VIRGINIA HERPETOLOGICAL SOCIETY

BULLETIN No. 82 March-April 1977

DISTRIBUTION NOTES ON THE YONAHLOSSEE SALAMANDER IN SOUTHWESTERN VIRGINIA

by (Dr.) Douglas W. Ogle**
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A range extension for the Yonahlossee salamander (Plethodon yonahlossee) E. of the New River drainage in PULASKI County, VA, is cited. This locality is the northernmost for the species and adds a new county to the Virginia records. The collection and dispersal of this salamander along the southern Blue Ridge escarpment in CARROLL Co. VA, is described and related to earlier texts.

The distribution of the Yonahlossee salamander (P. yonahlossee), generally considered somewhat restricted in range, has been summarized for Virginia by Hoffman (1967), and discussed in detail by Highton (1971). Two new localities will provide additional information about the range and natural history of this organism.

In summer 1975, while collecting plants in the Fisher's Peak area of CARROLL County, VA (Lambsburg Quadrangle, U.S.G.S. 7.5' series, 1965), I often turned over rocks and logs to look for salamanders. In several places along the top of the escarpment, from Fisher's Peak northeast to Fancy Gap, I found the slimy salamander (P. glutinosus) and an occasional red-spotted newt (Notophthalmus viridescens), but nothing else. However, as I started going to lower elevations, I began to find specimens of P. yonahlossee. At the base of the escarpment, in identical habitats, several species of Desmognathus were found.

During the last week of July, on a damp foggy night between 10 and 11, I collected two adult and four juvenile specimens of yonahlossee below Rich Mountain near the end of County Rte. 716. The specimens were given to Dr. Eugene Gourley* at Radford College, VA. At a later date, typical specimens were collected and sent to the National Museum of Natural History (Smithsonian Institution) Washington, D.C. (USNM-202,724-725). All the specimens were taken under Rhododendron along an old logging road at an elevation of 2,760' (650m), and, as Hoffman (1967) stated, no other species were seen at this time.

The following day I found a specimen at 1,720 ft. (530 m), on an old access road below Rich Mountain and an extremely large adult just northeast of Lambsburg, VA, near the base of the escarpment. These results would seem to indicate that further collection along the escarpment in CARROLL and PATRICK Counties should produce more specimens.

On October 3, 1976, on a collecting trip with C.E. Stevens, I again found yonahlossee under a log in colluvial soil (consisting of washout, rock, and cliff debris, --the material of avalanches) at the base of Brannon's Knob, PULASKI County, VA, at 2,570 feet (792 m.) (Mack's Mountain Quadrangle, USGS 15' series, 1965). This locality, 1.3 mi. (3 km.) NE of the CARROLL County station reported by Hoffman (1967) is important in several respects. Adding a new county to the Virginia records, the site is the

* VaHS member

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Yonahlossee Salamander in Southwestern Virginia (continued)

northernmost for the species, and establishes yonahlossee northeast of Big Reed Island Creek into the Mack's Mountain area. The topography is such that further collection around Mack's Creek or Big Laurel Creek might further extend the known range of this lovely animal.

When compared to published information on the species, these results provide interesting data. All specimens were taken more than 100 ft. (30 m.) from streams as mentioned in Pope (1950). Although the species has been reported from elevations varying from 1,500 ft. or 457 m. (Newman 1954), to 5,700 ft. (1,737 m.) (Conant, 1975), the individuals collected and observed were taken from lower elevations (none above 2,800 ft. (854 m.) and no hybrid material was detected. This seems to substantiate Highton (1971) in that the populations at the fringe of the range seem to occur at lower elevations than those toward the center. The collections are unusual in some aspects, too. More yonahlossee were taken than glutinosus, and although on Rich Mountain the range of the two species overlap, there does seem to be a correlation between population density and elevation; i.e., above sea level.

It would be very interesting to learn what effects the environment and competition have on limiting the distribution of P. yonahlossee, especially in the fringe habitats of the Blue Ridge Mountains.

