larger wetlands (beaver ponds) throughout project area.

Rana palustris Le Conte Pickerel Frog

Common along smaller streams on all areas.

Rana sphenocephala Cope Southern Leopard Frog

Found on larger, herbaceous-type wetlands throughout the project.

CLASS REPTILIA

Order Chelonia

Chrysemys p. picta (Schneider) Bastern Painted Turtle

Seen basking on logs in most open water areas.

Pseudemys rubriventris (Le Conte) Redbelly Turtle

Found on Richardson's Millpond near the dam.

Terrapene c. carolina (Linnaeus) Eastern Box Turtle

Common throughout project area in wooded and shallow-water areas.

Ware Creek Survey

Order Squamata

Suborder Sauria

Sceloporus undulatus (Latreille) Bastern Fence Lizard

The one specimen seen was along overgrown logging road traversing pine stand adjacent to Cow Swamp.

Bumeces fasciatus (Linnaeus) Five-Lined Skink

This lizard is common over entire area surveyed. One individual was found on a snag 35 m from an upland habitat within an herbaceous wetland.

Suborder Serpentes

Coluber c. constrictor Linnaeus Northern Black Racer

One specimen seen along edge of soybean field adjoining upper reaches of Frances' Swamp.

Elaphe o. obsoleta (Say) Black Rat Snake

A roadkilled specimen was found on Route 30. The only other specimen seen was in a shrub wetland, predominated by cattail.

Heterodon platyrhinos Latreille Eastern Hognose Snake

One specimen was observed in a hardwood upland area of Frances' Swamp. The number of toads present on the area would provide a large food source for this species.

Opheodrys aestivus (Linnaeus) Rough Green Snake

Several specimens were found in all types of habitats on the project site.

Schwab

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LIFE HISTORY OF THE TIMBER RATTLESNAKE

by

W. H. Martin Rt. 3, Box 804 Harpers Ferry, WV 25425

The life history of *Crotalus horridus* was investigated by mark-recapture and by sampling, in Shenandoah National Park, Virginia, during the years 1973 to 1987. Supplemental datawere gathered during the same time period and from 1956 to 1971 at additional sites located in northwestern Virginia, adjacent portions of West Virginia and Maryland, and southcentral Pennsylvania. Observations were made at 506 field locations on 4966 rattlesnakes, including 1179 neonates from approximately 253 litters. In addition, 29 live and 126 dead rattlesnakes were found on highways. The number of rattlesnakes marked totalled 1466 and 210 of these were recaptured a total of 266 times.

Adult male timber rattlesnakes in this study averaged 42.5 inches (all measurements snout to base of rattle) with a range of 33 to 51 inches. Adult females averaged 37 inches with a range of 29 to 45 inches. Young averaged 11 inches at birth; juveniles 17 inches at a year; 23 inches at two years; and 27.8 inches at three years. Neonates acquire the button, the first semipermanent portion of the rattle, during their first autumn shortly after birth when they molt for the first time. A segment is added at the base of the rattle with each molt. They average eight additional molts during the first five full seasons. Thereafter males average 1.3 molts per year and females, 1.2. Complete strings of rattles are uncommon on adults due to breakage. The longest rattle examined was a broken string of 21 segments. Timber rattlesnakes occur in light and dark color phases in the Appalachians. Light phase rattlers predominate in Shenandoah at 57.7%. Within the other study areas, the proportion of light phase rattlers ranged from 40% to 92.5%. The dark phase tends to predominate at higher, cooler, wetter, more densely forested sites. Procrypsis and thermoregulation are probably the major influences. Humans may kill more of the dark phase rattlers.

