

VIRGINIAN GLASS LIZARDS

by W. Leslie Burger
 President, VHS;
 Biology Department,
 Franklin College of
 Indiana.

"Glass Snakes", "Joint Snakes", or Glass Lizards have been known in Virginia for many years. Most naturalists can recognize a Glass Lizard at a glance. How many Virginian naturalists know which species of Glass Lizards occur in Virginia? Or a more fundamental question: How do we know that these creatures are lizards?

Before 1952 Glass Lizards of the Middle Atlantic region were thought to belong to a single species, Ophisaurus ventralis. In a brief synopsis (1952) and in a detailed account (1954) Edwin H. McConkey distinguished two species in the northeastern part of the range of the genus Ophisaurus.

Eastern Glass Lizard (Ophisaurus ventralis)

Adults have white markings on the posterior corners of scales. Dark stripes are lacking below the lateral fold and in the mid-dorsal position. Old individuals become greenish above and yellow below.

Slender Glass Lizard (Ophisaurus attenuatus)

Adults have white marks on the middle of the scales. Dark stripes are present below the lateral fold and in the mid-dorsal position. Old adults are brown with irregular dark-bordered light crossbands on the back and tail.

All Virginian populations of Glass Lizards that have been examined for the above features have proven to be O. attenuatus or, more specifically the eastern subspecies, O. attenuatus longicaudus. This Glass Lizard has been found in a half dozen counties in the Coastal Plain south of the Pamunkey River and in four counties on the adjacent southern Piedmont.

Early records of O. ventralis in southeastern Virginia date from the time when O. attenuatus was not distinguished.

(W. Leslie Burger is a co-founder and second president of the VHS.) (continued on page two)

VIRGINIAN GLASS LIZARDS (continued)

Collecting notes: Like many secretive reptiles, Glass Lizards are most often seen on highways. Smashed specimens may be identified and they may be preserved if they contribute new records. Discovery of a Glass Lizard is an infrequent accident, except for one procedure. Dr. Henry S. Fitch collects Glass Lizards in eastern Kansas by gently prodding a wide swath of vegetation with a long switch as he surveys the borders of weedy fields. Shortly after dawn Glass Lizards may be flushed by this kind of methodical prodding. A collector has the opportunity for one quick diving grab.

Literature: Information on the general biology of Glass Lizards was summarized by Hobart M. Smith in the HANDBOOK OF LIZARDS (Comstock Publishing Co., 1946). Details of skeleton and scutellation show that they are related to normal four-legged lizards like the Alligator Lizards (Gerrhonotus). In their eyelids and external ear openings all of these lizards have structures that no snake has.

Edwin H. McConkey described the kinds of Glass Lizards in detail in a paper entitled "A Systematic Study of the North American Lizards of the Genus Ophisaurus" (American Midland Naturalist, Vol. 51, pages 133-171; 1954.)

In the FIELD GUIDE TO REPTILES AND AMPHIBIANS (Houghton Mifflin Co., 1958) Roger Conant reiterated and illustrated these distinctions. W. A. Brumfield's note on Ophisaurus in Virginia (SCIENCE, Vol. 86, page 494; 1937) is one of interest as the first record in the state and one of the few records in the Piedmont. A mimeographed copy of this paper is included with the current bulletin going to active* members of the Virginia Herpetological Society and to those educators who have asked to be included on the Society's mailing list. *(paid).

W. Leslie Burger, Biology Dep't,
Franklin College of Indiana

* * * * *

PUZZLING VIRGINIA LOCALITIES - - - CAN YOU HELP US LOCATE THEM ?

