

REPORT ON THE OCCURRENCE OF POISONOUS SNAKES OF VIRGINIA, Maryland, and the District of Columbia. More misinformation than fact enjoys popular currency. Let us try to keep the record straight and to correct it where it errs. This report is presented in keeping with the aim of the Society to present information of general interest.

NEAR-FUTURE BULLETINS WILL COVER SNAKEBITE FIRST AID and emergency medical treatment. A later bulletin will cover identification.

Five kinds of venomous snakes occur within the state of Virginia. These are three rattlesnakes -- Timber, Canebrake, and Carolina Pigmy Rattlesnakes -- and two other poisonous snakes -- Northern Copperhead and Cottonmouth.

Only two venomous species are to be found in the state of Maryland -- Timber Rattlesnake and Northern Copperhead. Only one variety of poisonous snake is to be found in the District of Columbia -- Northern Copperhead. The poisonous Coral Snake is not found within the Virginia-Maryland area.

THE TIMBER RATTLESNAKE ranges widely over the western part of Va. Because of the rattlers' less secretive nature they have been killed off in their former range on the Piedmont Plateau. Most of the present range of the TIMBER Rattler lies west of a line extending across the state from Martinsville, Va., through Lynchburg, Charlottesville, and Warrenton, to Leesburg. VHS is actively investigating Timber Rattlers on higher elevations of the Piedmont. Historically, they occurred throughout the Piedmont in North Carolina, Virginia, and Maryland. There is always the possibility of "spotty" occurrence in the Virginia counties east of the Blue Ridge mountains.

In Maryland, the Timber Rattler is found in the northern highland counties. A single specimen, found in Kent County, Md., is believed to be an "escapee". Scientific name: Crotalus horridus horridus.

THE CANEBRAKE RATTLESNAKE has been recorded only in southeastern Va. Except for a case of rattlesnake bite at Hopewell, Va., definite localities for this snake are limited to the four southeastern border counties of Virginia -- Southampton to Princess Anne -- the lower York-James Peninsula -- Hampton and Newport News. The Canebrake Rattler is not reported from anywhere on the Eastern Shore or anyplace in Maryland. Scientific name: Crotalus horridus atricaudatus.

THE CAROLINA PIGMY RATTLESNAKE has been found at one spot just over the Virginia line in Norfolk County. The official account of this finding is to be published by Roger H. Rageot and W. Leslie Burger, both co-founders of the Virginia Herpetological Society. The technical name for the Carolina Pigmy Rattler is Sistrurus miliarius miliarius.

REPORT CONTINUED ON NEXT PAGE

(over)

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- Chairman, Md. Section, VHS. . Charles J. Stine, DDS, Towson, Md.
- Supervisor, Distribution Data: William L. Witt, Arlington, Va.

CORRESPONDENCE should be addressed to the Editor, 4706 Tallahassee Avenue, Rockville, Md.

## REPORT ON OCCURRENCE OF POISONOUS SNAKES OF VA., MD., &amp; D.C. cont'd:

The EASTERN COTTONMOUTH occupies almost the same part of Virginia as the Canebrake Rattler. Cottonmouths are common in places in Princess Anne and Norfolk Counties and occur occasionally as far west as Petersburg, Va. Their occurrence in some places on the York-James Peninsula would not be surprising.

The Eastern Cottonmouth is not found in Maryland. Verbal reports of "moccasins" killed on the Eastern Shore require verification.

Scientific name: Agkistrodon piscivorus piscivorus.

The NORTHERN COPPERHEAD is found in most parts of Virginia but is rare or absent at altitudes greater than 5,000 feet above sea level, at Hampton and Newport News, or in the two Eastern Shore counties.

Specimens of the Copperhead from southeastern Virginia often have slightly different body patterns when compared with those found elsewhere in the state. Northern Copperheads with some Southern Copperhead characteristics occupy a wide zone of Atlantic Coastal Plain extending from Southern Maryland to Greenville, North Carolina.

