THE NATURE CONSERVANCY LAUNCHES "NATURAL AREA" INVENTORY

The Virginia Chapter of THE NATURE CONSERVANCY is undertaking the preparation of an inventory of natural areas in Virginia. The purpose: to place on record an important body of information about the ecological resources of the state and to provide guidance for the land preservation efforts of THE NATURE CONSERVANCY and other organizations.

For purposes of the inventory, a "natural area" is defined as "any outdoor site that contains an unusual biological, geological, or scenic feature, or else illustrates common principles of ecology uncommonly well." This is the definition adopted in the published Indiana survey: "Natural Areas in Indiana and Their Preservation," by Lindsay, Schmelz, and Nichols .

Information about each area will be recorded on a special form sheet devised for the purpose. The completed inventory will be kept on file by the Virginia Chapter of TNC and will be available to interested and qualified persons.

Members of the Virginia Herpetological Society are urged to cooperate in the project by recording information about any that, in areas their opinion, fit the above definition. We should certainly have a record of localities in Virginia containing unique breeding colonies of reptiles and amphibians. Many VaHS members, doubtless read a recent (news) report to the effect that a power company in Maryland containing that "state's only known population of a particular species of frog." (See editor's note.) Had the unique value of the pond been more widely known, perhaps the company could have been induced to modify its plans. Incidents such as this exemplify the need for a comprehensive listing of our state's unique habitats.

Copies of the form sheet used for the inventory may be obtained from Dr. Robert J. Watson, 2636 Marcey Road, Arlington, VA 22207. The completed forms should be sent to Dr. Watson of TNC, who is a VaHS member, for entry in the inventory.

'SNAKES of VIRGINIA' IN VIRGINIA WILDLIFE (FEB)

VIRGINIA WILDLIFE magazine will carry an article on SNAKES of Virginia in early 1974 issues. Author: Mr. Joseph C. Mitchell, VaHS member of long standing, a student at Virginia Commonwealth University, Richmond. Part One is in February, 1974, issue of WILDLIFE.

If you are not alreadya VIRGINIA WILDLIFE reader now would be a good time to start the subscription, write:

The Va. Commission of Game and Inland Fisheries P.O. Box 11104, Richmond, VA 23230

(Editor's note: The news paper account misquoted J. D. Hardy of Chesapeake Biological Laboratory, Solomons Island, Md. The of the Narrowcolony mouth Frog (Gastrophryne c. carolinensis) was the only one in the county, one of three known colonies in the state (Md.). Telephone conversations with Mr. Hardy confirmed a suspected exaggeration, nonetheless, a regrettable incident.) FJT

"COLLECTING WITH A CAMERA" (Part Two) by Mr. George Prewster, VaHS, is continued on pages 5 to 7 of this VaHS FULLETIN.

SUMMER HERPETOLOGY COURSE OFFERED AT MOUNTAIN LAKE ALONG WITH SEVEN OTHERS:

The University of Virginia announces eight graduate courses in biology to be offered at the Mountain Iake Biological Station, near Pembroke, VA., this summer. The courses are:

Applications for the courses or requests for added information will be received by:

The Director, Mountain Lake Biological Station, Univ. of Va., Gilmer Hall Charlottesville, VA 22903

VaHS MEETING IN APRIL AT OLD DOMINION UNIVERSITY

The next meeting of the VaHS will be on Saturday, 20 APRIL 1974 at OLD DOMINION UNIVERSITY, Science Bldg. (2d floor)

Dr. David Delzell, Dep't of Biology, will be host.

*VaHS member

First term: 12 June to 16 July 1974

Principles of Ecology ----------Biology of Mosses ----------HERPETOLOGY ----------Invertebrate Zoology

Second term: 17 July to 20 August

Aquatic Ecology

Ecological Genetics ----------Taxonomy of Seed Plants ----------Mammalogy ----------

The building is located on the corner of Hampton Blvd. and Bolling Ave.