Where are:

- | | | |
|------------------|-------------------------------|-----------------------------|
| War Eagle | | |
| Willoughby Point | (Norfolk County ?) | Clinton ? |
| Mathias Point | (King George County) | Belcher Pond ? |
| Somerset Beach | (" " " ?) | Ellisville ? |
| Twiggs Ferry | (Middlesex County ?) | Folly Mills Creek ? |
| Grickton's Store | (Brunswick County ?) | |
| Dulinsville, | Madison County; | DETACH and USE the STUB |
| Griffith, | Alleghany County; | below. Mail to address |
| Elk Spur, | Allen's Knob, Carroll County; | provided, with information. |

PLEASE USE U.S. GEOLOGICAL SURVEY MAP, if possible, or mark on gas station map and send in with slip.

..... (detach)
This locality: near intersection of US # State # County routes:
War Eagle, County

HABITAT OF OPHIOSAURUS VENTRALIS

Two specimens of Ophiosaurus ventralis were discovered in Cumberland County and one specimen in Buckingham County, Va., in September, 1937. The first two specimens had been killed on the highway by automobiles; the third one was captured and is now in the possession of the farmer who found it in Buckingham County. The distance from the most eastward to the most westward of these finds was about twenty miles. These counties are in Piedmont Virginia, about seventy-five miles north of the North Carolina line and 150 miles west of the Chesapeake Bay.

Since Ditmars places the Northern limit of this reptile in the eastern part of the United States as North Carolina, and Jordan as "to Virginia," it seems that these are the first recorded specimens for this section of the country.

W. A. Brumfield

Southside Health District
Farmville, Va.

The above note is copied from Science, Volume 86, Number 2239, Page 494. November 26, 1937.

Further Information on the Above Glass Lizards. Professor Robert T. Brumfield, of Longwood College, recently (May 9, 1961) wrote concerning the specimens reported by his father: "Several broken specimens were found on the highway near Shephards in Buckingham County, Virginia, and at least one live specimen was taken in the woods near there. The specimens were preserved but I don't know where they were sent or stored."

Nomenclatural Note. The species Ophisaurus ventralis of 1937 has been found to be a component of several species, of which only O. attenuatus longicaudus is known in Virginia (McConkey, 1954, Amer. Midl. Nat., vol. 51, no. 1, p. 133-171). Probably the above specimens were of the latter species. Note the spelling of Ophisaurus.

W. Leslie Burger
Franklin College

October, 1961

IS THE "LESSER SIREN" IN VIRGINIA?

Dr. Bruce Collette, 1961 (Herp. 3, p. 203) reports four records of the Lesser Siren (Siren intermedia intermedia) from North Carolina and indicates that these records fill in the "gap" in the range from South Carolina to Virginia. The Virginia record often referred to is from Guinea Station, Caroline County, Va. Of the several literature references to this record: Bishop 1947 (Handbook of Salamanders, 459); Goin 1947 (Annals of Carnegie Museum 29(9): 217); and, Noble and Marshall 1932 (Am. Mus. Nov. 532: 7) no one states where this record is actually located, nor does anyone site a catalog number. Tracing such a record would indeed be difficult.

Shortly after reading the Collette article I chanced to be looking through some of the Virginia salamander records in the U.S. National Museum when I came across a record for the Greater Siren (Siren lacertina) from the same locality -- Guinea Station. I wondered if this might be the record and that a misidentification may have been made. Early in December, 1961, Dr. Coleman J. Goin came to the USNM. I asked him to identify this record and queried him on whether he thought this might be the frequently referred to record. He felt that the record was a Greater Siren (lacertina) rather than an intermedia.

The present evidence suggests that the Virginia record is, as cataloged, a Siren lacertina. If there are no other records of the Lesser Siren (S. intermedia) from Guinea Station or anywhere else, one can only wonder how Noble and Marshall arrived at intermedia. A check of the USNM catalog shows that this specimen has always been listed as lacertina.

A glance at the article by Noble and Marshall 1932 (Am. Mus. Nov. 532: 217) would lead one to believe that they saw this record in the collections of the National Museum for much of their material came from the USNM collection. According to Noble and Marshall: "We have seen a specimen of lacertina taken on the Potomac Flats, District of Columbia, while we have seen no specimen of intermedia taken further north than Guiney Station, Virginia."