The life of the timber rattlesnake centers around communalancestral dens (hibernacula) and birthing rookeries, located in or near ledges or talus. Dens may consist of a single hibernating crevice or several located in close proximity. Some den-colonies exhibit diffused hibernating patterns. Individuals usually return to the same den year-after-year,

but one adult female was recaptured as she emerged from hibernation 1.3 miles from the den were she was marked as a juvenile. Within Shenandoah's 450-square-mile ecosystem, 96 den-colonies (demes) are known and an additional 30 to 50 are predicted. The location of overwintering crevices has been confirmed at 40 of the sites. The mean elevation of Shenandoah's dens is 2250 feet with a range of 1100 to 3300 feet. Elevations at the other study sites range from 650 to 3600 feet. The most common aspect is southwest with a range from east-southeast to west-northwest. Only 5% of the dens face north of due west. Den spacing in Shenandoah ranges from 0.16 to 2.8 miles. A Maryland den is 15 miles from the nearest neighbor den.

The mean estimated date of entrance into hibernation was 10 October with an annual range of 2 October to 18 October. Ingress, however, is often staggered, with stragglers continuing to arrive, weather permitting, after most of the snakes have gone underground. The mean date of the last rattler seen was 21 October with an annual range from 9 October to 5 November. Some temporary and sporadic emergence usually occurs in the spring before general emergence with 14 April as the most common date of the first rattler seen and an annual range of 8 March to 2 May, The most common date of general emergence was 1 May with an annual range from 18 April to 12 May. Emergence of juveniles, three years old and younger, averaged five days behind that of the adults. An average of about two weeks is spent intermittently basking, weather permitting, at areas located within 0.2 mile of the den. Foraging, usually accomplished by ambush, begins with the onset of the first warm, humid, summerlike evenings, at a mean date of 15 May and an annual range from 24 April to 28 May. Major foods are white-footed mice and chipmunks taken mainly at night and day, respectively. With the onset of fairly settled summer weather, a short activity peak, involving all classes of rattlers except gravid females and snakes in a premolt condition, occurs, as snakes migrate toward summer range and search for scent trails of prey. This activity usually takes place about the second week of June but has occurred as early as mid-May or as late as early June. Rattlers have been found as far as 3.8 miles from the nearest den. Average home range radii were calculated at 1.53 miles for adult males; 1.35 miles for adult females (0.3 mile during a reproductive year); and 1.08 miles for juveniles three years old and younger. Gestating females and snakes in a premolt condition seek certain favorably exposed rocks (retaining walls along Skyline Drive included). The balance of the population spends most of the summer in wooded habitats where prey is more readily available.

Sexual maturity is reached as snakes approach their fourth and fifth birthdays. Females begin vitellogenesis and estrous in late July but the onset of the reproductive cycle may be delayed one or more years if fat reserves are low.

Pheromones may play a part in synchronizing the breeding season, not only among females, but possibly also among The mating season begins late July or early August males. with a surge of activity among adult males searching for female pheromone trails. Observations on male-female pairs peaked in August and waned in September. Matings were observed on 21 August, 5 September, and 13 September. Females begin gestation late May or early June of the following year when they ovulate and become pregnant from sperm stored during the previous summer's mating. Females usually bear their first young at six, seven, eight, and nine years of age but three out of 947 reproductive females. examined, gave birth at five years of age. Young are born thereafter at 2-, 3-, or 4-year intervals, depending on the nutrition of the female, which is heavily influenced by the weather, and on the age of the female -- fecundity increasing Only three recaptured females reproduced at 2with age. year intervals, 19 at 3-year intervals, and eight at 4-year intervals. Number of young per litter ranged from 4 to 14, with an average of eight. Birthing rookeries are sometimes averaged 0.07 mile distant and located at the den but birthing is known to have occurred as much as 0.8 mile from First birthing of the year is estimated to have a den. ranged from 4 August to 24 August in different years and last birthing from 28 August to 30 September. Multiannual mean date of birthing was 2 September with an annual mean that ranged from 19 August to 12 September. Birthing dates are influenced by emergent dates and by ensuing weather and temperatures. Mother and neonates stay together at the place of birth for about 7 to 10 days, then all leave in search of prey, or in the case of late birthings. overwintering sites. Neonates usually molt 7 to 11 days after birth and of 201 premolt litters, 185 were with a postpartum female. Of 52 litters in which molting had begun, 21 were with a postpartum female. Rodent numbers reach a secondary peak in autumn so postpartum females and young-of-the-year have a good chance of securing a meal during the 1 to 4 weeks of favorable feeding weather remaining before entering the dens. Mid- to late September is the usual time of the return migration to the dens with rattlers keeping mainly to the wooded areas. First rattlers entered the dens 29 September on the average with an annual range that varied from 18 September (7 September for youngof-the-year) to 8 October. Young apparently follow scent trails of the older snakes, thus learning the location of the hibernacula, and probably also the location of trails leading to summer range. Only about 30% of the young-ofthe-year overwinter in the communal dens. An unknown percentage uses alternate communal-ancestral dens that are limited (probably by the tightness of the crevices) to use by smaller snakes.