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References:

Conant, R., 1975. A Field Guide to Reptiles and Amphibians of Eastern and Central North America, 2d edition. Houghton Mifflin Company, Boston, MA.

Highton, R., 1971. Distributional Interactions Among Eastern North American Salamanders of the Genus Plethodon, pp. 139-188. IN P.C. Holt (Ed.) The Distributional History of the Biota of the Southern Appalachians, Part III Division Monograph #4, VPI & SU, Blacksburg, VA.

Hoffman, R.L., 1967. Distributional Records for Three Species of Plethodon in Virginia. The Radford Review, Vol. 21, No. 3, pp. 206-209.

Newman, W. B., 1954. A New Plethodontid Salamander from Southwestern Virginia. Herpetologica, Vol. 10, pp. 9-14.

Pope, C.H., 1950. A Statistical and Ecological Study of the Salamander Plethodon yonahlossee. Bulletin of the Chicago Academy of Science, Vol. 9, pp. 79-106.

MANY COLLECTION RECORDS OF VIRGINIA HERPETILES IN

During 1976-1977, VaHS received a large number of records of amphibian and reptilian specimens collected in VA over the past 100 years. Much of the credit should go to Joseph C. Mitchell, VaHS member, and coordinator of the new phenology program. He has succeeded in soliciting a magnificent response from many major scientific institutions in the eastern and central United States. These include natural history museums sponsored by a municipality or a sizable university. Placing all of these data on the VaHS Survey maps is taking all of the spare time of the editor not devoted to the production of the VaHS BULLETIN. This is more a tribute to the volume of material than to the time spent on the map posting.

Individual contributions of data with VaHS collecting data slips completed for specimens will be put on the large VaHS Survey maps during the operation.

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NOTICE OF PUBLICATION

During 1977, VaHS will be publishing a completely revised compilation of maps. These will be less than $8\frac{1}{2}$" X 11" versions of the VA. HERPETOLOGICAL SURVEY maps, but based on those permanent records.

These maps will show what records exist, species by species, for all of Virginia. All records will be based (1) on actual specimens in major collections across the U.S. and (2) by photographic record (usually 2" X 2" color slides of captured and released specimens.) The latter are largely a way of "filling in" large gaps in distribution within the known range of the Virginian (indigenous or native) varieties. (See VaHS BULLETIN No. 80)

We hope this will give a boost to the "adopt-a-species" and revive the "adopt-a-county" programs for clearing up some of the zoogeographic puzzles of which we have more than our share in VA.

REPTILES and AMPHIBIANS are not limited by strict political boundaries, but we find it convenient to inch up on the tremendous size of the state through a county-by-county survey.

Distribution of species is controlled more by the availability of suitable habitat.

SALVAGE PROGRAM:

Many specimens, particularly reptiles, can be collected as road kills. If the specimen was not destroyed (i.e., if the species is recognizable), the specimen should find its way into a suitable scientific collection. It is especially recommended if the species is a rare one for which there are few records. Take safety precautions on the road during such salvage operations. If in Federal parks, such as the Skyline Drive or Blue Ridge Parkway, collecting isn't permitted under ANY circumstances without a NPS Collecting Permit. Bring such salvagable specimens to the attention of a NPS ranger or Park Naturalist.

Use the VaHS Collecting Data Slips. A specimen without adequate data is also without value. Data should be filled out when still in the field--don't depend upon your memory! For specimens reported through the VaHS system the collector(s) will be credited by notes in the VaHS BULLETIN and entry in the records of the VA Herpetological Survey volumes-- a permanent record.

VaHS LENDS ENCOURAGEMENT TO NATURAL HISTORY OBSERVATIONS AT VA YCC CAMPS

Some excellent environmental programs were conducted at the Youth Conservation Corps (YCC) camps around Virginia in recent summers. One such study is carried in this VaHS BULLETIN.

In conversations with the Division of Parks' and the Department of Education's representatives, we have opened VaHS BULLETIN's pages to YCC participants' observations relating to amphibians and reptiles.