Unless someone can point to a specimen of the Lesser Siren (S. intermedia) already in a collection this salamander should be removed from the state lists -- as it already has in the two lists by W. Leslie Burger (1958 and 1959) but included as possibly an expected form.

As Noble and Marshall refer to material in both the collection at the American Museum of Natural History and the one at the Museum of Comparative Zoology, one of these might also house a Siren intermedia from Virginia.

ANYONE RECEIVING THIS BULLETIN who knows of a record for the Lesser Siren (Siren intermedia intermedia) from Guinea Station (or Guiney Station), Virginia, please write:

William L. Witt

THIRD ANNUAL NATIONAL ZOOLOGICAL PARK MEETING WAS ONE OF OUR BEST

About half of our active membership attended the Third Annual NZP Meeting on Saturday, November 25. Members came from Richmond and Hampton, Va. The Hampton group started out at 8:00 A.M. to get to the National Zoo by 3:00 P.M.

Thanks are due, once again, to our fine hosts at NZP. VHS wishes to express its group appreciation for the courtesies extended. Our hosts were Dr. Theodore H. Reed, Director, and J. Lear Grimmer, Associate Director of the National Zoo. Jack DePrato's staff at the Reptile House -- Mr. Lester Ratliff, and William Xanten -- went out of their way to make the group's visit pleasant and guided the tours.

Our thanks too, to T. Darrell Drummond of Seneca, Md., who was our projectionist again. Excellent film strips of the "Snakes of Canada" and a film "Introduction to the Reptiles" were presented. All were greatly enjoyed.

William L. Witt and William A. Xanten provided illustrated talks on Virginia reptiles and amphibians with the aid of excellent color slides. Our thanks to two fine VHSers for their fine teamwork!

Thanks to Wayne Willis, Tom Jones and Lester Via for special services in making the seating arrangements possible. The upstairs chamber -- second floor of the reptile house -- had been used as a temporary aviary for some spectacular tropical wading birds and it was not available. The main floor of the Reptile House served excellently. Thanks to all who waited patiently until the floor could be readied!

Since the meeting the Reptile House has received two King Cobras (*Naja hannah*) from Thailand. One is 16 feet in length and is on exhibit. The second, 10 ft., is "behind the scenes," at least for the present.

BRIEF REPORT ON THE VHS READER'S QUESTIONNAIRE -- IS YOUR'S IN?

The VHS Reader's Questionnaire was received most enthusiastically by all types of members -- biology instructors, museum curators, graduate students, college and high school biology students and adult amateur herpetologists. Your response has been encouraging to the Officers of the Society. VHS serves an essential purpose. It is the only group which is determined to do a much-needed job on the long-neglected herpetology of Virginia.

A special note of thanks is due those busy individuals who have taken time to write personal notes of encouragement. Dr. Doris M. Cochran, Roger Conant, W. Leslie Burger, Dr. R.G. Zweifel, Dr. H.G.M. Jopson and Dr. Glenn Gentry.

We welcome specific comments on the program of the Society and the content of the newsletter. We are already putting into effect some of the suggestions you have made, and we pledge to do all we possibly can to improve the service as we go along. Returns are being analyzed and a report prepared for the future.

NOTES ON REPTILES FROM WESTERN VIRGINIA (AND WEST VIRGINIA)

In the Proceedings of the West Virginia Academy of Science, Vol. 20, 1949, pages 57-64, Dr. W. Bayard Green* lists the results of the West Virginia Herpetological Survey. There are three records of interest to members of VHS. *(Marshall College, Huntington, W.Va.)

Wood Turtle (Clemmys insculpta)

Recorded from the Alleghany Mountains of West Virginia in Hampshire and Hardy Counties. VHS members collecting in HIGHLAND, AUGUSTA, ROCKINGHAM, SHENANDOAH and FREDERICK Counties, Virginia, should watch for this species. It is also reported by a reliable observer, from the Blue Ridge as far south as Front Royal. Included are WARREN, FAUQUIER, CLARK and LOUDOUN Counties, Virginia.