The Northern Copperhead is found in all Maryland counties on the Western Shore, but rarely on the Eastern Shore where it has been reported from only Wicomico and Worcester Counties. St. Mary's County Copperheads are said to show an intergradation with the more southern form. Scientific name: Agkistrodon contortrix mokeson.

This completes the listing of poisonous snake varieties which occur within the states of Virginia and Maryland.

OTHER POISONOUS SNAKES have, in error or on the basis of questionable data, been credited to Virginia. The Eastern Coral Snake (Micrurus fulvius fulvius), and the Eastern Diamondback Rattlesnake (Crotalus adamanteus) have been mentioned as Virginian varieties, but neither are represented in collections by authentic records. The nearest Eastern Diamondback record is for Jackson, N.C., fifteen miles below the Va.-N.C. line. The Coral Snake is found in central and southern North Carolina and further south through Florida and the Gulf states.

NEW LOCALITY RECORDS FOR POISONOUS SNAKES -- as well as for other Va. reptiles and amphibians -- are being actively gathered to complete our knowledge of their distribution. We solicit your closest cooperation in this effort. For technical purposes, the only bona fide proof of occurrence of a snake in a particular area is a specimen from there. We hope that readers will be willing to present live specimens to zoos and preserved specimens to museums and college or university depositories, from precisely indicated localities. (See VHS Bulletin # 11). NOTICE to VHS of such action will be reported in the future bulletins. (Credits on back page.)

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The VHS Bulletin is a newsletter appearing at least six times a year. It has a circulation of about 300: members and friends of the VIRGINIA HERPETOLOGICAL SOCIETY. VHS is a non-profit, voluntary association of persons with a more-than-casual interest in the reptiles and amphibians of VIRGINIA and surrounding states. DUES: \$1.00 a year. Members receive bulletin, membership card and free notices.

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NO VACATION FROM SAFETY

CAUTION is a word with vital meaning for herpetologists. If caution is not used death or, at the least, extreme pain may result. Carelessness, in this field, can bring anguish and expense to family and sadness to friends.

Two VHS members in the Richmond area received illegitimate bites from poisonous snakes. Both members survived their ordeals. Our hurrahs are reserved for their healthy systems and the good emergency medical care which saw them through.

Where poisonous snakes MUST be handled it is always with caution. It is rarely, if ever, necessary for amateurs to expose themselves. To our two less fortunate members we dedicate the following notes on "Avoidance of Snakebite" and forthcoming bulletin features on First Aid for Snakebite.

It is hoped that the physicians on our list will contribute notes on emergency medical treatment for the benefit of others who rarely see a snakebite patient. VHS officers, college and university faculty members, museum and zoological park staff readers are invited to send in their comments for publication in a later edition.

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WHERE POISONOUS SNAKES BELONG is out in the wild, off the beaten path. If in a farmyard or near home, they should be (1) captured with care and transported safely back to the woods or to a museum or zoo; or, (2) dispatched quickly and preserved in formalin solution if a local record is desirable (see VHS Bulletin No. 11 on preservation).

SAFETY-FIRST SUGGESTIONS FOR FULL-TIME OR PART-TIME HERPETOLOGISTS:

Don't lift a stone, plank, log, or any object under which a snake can hide by placing your hand or fingers under it. Move object with a stick, hook, or a pry-bar.

Don't reach into holes or crevices in ground, rocks or trees where you can't see.

As you hunt in grass, brush, or rocks, stay in cleared spots as much as possible. Wear puttees or heavy boots. Keep a sharp lookout for snakes that may lie concealed in, or beside, your path. Remember, most snakes are protectively colored; it takes a sharp eye, not a cursory glance, to discover one in its natural surroundings.

Snakes are in the shade when it is hot. They are most active when the temperature is moderate.

Don't walk around camp or suburban home yard in darkness; poisonous snakes are nocturnal much of the year. Use a flashlight; wear boots. Step ON a log, never over it, so that you can see whether there is a snake below the curve on the far side. Look before stepping down. Don't reach above your head for a handhold in climbing amid rocks.