Overwinter mortality for young-of-the-year was calculated at 50% and for the first year--66%. Failure to find food and adequate hibernacula are probably major causes of the high

mortality. Mortality for the second year was calculated at 50%; for the third year--35%; and for the fourth--22.5%. Mortality on rattlers four years and older was calculated at 10% annually. Adult mortality is due primarily to human activities. On the average, den-colonies contain roughly equal numbers of adults and juveniles, but big dens in remote areas have a higher proportion of older snakes. About 17% of the total population is composed of snakes 15 years of age and older. Oldest adults are believed to be between 30 and 50 years of age. The chances of a neonate female's living long enough to reproduce is about 1 in 15. Populations per den are estimated to range from 10 to 205with a springtime average of 45, dropping to 40 by late summer before the new cohort of young is added. Population increases by an average of 63% with birth of the young but the proportion of females reproductive in any one year varied from 10% to 66% so total population can vary by 100% from one autumn to the next and recruitment into the adult population may vary enough to cause the total population to fluctuate by as much as 18% from year to year. Total population of known dens in Shenandoah is estimated at 4320 and is extrapolated to be between 5400 and 6700 for the ecosystem. The population apparently has remained fairly stable during the course of this study but may have suffered a decline of 50% to 65% since the 1940s. Major factors in the probable decline and continued control of the population are automobile traffic and maintenance activities along Skyline Drive, development around Shenandoah's boundary, and shading over of basking habitat by natural vegetational succession. Populations at some sites, especially in Maryland and Pennsylvania, have declined by 65% to 85% since the 1960s. Increasing human population and encroachment on the summer range of the timber rattlesnake is a factor in that decline, but the major cause is direct removal of snakes from the dens and birthing rookeries.

The timber rattlesnake is an important element in the eastern deciduous biome. Among the snakes, it represents the extreme in K-selection. It is a slow-growing, latematuring, long-lived predator with a low reproductive rate and few natural enemies. These characteristics, coupled with the proclivity for denning and gestating communally, and for traveling rather long distances between den and summer range, make the timber rattlesnake vulnerable to human exploitation and development.

12

FIELD NOTES

Heterodon platyrhinos (Eastern Hognose Snake): Lunenburg County, Co. Rt. 643 0.4 km E of Co. Rt. 635 intersection. July 11, 1987. D. Schwab and J. L. Schwab.

A black female specimen was found crossing road. Neither Linzey and Clifford (Snakes of Virginia, Univ. of Virginia Press, Charlottesville, 1981, 159 pp.) nor Tobey (Virginia's Amphibians and Reptiles: A Distributional Survey, privately published, Purcellville, Va., 1985, 114 pp.) show records of this species from Lunenburg County. The specimen will be turned over to C. A. Pague for deposit in an appropriate collection.

Don Schwab P.O. Box 847 Suffolk, VA 23434

Terrapene c. carolina (Eastern Box Turtle): Lunenburg County, 0.8 km W of Co. Rt. 635 and 0.5 km N of Co. Rt. 643 (west of Co. Rt. 635), July 11, 1987. D. Schwab.