Spotted Turtle (Clemmys guttata)

VHS members may recall a note in VHS Bulletin No. 9 concerning a record of this species from Augusta County, Va. That record is now deemed to be an error (perhaps for Augusta, Ga.) It seemed as though this turtle did not occur in the Shenandoah Valley. The West Virginia Herpetological Survey, however, records a specimen from Jefferson Co. W. Va. The adjacent counties in Virginia are LOUDOUN County to the east, and CLARKE County to the south. The Spotted Turtle is reported to be commonly seen in company with the Eastern Painted Turtle (Chrysemys p. picta). Look for it in the Shenandoah Valley, to south.

Midland Painted Turtle (Chrysemys picta marginata)

Look for the Midland Painted Turtle in Virginia from ALLEGHANY County southward along the West Virginia line. One specimen was reported as a result of the W. Va. Herpetological Survey from Pocahontas Co., W.Va.

W.L. Witt

* * * * *

From: "KIDS STILL SAY THE DARNDDEST THINGS!" by Art Linkletter published by Bernard Geis Associates and distributed by Random House, 1961.

Art Linkletter says: "Of all the girls who've ever told me what snips and snails boys can be, I'd say the one who really convinced me was a ten-year-old intellectual who had her mind set on a very unusual career." (The conversation went like this:) "What do you want to be?" (girl) "A herpetologist." (Art) "You're the first girl who ever said that! How come?" (girl) "Because I like snakes better than boys." (Art) "What's so attractive about a snake?" (girl) "They have such beautiful big brown eyes and such sweet faces." (Art) "Then you believe that a boy as a companion definitely comes second to a snake?" (girl) "Oh no! After a snake comes a lizard, and then a tortoise, then a Gila Monster, and then comes a boy -- maybe!" (Art) "You're going to make a fine herpetologist!"

(ALEXANDRIA) SPRING RESEARCH PROJECT

It is time for members to get out VHS Bulletin No. 23 and then re-read the article by W. Leslie Burger "A Spring Research Project". It is our hope that a VHS member will turn up a record of the Tiger Salamander on the Coastal Plain this year. We need a Virginia record.

"This is the season for our herpetologists to engage in a Tiger hunt. Woodland pools of a semi-permanent nature (or not drying up before July) and not populated by myriads of predacious fish, would be the likeliest areas to Tiger hunt. Less suitable areas might, however, turn up the prize. They (Ambystoma tigrinum tigrinum) are sometimes found in window wells, cellars, etc."

John Thornton Wood, MD
(First VHS President)

Dr. Wood suggested, in a letter to VHS, that the date of arrival of another Mole Salamander -- the Spotted Salamander (Ambystoma maculatum) --- in various Virginia localities may be a useful device for determining the difference in timing of the activity seasons in different elevations and "microclimates" in the state.

A MARCH-THROUGH-NOVEMBER PROJECT

Someone has presented us with an interesting research opportunity in a nature conservatory if we can provide a responsible, mature VHS member for the project. The opportunity would have to go to a member living in northern Virginia, more specifically, someone in the vicinity of Alexandria, or within reasonable commuting distance of Alexandria.

Ideally, the project should be undertaken by a scientist on the staff of a nearby museum or zoo, or an instructor in biology at a local college or high school. A gifted student willing to work under the close supervision of a scientist or biology instructor could qualify.

The project would require a well-rounded biologist who is familiar with the reptiles and amphibians of the Coastal Plain and Piedmont.

Biology instructors, scientists, graduate zoology students will be given details, if desired. Write to: Franklin Tobey, Jr., Secretary, VHS. 4706 Tallahassee Avenue, Rockville, Md. (Telephone: WH 6-8267.)