\* \* \* LEARN TO RECOGNIZE THE VENOMOUS SNAKES OF YOUR AREA, AND AVOID KILLING THE HARMLESS ONES.

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POISONOUS SNAKEBITE SYMPTOMS:

- SWELLING AND DISCOLORATION OF BITTEN AREA
- PAIN, COLD SWEAT AND PALENESS (SHOCK)
- WEAKNESS AND GIDDINESS
- RESPIRATORY (breathing) DIFFICULTY
- NAUSEA AND VOMITING
- HEMORRHAGE AND CIRCULATORY DISTURBANCE

Snakebite, compared with other accident and injury, is not common.

If you are careless don't follow herpetology. Find an avocation where the penalty for carelessness is not so severe and final.

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The Virginia Herpetological Society does not encourage the housing of poisonous snakes. If they are to be housed the zoo is the best place for them. The Society strongly recommends against handling poisonous snakes. If they must be handled it should not be done with the bare hands but with proper equipment. \* \* \*

AVOIDANCE OF POISONOUS SNAKEBITE, continued:

Examine the surroundings before sitting down to rest on a log or rock.

When a rattler sounds suddenly don't move until you know where the sound is coming from; you may step on a rattler or into its range instead of away from it. A rattler or other poisonous snake seen in time is not a dangerous snake providing you avoid it.

Don't handle an injured or dead rattlesnake. Don't touch the head of a decapitated poisonous snake. If you must examine the head use sticks or instruments, not your fingers. Snakes capable of reflex actions for an hour or so after they have been fatally injured -- The head of a poisonous snake has been known to inflict a bite half an hour or more after it was completely severed from the body.

Don't grab for the tail of an unidentified snake or a poisonous snake going down a hole; the head may already have turned and be facing outward. LEARN TO RECOGNIZE THE VENOMOUS SNAKES OF YOUR AREA.

(The above is taken, in part, from RATTLESNAKES, Their Habits, Life Histories, and Influence on Mankind, Volume II, by Laurence Klauber.)

Credits: Dr. John T. Wood, W. Leslie Burger, O.K. Goodwin, John E. Cooper, Roger H. Rageot, William L. Witt. ( for data, pages 1-2.)

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DEATHS FROM INSECT STINGS TOP SNAKEBITE TOLL  
by Phil Casey, Washington (D.C.) POST

"Bee-, wasp-, hornet-, yellowjacket- and other venomous insect ... stings can be fatal to many of us who are allergic to the little beasts.

One study covering a five-year period showed that of 215 deaths caused by bites or stings, 86 were caused by bees, wasps, hornets and yellowjackets. This compared to 71 deaths attributed to poisonous snakes and spiders." (Such data usually include scorpions.)

"People found to be allergic are urged to undergo "desensitization therapy" -- injections of an extract made from wasps, hornets, bees and yellowjackets. Some authorities recommend an emergency kit for those dangerously allergic to (insect) bites. Immediate but extremely careful removal of the stinger is recommended."

Since herpetologists, in turning over logs and rocks, etc., often encounter stinging insects the above should be heeded by those who suspect that they may have an allergy.

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PROBLEMS OF VIRGINIAN HERPETOLOGY

Part III

by: William L. Witt,  
Co-Founder, VHS

Turtle, turtle, who has seen a Muhlenberg's Turtle ?

This, the smallest American species of turtle, has been listed as occurring in Virginia based on a single specimen -- a shell -- from Fairfax County, found at Stubblefield Falls on the Potomac River, just above Chain Bridge. Recently, Dr. Doris M. Cochran of the U.S. National Museum has determined that the shell actually belonged to a young Wood Turtle (*Clemmys insculpta*). Accordingly, Muhlenberg's Turtle has lost its place on the state list.

On the second state list prepared by W. Leslie Burger ( before the discovery by Dr. Cochran) the Muhlenberg Turtle was listed as likely to occur in western Virginia. Where to look ?