We have proposed to carry: (1) Any good records or notes on observations prepared by YCC participants that may make real contributions to knowledge of local plants and animals. Interrelationships must be shown to local reptile and amphibian life forms.

(2) The notes will carry full credit to the YCC observer(s) and YCC Camp staff advisers (biologist or naturalist, etc.).

(3) These data, observations, or wildlife lists will become a part of the state's reptile and amphibian survey.

Since some of the camps are in areas of Virginia that have been virtually unsurveyed (from an ecological viewpoint) we may be able to establish that

(See Camp Mitchell, YCC, Report -- on page five.)

an unexpected reptilian or amphibian variety does occur. In some cases, it would be a contribution to determine that the expected varieties occur.

We must stress that VaHS is primarily interested in reptiles and amphibians albeit, with reference to natural habitat: plants and associated animals in proper perspective.

We believe this will give the local natural history a boost. It will also add to the statewide survey which VaHS has had underway since early 1961.

We have requested that the YCC staff encourage their YCC camp participants to send any notes or data to the VaHS for use. We will do a little cutting or polishing as necessary to conform to VaHS BULLETIN format, and to reflect well upon the participant's efforts.

VaHS is preparing a kit of materials that may be useful to YCC staff biologists, naturalists, or others who are working closely with this program.

YCC Camp Directors are included in the list of VA summer camp and park naturalists who will receive information kits from VaHS during this summer '77.

GAP IN VA RANGE OF SMOOTH EARTH SNAKE TO BE FILLED?

A specimen of the eastern smooth earth snake (Virginia valeriae valeriae), has been recorded for the first time from SCOTT County, VA. (See Dr. Conant's Field Guide, Map #24). There has been a large gap in the range of this species until the collection of this specimen by Ms. Charlotte Howington, a student at East Tennessee State University in 1974. Ms. Howington was a member of Dr. Fred J. Alsop's vertebrate zoology class. She keyed the specimen to Virginia valeriae but raised the question since Conant's 1958 Field Guide showed that the species had not been taken in that area.

Dr. Fred J. Alsop, III, Assistant Professor of Biology at East Tennessee, at Kingsport University Center, Kingsport, Tenn., also keyed the snake to Virginia valeriae.

The specimen came from 1 mi. west of Rye Cove, SCOTT County, VA.

The specimen was collected on a path in the open near a cedar grove about 1:00 p.m. 13 October '74. It is temporarily in the possession of Franklin J. Tobey, Jr., Loudoun County, VA. It will be returned to Kingsport Univ. Center in early summer.

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VaHS BULLETIN: A mailing consists of 200 to 300 VaHS BULLETINS. The first mailing is sent to VaHS members and "exchange"-members in other states. The second mailing goes to prospective members and, in summertime, to camp & park naturalists.

MEMBERSHIP CARDS (VaHS)

Your updated membership card should be enclosed in this VaHS BULLETIN.

Those not receiving a new card with VaHS-B# 82 may write:

VaHS Secretary
P.O. Box # 1376
LEESBURG, VA 22075

if an error has been made please say so.

If support has not been kept current, please send your contribution to:

Mr. Louis C. Baker,
VaHS TREASURER,
Yorktown High School
5201 No. 28th Street
Arlington, VA 22207

Recommended Support Rate:

Science Faculty	$1/year;
VA resident	$2/year;
Out of State	$3/year;
Overseas	$5/year.

Membership cards are put in the mail all at one time, yearly, so that the uniformity (weight and size) requirement under Post Office regulations will not be violated.

Member's names will be carried in a forthcoming VaHS membership roster.

CAMP MITCHELL, YCC REPORT OF 1976 PARTICIPANT

Summer 1976, I worked in the Y.C.C. (Youth Conservation Corps). I recently received a letter from my camp director, Mr. Edwin B. Swan of New Castle, VA, asking me to give any information that might be of use to VaHS BULLETIN.

The following is a listing and location of all of the reptiles and amphibians which I encountered during my stay at the YCC Camp.

