CONCERN EXPRESSED BY NEIGHBORS OF PRESIDENT'S COUNTRY RETREAT

The item below is reprinted from the Washington POST, Washington, D.C., on Tuesday, February 19.

Virginia neighbors in the area of President and Mrs. Kennedy's new home atop Rattlesnake Ridge at Atoka are predicting that the first family will be in for an unexpected "housewarming" on the first warm day of Spring. The uninvited callers will be snakes, they predict.

"That mountain top was not named Rattlesnake Ridge for nothing," said one oldtimer. "Only there aren't any rattlesnakes up there in the rocks behind the Kennedys' new house. The place is infested with copperheads and moccasins."

It is predicted that the snakes will come out of winter hibernation as soon as the weather gets warm and slither about the premises until next Fall unless the Secret Service gets busy in the meantime. As one resident put it: "The Kennedys had sure better observe St. Patrick's Day this year!" (St. Patrick is credited with ridding Ireland of snakes.) (Washington Post item)

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With all respect due the President of the United States, it is our hope that the snakes will observe St. Patrick's Day by becoming rare and staying away from the Secret Service throughout the coming warm seasons. That there are Copperheads (Agkistrodon c. mokeson) there is little doubt. There may be a rare Rattlesnake (Crotalus h. horridus). But we are certain there will not be any "moccasins" worth worrying Caroline and John Jr. about. It may be that the local "mocs" are the familiar, frequently mislabeled, Northern Water Snakes or a similar harmless species.

It is our hope, if this problem potential disturbs the President's family, that the President will seek the advice of able naturalists and herpetologists available to him in the Washington area. The U.S. National Museum, The National Zoological Park, U.S. Fish and Wildlife Service, National Park Service, and many other bureaus can get the kind of information or help he needs to relieve needless concern.

While the herpetofauna of Atoka may give the distaff side of the family reason for pause, we may rest assured that the President has many more serious problems which will be occupying his thoughts -- even while in retreat in the foothills of the Blue Ridge.

FJT

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The VHS BULLETIN is a newsletter appearing at least six times a year. It has a circulation of about 300. Some special issues are addressed to 300 additional individuals -- science and biology instructors in the secondary school system throughout Virginia.

VHS is a non-profit, voluntary association of persons who have a more than casual interest in the reptiles and amphibians of the Commonwealth of Virginia and adjacent states. The stated aims of the Society are scientific-educational -- the collection and communication of data on Virginia herpetofauna.

DUES: One dollar a year, payable to the Society's Treasurer, Dr. Phoebe H. Knipling, 2623 Military Road, Arlington, Virginia. Application blank appears at bottom of page 5

PROBLEMS OF VIRGINIAN HERPETOLOGY
Part IV

by William L. Witt
Co-Founder, VHS

The long-awaited revision of the salamander genus Plethodon by Dr. Richard Highton, University of Maryland faculty member and member of VHS, was published in December 1962.

"Revision of North American Salamanders of the Genus Plethodon."
Dr. Richard Highton; Bulletin of the Florida State Museum
6 (3): 235-367 (Gainesville, Fla.) $1.55

For the benefit of members who may want to post the changes in their checklists, the following are given:

Red-backed Salamander — Plethodon cinereus cinereus

No change. Range: It does seem to be missing in a number of Va. counties. Members collecting in Lee, Scott, Wise, Dickenson, Buchanan, Halifax, Mecklenburg, Brunswick, Greensville, Southampton, Sussex, Prince George, Dinwiddie, Chesterfield, Nottoway, Amelia, Lunenburg, Prince Edward, Cumberland, and Powhatan, should keep an eye out for it.

Since most of these counties are in Virginia's "Peanut Belt", collecting of terrestrial salamanders may be impossible. Dr. Highton and VHS will be interested in such records as may be obtained.

Slimy Salamander — Plethodon glutinosus glutinosus

Again no change. Range: This salamander is missing (records needed) from one or two general areas within the state and should be watched for by VHS members. It is unknown from the Eastern Shore counties of Accomac and Northampton; and from the "Northern Neck" counties --- between the Rappahannock and Potomac rivers --- King George, Westmoreland, Richmond, Northumberland, and Lancaster. It is unknown from the "Middle Neck" --- between the Rappahannock and York rivers --- Caroline, King-and-Queen, Middlesex, Mathews, Gloucester, and King William. The single exception -- it is known from Essex County.

As has been pointed out in earlier VHS Bulletins (See "Problems of Virginian Herpetology") there are TWO different-looking Slimy Salamanders in Virginia. Dr. Highton divides them into a mountain form having large dots of white and a coastal form having small white dots and a side stripe.