In the American Museum of Natural History there is a record of the Muhlenberg Turtle from Beaver Creek, Ashe County, North Carolina, collected by Charles Breder of the AMNH. The locality is about 15mi. southwest of the Va.-N.C. line or Grayson County, Va. The same valley wherein this record was taken extends into Virginia and it forms an intermont valley between the eastern and western halves of the Blue Ridge.

The species is certainly expected between the Blue Ridge on the east and the Iron mountains to the west. Good Hunting ! WLW

Following is an excerpt from Roger Conant's "A FIELD GUIDE TO THE REPTILES AND AMPHIBIANS of Eastern North America" (1958) page 42 :

Bog Turtle (*Clemmys muhlenbergi*) Average size 3 to 3½ inches; the record size 4½ inches. ... The head patch sometimes is yellow or split into two parts. Large scutes of carapace (back shell) may have yellowish or reddish centers. Young: About 1 inch at hatching.

A gem of a turtle, indeed almost a collector's item. Although still common in certain areas, it is rare or completely absent in regions where it once occurred. Sphagnum bogs, swamps, and clear, slow-moving meadow streams with muddy bottoms are preferred. Man's propensity for draining and 'reclaiming' such habitats has contributed to its disappearance. ...Range: New York to North Carolina in disjunct colonies; from near sea level in the North to 4,000 feet alt. in the southern mountains. (End of excerpt from Conant's Guide.)

\* \* \* \* \*

CONTRIBUTORS TO SCIENTIFIC KNOWLEDGE AND THE PRESERVATION OF THE NATIONAL ZOOLOGICAL PARK'S KING COBRA were:

Mark Craig of Bedford, Bedford County, Virginia

John Dubois and William Lines, both of Silver Spring, Md.

in response to requests made for blacksnakes and snapping turtles. The staff at the NZP reptile house express their appreciation.

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WANTED: Field Assistant. High School or College student willing to act as a field assistant on major herpetological\* projects in Virginia. Assistant: (1) must be free for field trips on almost every Saturday and/or Sunday throughout the year on two or three days notice; (2) must follow ALL general and specific instructions to the letter (and spirit) intended; (3) will not be permitted to handle living poisonous snakes; (4) must supply own camping gear (sleeping bag, or other equipment as needed).

Resident of Arlington or Fairfax counties preferred. APPLY TO:

APPLY TO: William L. Witt, Apt. #121  
1412 Patrick Henry Drive  
Arlington 5, Virginia

\*(general biology projects included.)

Telephone: KENmore 8-6371 (D.C. metropolitan area)

NOTES ON VIRGINIAN HERPETOLOGY

During a ten-day period, VHS member Lester Ratliff, National Zoo (NZZ) Reptile House staff, spent most of his time not looking for herps. Mr. Ratliff was vacationing in the area around Clintwood, Dickenson County, Va. We say "not looking" because only five species were observed and one collected. List as follows:

- |   |                                   |
|---|-----------------------------------|
| Snapping Turtle                               | <u>Chelydra serpentina</u>        |
| Black Racer                                   | <u>Coluber c. constrictor</u>     |
| Gray-Black Rat Snake*                         | <u>Elaphe o. obsoleta</u> X       |
| (intergrade)                                  | " <u>obsoleta spiloides</u>       |
| American Toad                                 | <u>Bufo terrestris americanus</u> |
| (one of these now at the reptile house, NZZ.) |                                   |
| Gray Tree Frog                                | <u>Hyla v. versicolor</u>         |

Mr. Ratliff indicated the abundance of this gray tree frog but doesn't recommend attempting collection of these in Oak trees. Apparently it isn't very successful. Collected in Dickenson County, Va., however, it would be a county record if preserved.