The location of my work was at Camp Mitchell New Castle, VA. It is a recreational area for the residents of New Castle.

Specimens encountered were:

Snakes:

Black Rat Snake: Five ft. in length, older specimen with one blind eye. Found in graveled area leaving the border of the woods near a small-sized stream.

Northern Ringneck Snake: 9-inch specimens and two smaller young from center of a rotten log behind a cabin.

Northern Copperhead: 2-ft. specimen in stream with trees surrounding.

Lizards:

Northern Fence Lizard Found on trees around the cabins. Both females and males were in great abundance. One lizard near cabin (#3) would stay next to a garbage can and feed on the ants that lived under it. Ants seem to be the main ingredient in this lizard's diet.

Five-lined Skink: Female specimen lived under and around cabin (#3) and fed on flies and ants. It bit readily when captured.

Salamanders:

Slimy Salamander: Large (5 - 5½ inch) specimens were found under rocks or fallen, partially decayed trees.

Four-toed Salamander: In same habitat as slimy salamander and, in fact, often shared the same cover. Both found in woods behind the cabins.

Eft of red-spotted newt: Two specimens were found walking in the open on the forest floor after a rain.

Northern red salamander: Five-inch specimen found under mossy rock in a small stream near camp.

Frogs and Treefrogs:

Spring Peeper: Found in open, tree areas, and around the swimming-pool at night.

Gray Treefrog: Found around the swimming-pool area at night.

American Toad: Found mostly at night, around the small stream and the cafeteria area.

Turtles:

Eastern Box Turtle: A small, young turtle was found in the yard of the New Castle Ranger District Work Center.

(Mr.) Robert F. Wise
315 Dawn Avenue
WOODSTOCK, VA 22664

Editor's Note: We hope that this may be first of an occasional YCC report on reptile and amphibian life in the vicinity of Virginia's several YCC camps. Biologists and science teacher staff may assist VaHS by encouraging student participants.

(FJT)

FIELD BIOLOGY AND ECOLOGY AT CORNELL SUMMER SESSION JUNE 29 - AUGUST 12, 1977

The Cornell University's summer session offers eight courses at the advanced undergraduate level: Laboratory methods in biology, general ecology, plant ecology, mammalogy, ornithology, herpetology, biology of fishes, and comparative vertebrate ethology. The courses provide extensive training in field problems and methods. A variety of field sites are located in the vicinity of the Cornell campus, Ithaca, Weekend trips will enable students to visit more distant areas of interest.

Herpetology: William J. Mautz--Evolution, distribution and adaptations of reptiles and amphibians, emphasis on zoogeography, ecology, behavior, and physiology. Admission is gained through formal application. For the forms instructions, and summer session catalog---Write:

Dean of Summer Session
Cornell University
105 Day Hall
Ithaca, N.Y. 14853

For specific information about the offerings in field biology and ecology write Dr. Simon A. Levin, Chairman, Section of Ecology and Systematics, CU, Langmuir Laboratory, Ithaca, N.Y., 14853

PESTS ENCOUNTERED IN THE SUMMERTIME ---- OUTDOORS

Chiggers or red bugs are frequently encountered on field trips. Chiggers cause intense itching all over the body by biting. Bites are small to large reddish welts on the skin. Chiggers are so tiny most people cannot see them. The larval chiggers bite, not the adults, injecting a tissue-dissolving fluid. This is usually at the site of a pore, or a hair follicle under the cover of tight clothing.

Young chiggers attach themselves to the skin of people and domestic or wild animals, including reptiles and birds. The bites have a more severe effect on some people. No disease is known to have been spread by chiggers in the U.S. Dusting your socks with powdered sulfur and avoiding sitting on the ground will often prevent chigger bites.

Continued at top of next column

Continued from column one: The eight courses are open to candidates for undergraduate and graduate degrees, teachers and those interested in personal or professional improvement. Students may participate in two courses simultaneously; up to eight credits may be earned during the 6-week summer session. (Cost: $100 a credit.)