All VaHS members within the area, or others who happen to be in the Great Dismal Swamp area for the weekend would be welcome. Some of us may drift over into Virginia Beach (the former PRINCESS ANNE Co.) for a field trip. This

Dr. William E. Odum University of Virginia Dr. David A. Breil Longwood College *Dr. Harry G.M. Jopson Bridgewater College Dr. Fred A. Diehl University of Virginia

Dr. George M. Simmons, Jr. Virginia Polytechnic Institute & State Univ. Dr. David A. West, VPI & SU Dr. Warren H. Wagner, Jr. University of Michigan *Dr.Charles O. Handley, Jr. U.S. National Museum of Natural History

will not be an organized "hunt" but will be done on the basis of several small groups; no specific site or time. Local VaHS coordinator is:

(Mr.) D. R. Hollowell* 2804 Sterling Pt. Drive Portsmouth, VA 23703

VaHS MEETING APRIL 20th 1974 MARK YOUR CALENDAR NOW - - -

OLD DOMINION UNIVERSITY, NORFOLK.

EASTERN SEABOARD HERPETO-LOGICAL LEAGUE MEETINGS:

OCTOBER 1973 ESHL MEETING ENJOYED BY ALL ATTENDEES! by Robert J. Gagnon, VaHS, Mechanicsville, VA.

The ESHL meeting in Philadelphia was chaired by Mr. Mal Skaroff. Sponsors were the Phila. Herpetological Society. After the introductions, the meeting got underway with slide showings. All of them were very good. Each constituent society representative stood to say: "Hello!" A tour of the Philadelphia Zoo's reptile house was made at about 4:30 p.m. following the slide talks. The reptile house very fine with many good specimens including three large Gaboon vipers, and an albino rattlesnake and several other species of snake not normally seen in any other collections.

The program included: Mr. Saul A. Friess, NYHS, Photography as a Tool in Herpetology; Dr. Robert Feuer, Phila. College of Pharmacy and Science, PHS, Selective Stabilizing of Mortality in Snakes; Mrs. Elizabeth Buckley, Wyeth, PHS, The Dangers of Active Immunization of Humans with Snake Venom. Dr. Glenn Slemmer, Inst. for

Cancer Research, PHS, Breeding the (true)Albino Corn Snake; Mr. Robert Zappalorti, Staten Island Zoo, NYHS, A Turtle to Save--Clemmys muhlenbergi.

MARCH 1974 ESHL MEETING WILL BE IN BALTIMORE AREA

The next meeting of the ESHL will be March 2, 1974 at Essex Community College near Baltimore, Md.

The meeting is to be held in the lecture hall of the college's Administration Building, noon to 5 p.m., and will be sponsored by the Maryland Herpetological Society.

Essex Community College is located between I-95 and U.S. 40 (Pulaski Hwy) near Exit #33 of the Baltimore Beltway (I-695). Approach is via Exit #32, turn north onto Belair Rd. proceeding to Ridge Rd. Follow Ridge Rd. to Rossville Blvd. (under I-95) to Ridge Rd. extended, to college. If you reach Md. Rt #7 (Philadelphia Rd.) you have gone too far!

Program speakers include: Mr. J.D. Hardy, MdHS; D. S. Lee, MdHS; H.S. Harris and Dr. R.S. Simmons, Md. HS. Anyone interested in presenting a paper please contact Dep't of Herpetology, Natural History Soc. of Md. 2643 No. Charles St. Paltimore, Md. 21218 or call Herb Harris evenings (301) 644 -1141. Those using public transportation are urged to contact MdHS in advance for transport from Baltimore to the college site.

Exit #33 is the junction of the Balto. Beltway and Interstate 95 (Virginia residents please note --- exit at #32 to Belair Rd. to North and Ridge Rd.).

ESHL-The Eastern Seaboard Herpetological League is a federation of the city and State herpetological societies along the east Member societies coast. include the Massachusetts Herpetological Society, Connecticut HS, New York (metropolitan) HS, Muhlenberg Group (N.J.) Phila. (metropolitan) HS, MdHS, Washington (metropolitan DC-Va.-Md.) HS and VaHS (statewide). VaHS is a founding member of ESHL.