WLWitt

\* Since Lester Ratliff works with snakes daily at the National Zoo we believe he knows what he sees. He states that he had a "Gray Rat Snake" (Elaphe o. spiloides) specimen of about two feet in length. At this size the Black Rat Snake (E.o. obsoleta) is usually nearly all black with some trace of the juvenile (saddled) pattern which Gray Rat Snakes (E.o.spiloides) retain as adults.

What may be a similar Gray-Black Rat Snake intergrade specimen was taken between Abingdon and Bristol, Washington County, Va. and is in the possession of the VHS Secretary. It will be preserved, eventually, as an example of intergradation in Rat Snakes of the southwestern counties. We are indebted to Mr. Ratliff for this added information and record. We plan to exhibit the specimen at the VHS statewide meeting in Richmond this fall. (Watch VHS Bulletin notice.)

The Gray Rat Snake (E. o. spiloides) is not a current or expected member of the state's herpetofauna. VHS president, W. Leslie Burger, studied the snakes of the southwestern Virginia counties and was led to believe that intergradation occurs. Influence of the Gray Rat and Yellow Rat Snakes (Elaphe o. quadrivittata) may be noted in the Va. counties bordering North Carolina and Tennessee. These Rat Snakes may show color or pattern characteristics of either southern form.

The late Howard A. Kelly's small booklet "Snakes of Maryland" (1936) lists both Gray and Yellow Rat Snakes on the basis of one record each -- both obviously escapees. Franklin Tobey, before the organization of VHS, included both Gray and Yellow Rat Snakes in his article on "Harmless--and Often Helpful-- Snakes of Virginia" in the VIRGINIA WILDLIFE magazine of April, 1957. He was not aware, at the time, that intergrades would be more likely in SW Va. than the more typical southern forms. More records from southwestern counties are necessary before any hasty decisions are made.

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.....(detach).....  
(attach to specimen)

COLLECTION DATA SLIP

(type, or hand letter in ink) (spell out month)

Collector's name \_\_\_\_\_ Date \_\_\_\_\_ 19\_\_

COUNTY where found \_\_\_\_\_

Nearest Road Intersection to site \_\_\_\_\_ Distance: \_\_\_\_\_

State (county) Rt.# \_\_\_\_\_ and State (county) Rt. # \_\_\_\_\_

Compass direction from intersection to site: \_\_\_\_\_

Weather and time of day or night \_\_\_\_\_ A.M.(P.M.) \_\_\_\_\_

Description of collection site: \_\_\_\_\_

Activity of specimen at time of capture: \_\_\_\_\_

Fluid preservative used: \_\_\_\_\_

Name of post office nearest collection site: \_\_\_\_\_

Identification of attached preserved specimen: \_\_\_\_\_



NOTES ON VIRGINIA HERPETOLOGY, continued

Members and friends of the VHS will be pleased to note a feature article on "The Amazing Glass 'Snake'" which appeared at page 22 of the August issue of VIRGINIA WILDLIFE. The article was written by Howard E. Uible, VHS member, well-known at the National Museum and at NZP. Members may find additional background information on the Glass Lizard in Virginia in VHS Bulletin No. 27 by W. Leslie Burger.

COLLECTING NOTES: J. A. (Jack) Redmond, Jr., Midlothian, Va.

Unless otherwise noted specimens listed below came from Hertford County, North Carolina just below the Va.-N.C. line. Others, as noted, came from Northampton County, North Carolina. (Jack Redmond is a student at Chowan College, Murfreesboro, N.C., and resident of the Richmond, Va., area.)

- Eastern Ribbon Snake 1
- Rainbow Snakes (2 DOR) 3
- Red-bellied Water Snakes 3 ( 1 Northampton County, N.C.)
- Brown Water Snakes 7 ( 4 Northampton " " )
- Northern Water Snakes 11 ( 2 Northampton " " )
- Black Rat Snakes 6 ( 2 Northampton " " )
- Eastern Hog-nosed Snake 6 ( 4 young, about nine inches)
- Black Racers (Coluber) 2
- Rough Green Snakes 2 (both DOR - dead on road)
- Northern Brown Snakes 3
- Scarlet Snake (Cemophora) 1 (Northampton County, N.C.)
- Copperhead (intergrade?) 1
- Eastern Cottonmouth 1 (DOR, measured 5ft. 4 inches)

Common Snapping Turtles and Eastern Painted Turtles were common in the Meherrin River, as were many large specimens of Pseudemys. Unfortunately, these last were far too wary to allow capture.