Professor Horton H. Hobbs, Jr., formerly of the University of Virginia's biology department, has been appointed chief curator of zoology at the U.S. National Museum, Washington 25, D.C. Dr. Hobbs took office February 1. Dr. Hobbs joined VHS in June '58.

VIRGINIA COLLECTING NOTES:

On the weekend of August 20-21, 1961, Lester Via, Wayne Willis and William L. Witt paid a rather hurried visit to the southern Blue Ridge and Whitetop Mountain areas. The trip was made to become more familiar with the terrain and herpetology of this part of Virginia.

An attempt was made to locate the road going to the summit of Smith Mtn. -- the location for the latest collection of the S.E. Crowned Snake (Tantilla coronata). While this aim failed a sawmill was investigated and the following specimens were collected. County records are marked with an asterisk (*).

- Five-lined Skink (Eumeces fasciatus)
- Northern Brown Snake* (Storeria d. dekayi)
- Corn Snake (Elaphe g. guttata) alive at the National Zoo along with another from the same area taken by W. H. Martin, III of VHS.
- Worm Snake (Carphophis a. amoenus)
- Rough Green Snake (Opheodrys aestivus) a badly mashed specimen was noted on the Blue Ridge Parkway near Fancy Gap, in CARROLL County, Va., but was not saved. This would have been a county record!

Upon reaching Whitetop Mtn. no attempt was made to drive to the summit. A collecting stop was made at the WASHINGTON-GRAYSON County line. A trash dump by roadside yielded three species that were new to us:

Blue Ridge Mountain Salamander (Desmognathus ochrophaeus carolinensis) looks like just about everything else except a Desmognathid. Some looked at first glance like wood salamanders (Plethodon c. cinereus) or the Two-lined Salamanders (Eurycea b. bislineata).

Metcalf's Salamander (Plethodon jordani metcalfi) and, the Southern Ravine Salamander (Plethodon richmondi popei) -- thanks to Dr. Richard Highton, University of Maryland faculty member (who described the race) for identification.

A few hundred feet down the western slope another collection was made. This resulted in one more unfamiliar species plus an old friend in a rather different garb.

Yonahlossee Salamander (Plethodon yonahlossee) a large salamander six to seven inches long with a red stripe along its back and silvery ones on each side. It is about the same size and build as the Slimy Salamander.

Slimy Salamander (Plethodon g. glutinosus) this old friend is very different in appearance from those examples of the species found in most other parts of Virginia. The white flecks usually found along the back and sides are seen as a mass only along the sides. Only a scattering of small white dots is seen on its back.

A similar pattern occurs in S.E. Va. (continued, top of page eight)

Virginia Collecting Notes: (continued)

At a third locality still on Whitetop the only reptile taken was collected by Lester Via. Northern Ringneck Snake* (Diadophis punctatus edwardsi)

Night was falling fast when we approached a fork of the Holston river just outside Damascus, Va. The fuel tank separated from the car and was left sitting beside this river. In the intervening two hours, with the assistance of two local residents, we not only replaced the fuel tank but learned that a "soft-shelled turtle and a small mud turtle having a striped neck" were to be found in the river. If true, and these are actually the Soft-Shelled Turtle (Trionyx) and the Stripe-necked Musk Turtle (Sternotherus), then two range extensions are waiting to be picked up. The furthest that either is known to occur in Virginia is some 50 miles to the west. The Map Turtle (Graptemys geographica) might also be sought there, too, for it has been taken near Abington, Va., a few miles to the west. Also, the Mudpuppy (Necturus m. maculosus) has been collected at Glade Springs, Va. less than 10 mi. to the northwest.

Some of the unusual species have been photographed in color and are to be shown at forthcoming VHS local, regional and statewide meetings.

W.L.W.

A Checklist of reptiles and amphibians of the SHENANDOAH NATIONAL PARK is available, free, from the Shenandoah National Park Hdqrs, Luray, Va.