Continued on next page - -

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At the annual statewide meeting of the VHS the following were nominated to the offices indicated:

For VHS President: Dr. James L. Chamberlain, Biology Department, Randolph-Macon Woman's College, Lynchburg, Virginia

Leslie Earl Southall, Petersburg, Va.

Roger Henry Rageot, Curator of Natural History, Norfolk Museum of Science and Industry, Norfolk, Virginia

(Officers, continued on bottom of page 3)

"Revision of Genus Plethodon," (continued):

Jordan's Salamander — Plethodon jordani

All of the races (subspecies) of this salamander have been done away with, including "metcalfi" which was the race known in Virginia.

Ravine Salamander — Plethodon richmondi richmondi

The "Southern Ravine Salamander" race popei has been done away with. The races left in Virginia are the Northern Ravine Salamander (P. richmondi richmondi) and the Peaks of Otter Salamander (P.r.hubrichti).

Wehrle's Salamander — Plethodon wehrlei

The Salem or Dixie Cavern Salamander has been dropped and is now just classed as a Wehrle's Salamander that is isolated in a cavern system in the Roanoke Valley. The race "dixi" has been dropped.

Weller's Salamander — Plethodon welleri

The Virginia race (ventromaculatum) was dropped and becomes P. welleri once again.

Yonahlossee Salamander — Plethodon yonahlossee

No change.

Some of the professional members may find Dr. Highton's paper controversial. Such taxonomic revision will not be finished here. Perhaps, in a year yet ahead, one of our present student members may produce still another revision of this genus, or of another one. Each year man learns more about the world around him. There is no finished product to research -- just information on which to base more research.

W.L. Witt
Arlington, Va.

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RECAPITULATION IN BRIEF

Genus: Plethodon

IN	OUT
P. cinereus cinereus	
P. glutinosus glutinosus	
P. jordani	"P. jordani metcalfi"
P. richmondi richmondi	"P. richmondi popei"
P. richmondi hubrichti	
P. wehrlei	"P. wehrlei dixi"
P. welleri	"P. welleri ventromaculatum"
P. yonahlossee	

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WLW

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OFFICERS OF THE VIRGINIA HERPETOLOGICAL SOCIETY -- (continued)

nominated unanimously:

For Chairman: O. King Goodwin, Newport News, Virginia

For Co-Chairman: William L. Witt, Arlington, Virginia

For Treasurer: Dr. Phoebe H. Knipling, Arlington, Virginia

For Secretary: Franklin J. Tobey, Jr. Rockville, Maryland

A postal-card ballot will accompany members' copies of VHS Bulletin Number 33. Information on each of the nominees will be presented.

SALAMANDER LIMB REGROWTH SEEN IN DETAIL BY USE OF ELECTRON MICROSCOPE

by Harold M. Schmeck, Jr.
(from The New York Times)

Working with the powerful electron microscope, a scientist has been able to follow in great detail the process by which an animal regenerates a lost limb. The research, reported at a symposium on regeneration, confirms earlier disputed evidence concerning the process.

In the opinion of some specialists, the research has brought the essential events into clearer focus than ever before.

In the study by Dr. Elizabeth D. Hay of the Harvard Medical School, the limb regeneration process in salamanders has been observed through its full course -- from immediately before a limb was amputated to the complete regrowth of a substitute.

Salamanders are among the higher animals which possess the ability to regenerate whole new limbs as a survival mechanism.

Dr. Oscar E. Schotte of Amherst College described the work as "brilliant" and a"remarkable achievement." For that reason, and for its interest to students of the processes of growth and development, the study of regeneration is of scientific interest. . . .

The process covered by Dr. Hay involves these generally accepted events. After amputation of the salamander's limb, the cells of specialized or differentiated tissues in the stump, such as muscle, connective tissue and cartilage, dedifferentiate to a more embryonic, less specialized state. Such cells look like the mesenchymal cells, from which connective tissue arises in embryos.

A blastema, the "bud" from which the new limb will form, develops and is packed with undifferentiated cells that proliferate rapidly, differentiate into specific tissue cells and eventually grow to form a new limb.

In the larval salamander the process takes about two weeks; in the adult, two months. By use of the electron microscope, and also tracer studies in which nucleic acid in cell nuclei is "tagged" with a radioactive material, Dr. Hay said, the process can be studied in detail impossible to achieve with the ordinary light microscope.

It appears possible, in effect, to watch the dedifferentiated cells acquire the chemical machinery they need for rapid proliferation and the manufacture of new protein. Still left unanswered by such studies, to date, is the question whether a dedifferentiated cell can redifferentiate into a specialized cell form it didn't originally have. Could a former muscle cell become a bone cell, for instance ?