A carapace of an Eastern Box Turtle was found, no other bone material was present. An adult male box turtle was also seen in the same vicinity, but not collected. Tobey (Virginia's Amphibians and Reptiles: A Distributional Survey, privately published, Purcellville, Va., 1985, 114 pp.) does not show any records of this species from Lunenburg County. The specimen will be given to C. A. Pague for deposit in appropriate collection.

Don Schwab P.O. Box 847 Suffolk, VA 23434

Sceloporus undulatus hyacinthinus (Northern Fence Lizard: Lunenburg County, Co. Rt. 635, 150 m S of intersection with Co. Rt. 643 (east). October 4, 1987. D. Schwab.

A juvenile fence lizard was found sunning on a Virginia Pine (*Pinus virgininiana*), 1.5 m above the ground. The species has not been reported from Lunenburg Co., though it has been collected in most adjoining counties (Tobey, *Virginia's Amphibians and Reptiles: A Distributional Survey*, privately published, Purcellville, Va., 1985, 114 pp.). The specimen will be turned over to Chris Pague of Old Dominion University, Norfolk, for deposition in an appropriate

Field Notes

collection. The specimen is numbered D-429-87 in D. Schwab's Catalog.

Don Schwab P.O. Box 847 Suffolk, VA 23434

Acris crepitans crepitans (Northern Cricket Frog): Lunenburg County, 200 m W of Co. Rt. 635, 150 m S of intersection with Co. Rt. 643 (east). October 4, 1987. D. Schwab, J. Schwab, L. W. Swann, Jr.

Two specimens were collected adjacent to a slow-flowing, rocky stream. Vegetation predominately hardwoods (Acer and Quercus) with Christmas Fern (Polystichum acrostichoides) understory. This frog has not been reported in Lunenburg Co., but has been collected from Nottoway (north) and Mecklenburg (south) Counties (Tobey, Virginia's Amphibians and Reptiles: A Distributional Survey, privately published, Purcellville, Va., 1985, 114 pp.). The specimen will be turned over to Chris Pague of Old Dominion University, Norfolk, for deposition in an appropriate collection. The specimens are number D-430-87(2) in D. Schwab's Catalog.

Don Schwab P.O. Box 847 Suffolk, VA 23434

Lampropeltis getulus getulus (Common or Eastern Kingsnake): Brunswick County, Co. Rt. 626, .8 mi N of junction with Co. Rt. 666 near Gasburg, Virginia. 22 June 1986. Robert A. S. Wright.

While fishing on a small farm pond near Lake Gaston, I was distracted by wild fluttering and loud "chirping" noises that emanated from beneath a dense blackberry bramble. Upon closer inspection, a large kingsnake was found; it had invaded a bobwhite quail nest and was eating the eggs. For the next 50 minutes, the snake devoured all five eggs in the nest, despite a valiant defense by the mother bird. Tobey (Virginia's Amphibians and Reptiles: A Distributional Survey, privately published, Purcellville, Va., 1985, 114 pp.) does not indicate any specimens from the Lake Gaston area. The snake was captured, identified and released.

Robert A. S. Wright Central Va. Biolog. Research Consortium 5204 Riverside Drive Richmond, VA 23225

Coluber constrictor constrictor (Black Racer): Buckingham County, U.S. Rt. 60, 1.7 mi E of Mt. Rush, Virginia. 3 July 1986. Robert A. S. Wright.

A freshly-roadkilled specimen was collected at 2:30 p.m. in the westbound lane of U.S. Route 60. The temperature was 82° F., the weather hot and humid. The habitat adjacent to the site was second-growth hardwoods. Tobey (*Virginia's Amphibians and Reptiles: A Distributional Survey*, privately published, Purcellville, Va., 1985, 114 pp.) does not note any specimens from Buckingham County. The snake will be donated to the Lynchburg College Biology Department teaching collection.

Robert A. S. Wright Central Va. Biolog. Research Consortium 5204 Riverside Drive Richmond, VA 23225

Farancia erytrogramma (Rainbow Snake): City of Richmond, southern shore of the James River, 400 m B of SCL train trestle and 600 m W of Rt. 161 (Boulevard) Bridge. 15 September 1985. Robert A. S. Wright.