Both Fence lizards and Five-lined Skinks were well represented. Going by Conant's Field Guide I also caught a Southeastern Five-lined Skink. I also missed a huge male skink that by his size could only have been a Broad-headed Skink. This fine specimen avoided capture by swimming under 18 inches of water and hiding in the leaves.

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TWO-LEGGED "SNAKE" (See VHS Bulletin No. 28) Mr. Birchfield of the Evening Star, Washington, D.C., writes that your editor missed a later column about the snake with "legs". Mr. Birchfield took the snake to Dr. Doris Cochran, Curator of the US National Museum's Division of Reptiles and Amphibians. It turned out that the snake had swallowed a frog just before being stepped upon by a cow. The cow's hoof slit the side so that the frog got both its front legs through. Dr. Cochran cut the frog out, identified it, and kept both snake and frog. Jim Birchfield asked us to bring you all up-to-date. Well, that disposes of one of the two "snakes with legs". Others?

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..... (detach) ..

APPLICATION FOR MEMBERSHIP IN THE VIRGINIA HERPETOLOGICAL SOCIETY

(name) \_\_\_\_\_ (check one)  
 (address) \_\_\_\_\_ ( ) introductory  
 (city or P.O.) \_\_\_\_\_ State \_\_\_\_\_ ( ) renewal  
 (county --if Va.) \_\_\_\_\_  
 (occupation) \_\_\_\_\_

PLEASE HAND LETTER or TYPE ABOVE.

Dues: \$1.00 a year -- covers membership card, bulletins, postage. Send money order or check to: Dr. Phoebe H. Knipling (Treasurer). Note on check "for VHS dues" and mail with this detachable stub, to: 2623 Military Road, Arlington, Va. Membership card will be sent with the next issue of the VHS Bulletin (allow minimum of one month).

## LAST BULLETIN FOR "INACTIVE" LIST

If you haven't paid Society dues for the past two years, never wrote the Treasurer or Secretary of your interest and haven't returned either the VHS reader's questionnaire or the post card enclosed with Bulletin No. 28; you are well on the way to becoming an inactive member.

VHS must trim its list of over 350 to the 250 we know are at least occasionally supporting our work by their activity and dues. VHS wants to add 200 high school science and biology instructors to the mailing list in order to put the Bulletin in as many high schools in the nearly 100 counties and major "free" cities in the state of Virginia. The Bulletin is mailed FREE to instructors until they express a desire to become a member of the Society.

So, if you are not an instructor or educator, and you haven't communicated with VHS in over two years, you are slated for removal from the mailing list for VHS Bulletin No. 30. Let's hear from you!

INTERESTING THINGS ARE IN STORE FOR THOSE WHO REMAIN BULLETIN READERS --AND, WE HOPE, CONTRIBUTORS:

- (1) A Statewide Meeting in the Richmond, Virginia, area this Fall;
- (2) The Society's new roster of members and friends by county;
- (3) Field identification notes in "key" format for the "SNAKES OF VIRGINIA" (with diagrams);
- (4) Distribution records on reptiles and amphibians of Va.
- (5) Nomination and election (in Fall) of 1963-1964 VHS officers.

WE ASK ONLY THAT YOU LET US KNOW THAT YOU ARE INTERESTED IN VHS!

VIRGINIA HERPETOLOGICAL SOCIETY BULLETIN No. 29  
Treasurer: 2623 Military Rd. Arlington, Va.  
Secretary: 4706 Tallahassee Avenue,  
Rockville, Maryland..  
(Return Postage Guaranteed)