"Swimmer's itch" is often reported following wading in seawater, freshwater ponds, lakes, or rivers. The animal causing the itch is a flatworm parasite no larger than an eyelash. The cercariae of about 20 (non-primate-infesting) schistosomes cause swimmer's itch. The cercariae are known to penetrate human skin, but since people are not an acceptable host, the parasites die under the skin. The natural hosts are non-primate mammals and waterfowl. Intermediate hosts are snails. You may want to grab a biology text in this connection: Schistosome eggs in solid body wastes from infected hosts hatch in water and produce miracidia which enter snails. Sporocysts (larval forms) emerge from the snails. These subsequently produce fork-tailed schistosome cercariae, thus completing the life cycle. The cercariae produce red spots on the swimmer's body. Rapid dry-towelling the body on emergence from the water may prevent penetration.

References:

Public Health Reports Vol. 91, No.5 Sept.-Oct. 1976 pp. 469-470 (source).

Cort, W.W. (1950) Studies on schistosome dermatitis. XI. Status of knowledge... Am J Hyg 52: 251-307.

Wills, Fried, Carroll and Jones (1976) Public Health Reports (cited above as the source of this item.)

LETTERS, IDEAS, COMMENTS:

COSTELLO CRAIG TO THE RESCUE!

Having a snake for a 'pet' may not have appealed to me less than a year ago, but has recently become a very special addition to my life. Locating a 'friendly' snake in the middle of winter would have been an impossible task had I not met Mr. Costello M. Craig, a VaHS member from Bedford, VA. He very graciously allowed me to borrow one of his corn snakes (which I now call 'Sophie'), to fulfill a college requirement in one of my teaching methods classes. I decided that it would be a great opportunity for kindergartners to have a 'hands on' learning experience with a real live snake rather than me just talking about reptiles and showing pictures from story books. Well, some experience it was, but I'm not sure for whom: the children, the snake, or myself!

Living with Sophie for over a week, I was able to learn a lot from handling and simply watching her execute many locomotor skills. However, her comic 'personality' and captivating charm really began to show itself the day she visited kindergarten. After a short while, a few of the children became very interested in this new critter and, consequently, very competent in handling her. One girl, in particular, was very content just to sit and hold the snake as she watched it crawl. The situation seemed under control, so I began to read a story to the other children who were gathered around me. Well, it wasn't long before I received a tug on my arm from my snake sitter. It seems that 'Sophie's' infatuation with dark, cozy places had overcome her and she had managed to stuff almost all three feet of her body up the pant leg of this extremely startled kindergartner! All I can say is it was a good thing Sophie decided to come out on her own as I would have been a little hesitant to match strengths with her in that particular situation.

Honestly, after sharing several experiences like that with an animal, it's awfully difficult to have to give her up. But, Mr. Costello Craig came to the rescue again, for now this beautiful reptile is mine!

Gratefully,

(Ms.) Kathy Newhouse
Student Teacher for
Kindergarten & 1st Grade
Hayfield Elementary School
Fairfax County Schools, VA

SECOND ANNUAL REPTILE PROPAGATION AND HUSBANDRY SYMPOSIUM

The Second Annual Reptile Propagation and Husbandry Symposium will be held in Cleveland, Ohio, in June. The first symposium was held at the Catoctin Mtn. Zoo (Thurmont, MD) in the summer of 1976. Registration fee was $25.00. The symposium, this year, is hosted by the Northern Ohio Association of Herpetologists, Cleveland Museum of Natural History, and Case Western Reserve University. The meetings will be held on the Case Western Reserve University campus and Cleveland Museum of Natural History on June 23, 24, & 25,1977.

The sponsors of the 2nd Annual Reptile Symposium are: the Baltimore Zoological Society, Catoctin Mountain Zoological Park, the Zoological Society of Philadelphia, and Reptiland. Preregistration can be obtained by writing to:

(Mr.) Bob Johnson
Baltimore Zoo
Druid Hill Park
Baltimore, MD
21217

ADD: (ATTN: Reptile Symposium)

CONTENTS of VaHS BULLETIN No. 82