ROSTER: This current issue was scheduled to be the Society's roster of members. We have postponed its publication to permit time for some to prepare items of a biographical nature. Bulletin Number 33 will contain a <u>complete</u> list of members and officers of VHS.

MEMBERSHIP CARDS: If you have recently (last two months) sent in your application for membership, or requested the renewal thereof, do not be distressed if you have not yet received your new membership card. These are being processed at the printer's and we hope to have them soon.

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TASK FORCE "TIGER"

VHS members living on or near the Coastal Plain who are interested in working on a joint investigation of the Tiger Salamander in the Maryland-Virginia area should notify the secretary. Write, or phone, Franklin Tobey, (Area code 301, WH 6-8267).

Meetings will be set up with Dr. Charles J. Stine, the Chairman of the Maryland Section of VHS, at a spot near the Potomac River. It is urged that you provide a phone number where you may be reached on a week-end; Sundays particularly. Indicate your area code.

Dr. Stine will preside at the meetings and discuss TASK FORCE "TIGER" objectives and the plan of operation. It may be possible to show those attending such meetings a typical pond and, perhaps, eggs and specimens nearby.

Serious workers -- people willing to participate for several years -- are urged to attend. Let us know you are interested and we will set up an "alert" system.

Adult members with own transportation will find the program most feasible. Students below tenth grade should be accompanied by adult member, science- or biology instructor.

Review: VHS Bulletins numbered 28 (page five), 27 (page six), and VHS-B 23. Re-read the "Spring Research Project" feature article by our Society's second president, W. Leslie Burger.

Objective: Publication of reports on details of ecology and life history of the Tiger Salamander (Ambystoma t. tigrinum)is the aim. It is planned as a long-range program.

This TASK FORCE should be particularly interesting to Biology and Science Instructors and their top-notch, upper grade (advanced) students. High schools and colleges on the Coastal Plain will be given priority on information and space in the TASK FORCE "TIGER".

TIGER HUNT: You should watch for the Tiger:-- even though you may not be able to join other members in this activity. The Tigers breed under the ice in temporary pools in open fields -- cornfields -- during the early February thaws characteristic of our area. To those who have asked: "The Tiger may breed as early as the first week in January, or, according to my records, as late as the last week in February. Breeding is not sustained as it is with the Spotted Salamander (Ambystoma maculatum)."

Charles J. Stine (DDS)
Towson, Md.

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-- APPLICATION FOR MEMBERSHIP IN THE VIRGINIA HERPETOLOGICAL SOCIETY

(check one)
( )introductory
( )renewal

(name)
(address)
(city or P.O.) (State) _____.
(county, if Va.)
(occupation)

Dues: $1. a year --covers membership card, bulletins, postage.
Send money order or check to: (Mrs.) Phoebe H. Knipling (Treas.)
Note on check "for VHS dues" and mail with this detachable stub to:
Dr. P.H. Knipling, 2623 Military Rd., Arlington, Virginia.
Card will be mailed with the next issue of the VHS Bulletin.

TO: BIOLOGY INSTRUCTORS
SCIENCE INSTRUCTORS

DO YOU HAVE STUDENTS WITH AN ACTIVE OR POTENTIAL INTEREST IN HERPETOLOGY ?
THEY MAY ENJOY KNOWING ABOUT THE VHS.

THE VIRGINIA HERPETOLOGICAL SOCIETY, organized in 1958, IS STILL GROWING. (Be sure to get our 1963 Roster number.)

Do you have exceptional students who may be recommended for membership in the VHS ? Here is an outlet for science or biology interest and enthusiasm which you may wish to use as an adjunct to more formal classroom and laboratory studies. WRITE US (address appears at lower left).

Virginia High School program: Science Fair exhibitors in herpetology (or related) are offered a year's free bulletin subscription. SCIENCE FAIR PROJECT WINNERS with an exhibit in the field of herpetology are awarded a year's paid membership in the VIRGINIA HERPETOLOGICAL SOCIETY. Let us know who the deserving students are and provide their addresses.

IF YOU ARE INTERESTED IN OUR PROGRAM, and especially if this bulletin is not addressed to You, personally, WRITE US to be certain that your name appears on the VHS mailing list.

VIRGINIA HERPETOLOGICAL SOCIETY Bulletin No.32
Treasurer: 2623 Military Road, Arlington, Va.
Secretary: 4706 Tallahassee Avenue,
Rockville, Maryland
(Return Postage Guaranteed)

to: Bio-Science Dep't Head