During a fishing trip below my home in Richmond, a dead rainbow snake was found near a log pile on the southern bank directly across from Cooper's Island. This particular section of the James has no extensive undisturbed swamps, but it does have many acres of poorly drained, sandy alluvial woods especially in remote sections of Huguenot Woods and the "meadow" in the James River Park system. Eels, the rainbow's favored prey, are commonly caught on rod and reel here. It is possible that the snake was released from captivity, although no pet shops here supply eels or even tadpoles. The specimen was donated to the Smithsonian Institution via Joe Mitchell.

Robert A. S. Wright Central Va. Biolog. Research Consortium 5204 Riverside Drive Richmond, VA 23225

Heterodon platyrhinos (Eastern Hognose Snake): Pittsylvania County, Co. Rt. 706, .4 mi NE of junction with Co. Rt. 718, on the periphery of White Oak Mountain Wildlife Management Area, about 4 mi. SE of Chatham, Virginia. 30 June 1987. Robert A. S. Wright.

A roadkilled specimen was retrieved from along an unnamed tributary of the Banister River. The soil there was a sandy

loam from weathered quartzite of the Mt. Athos formation. Surrounding soil was very clayey. Tobey (Virginia's Amphibians and Reptiles: A Distributional Survey, privately published, Purcellville, Va., 1985, 114 pp.) does not note any Pittsylvania specimens; this one will be donated to the Smithsonian Institution via Joe Mitchell.

Robert A. S. Wright Central Va. Biolog. Research Consortium 5204 Riverside Drive Richmond, VA 23225

Plethodon yonablossee Dunn (Yonahlossee Salamander): Floyd County, headwater of Deepwater Creek above St. Rt. 611, W of Indian Valley. 19 May 1987. R. L. Hoffman.

A large adult (81 mm SV) was found ca. 10 p.m. emerging from a talus slope in mixed oak-tulip poplar woods just above the hemlock-rhododendron community of a deep moist hollow. Approximately 45 minutes of search preceded the find. Heretofore only a single Floyd County locality was known for this species, which is here at the northernmost extent of its range. On the eastern side of Mack's Mountain at an elevation of 2800 feet ASL, the new locality extends the range about 4 miles northeastward of the previous stations in Carroll and Pulaski Counties. Subsequent night search several miles farther northeast, in what appeared optimal habitat for *P. yonahlossee*, produced only specimens of *P.* glutinosus. The specimen of *P. yonahlossee*, which is now the northernmost known for the species, will be deposited in the Virginia Museum of Natural History.

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Richard L. Hoffman Radford University Radford, VA 24142

VIRGINIA HERPETOLOGICAL SOCIETY SPRING MEETING!

Thanks to the initiative and efforts of Don Schwab, our annual spring meeting will be held April 16, 1988, at the Elm Hill Wildlife Management Area, Mecklenburg County, near the John H. Kerr Dam.

To get to Elm Hill from U.S. Hwy. 58, turn south on Va. Hwy. 4 (this is 16 miles west of South Hill and 6 miles east of Boydton), proceed about 6 miles to small settlement (Castle Heights) and watch for the Elm Hill sign on the left side (white-routed letters on dark background). About six-tenths of a mile in on the dirt road bear right at the fork then left at the next fork to arrive at the Office/Maintenance Complex where the meeting will be held. We wish to begin at 11 a.m. promptly, conduct minimal necessary business, and get directly into orientation about the day's activities.

Coffee and other beverages will be provided by the Virginia Game Division. Bag lunches may be brought, or "pick up" food purchased at the grocery just across from the Elm Hill entrance. There is a coffee shop at the North Bend Park, at the Kerr Dam, a mile south on Rt. 4 from the entrance to Elm Hill. Field trips will be organized for different purposes, with some choice available. In accordance with state policy, any specimens captured and retained will be placed in an established public research/teaching collection.

If anyone wishes to arrive Friday and camp over, or stay over Saturday night, water and simple facilities are available on the Management Area. For the less hardy, a number of campgrounds with amenities are operated by the Corps of Engineers at Kerr Dam and elsewhere in the region (watch for the signs). For the fastidious, there are motels at South Hill and Clarksville, both about 30 minutes away. The possibility of night collecting will be discussed during orientation.

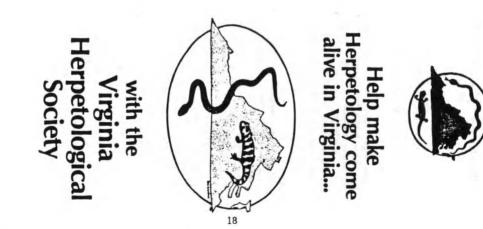
Don has set us up in a nice location, and if the weather cooperates we should enjoy an interesting day in the field. We hope to see a big turnout.

Membership Application

I wish to	initiate	renew	membership in	the Virginia Herpetological Sc	ciety for the year 19					
□ I wish only to receive a membership list. Enclosed is \$1.00 to cover cost.										
Name										
Address					3.3					
					Phone					
Dues cate	gory:	Regular (5.00) 🗆 Family (7.5	50) 🗆 Under 18 (3.00)						
Interests:	🗆 Repti	les D	Amphibians	Captive husbandry						
	Distri	ibution [Research	Specifically:						

Make checks payable to the Virginia Herpetological Society and send to the treasurer.



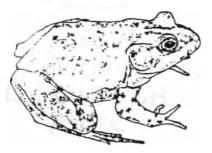


The Virginia Herpetological Society

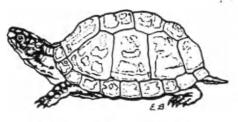
A society open to everyone with an interest in the conservation, study and care of reptiles and amphibians

The Virginia Herpetological Society was organized in 1958 to bring together people interested in advancing the knowledge of Virginia's reptiles and amphibians. The VaHS encourages the scientific study of Virginia's herpetofauna and its conservation. Educational activities continue to be important society functions

Meetings are held twice each year, in Spring and Fall, at different locations throughout the state. The program is open to all members and includes a business meeting and a contributed papers session, during which members present information on their work with reptiles and amphibians, particularly in Virginia. An afternoon field trip usually follows.



The VaHS publishes a bulletin, CATESBEIANA, twice each year which con-tains articles, news and information on various aspects of Virginia herpetology. Members publish field notes and observations, distributional information and suggestions for improving husbandry techniques. Review articles appear occasionally. Material for inclusion should be sent to the CATESBEIANA editor.



Society dues are \$5.00 per year (\$3.00 for members under 18, and \$7.50 for families).

Inquiries should be addressed to the

secretary. Membership can be initiated at meetings. Dues may be paid at that time.

- President: Richard L. Hoffman, Dept. of Biology, Radford University, Radford, VA 24142
- Vice President: Christopher A. Pague, Dept. of Biological Sciences, Old Dominion University, Norfolk, VA 23508
- Secretary/Treasurer: Laura Crews, Route 1, Box 411, Hayes, VA 23072 (804) 642-4828
- Coeditors: Eugene Gourley and Charles Neal, Radford University Radford, VA 24142

Advantages of VaHS membership

- Spring meeting with talks, slides, and field trip
- Fall meeting with lectures, film or workshop
- Society bulletin published twice per year
- Extensive research material available
- Awareness of current herpetological events
- Opportunity to meet others who share your interest in herps
- Support of VaHS education and conservation goals



Major Papers

manuscripts should be submitted well in advance of March September. approved Manuscripts VaHS refereed 'n paper, with adequate margins. typewritten this issue in addition to the by by at (double spaced) on being submitted the for additional Least author one before publication; coeditors. officer (past information. good quality 8 1/2 by Consult the style of for publication All changes must or Articles will present) therefore, by 11 inch should articles of the be 10 be be

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Field Notes

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