THE EASTERN KING SNAKE IN SHENANDOAH NATIONAL PARK

The literature records and one old specimen in the Park (SNP) collection are somewhat vague as to location. On July 8,1973 Ranger Malcolm Ross found a DOR+ Eastern King Snake (Iampropeltis g. getulus) on the Skyline Drive at mile 9.8 (elev. 2,250 ft) WARREN County, Virginia. This specimen was deposited in the SNP collection. On July 10, I found a live specimen on the Skyline Drive at mile 16.5 (elev. 2,950 ft) RAPPA-HANNOCK County, VA. This snake measured 33 inches and was photographed and released. Photos are in the SNP file. On August 28, Ranger Norman Trout found a DOR specimen on Skyline Drive at Shenandoah Valley Overlook, mi. 2.6 (elev. 1,400 ft) in WARREN County, VA. This specimen was not preserv-All three of these snakes were found during periods of prolonged hot, dry weather. Possibly, they were prowling in search of water or moisture. Wilson C. Estelle, Shadwell, VA., reported a live eastern kingsnake on Skyline Drive between Afton and Jarman Gap in ALBEMARLE County, VA., (on what may be the ALBEMARLE -AUGUSTA county line). (continued in next column)

COLLECTING NOTES:

Reports should be backed by live specimens, photographed and released, or by preserved specimens in a scientific collection.

This summer, W.H. Martin, II, Leesburg, VA found one DOR Eastern Kingsnake in the Shenandoah Valley but he has not been able to pinpoint the location on the map.

The distribution of the E. kingsnake in northern and western Virginia seems to be spotty. I never saw them in LOUDOUN County where I lived for a number of years. Collectors in New Market and Bridgewater in the Shenandoah Valley report none. They are known from the South Branch Valley in the West Virginia Panhandle. Data from the western part of Virginia are too meagre to know whether or not the West Virginia population is isolated.

Collectors in FREDERICK and SHENANDOAH counties may help fill in the gaps.

(Mr.) W. H. Martin, III Rt.#3, Box 138-C Elkton, VA 22827 NEW COUNTY RECORD FOR CAROLINE COUNTY, VA.

In 1967, Dr. Ann Pace of the University of Michigan (Ann Arbor) taped a frog chorus along U.S. Rt. # 301 south of Bowling Green, VA. When the tape was checked, it included the call of the Carpenter frog (Rana virgatipes) among the more expected frog voices. The carpenter frog been recorded only in the of the vicinity Dismal Swamp until very recently. Dr. Roger Conant brought this matter to the attention of MdHS and VaHS. Jerry D. Hardy Chesapeake Biological Laboratory, Solomons, Md., and later, Dr. John B. Funderburg, Randolph-Macon College, Ashland, VA., collected specimens at the site of the earlier tapings. A specimen has been deposited in the collection of the National Museum of Natural History by Dr. George R. Zug. It is USNM #195,859. A dot has been placed on the VaHS distribution map for this species. This represents a significant range extension in Virginia. An opportunity is presented for checking in the counties between the Dismal Swamp and CAROLINE County to see if there are other pockets of the carpenter frog which have remained undetected.

⁺D.O.R. = Dead on road.

by: Mr. George Brewster
Arlington, VA

VaHS asked Mr. George Brewster of Arlington, Va., to write an article nature photography. There is an alternative to the establishment of a small collection of preserved specimens. Some of the smaller colleges and any high school may prefer to go the route Mr. Brewster recommends. It is one that should save a number of reptiles and amphibians for the gene pool -and keep them out of the formaldehyde jars!

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Part II of the Brewster article is presented here; Part I appeared in VaHS Bulletin No. 72. If you did not receive a copy please write the editor.

LIGHTING

Lighting is the key to good pictures. Recognizable pictures can usually be made by daylight, whether direct sunlight or the flat light of a cloudy day. Sunlight is usually good light, but you should at least use a reflector to fill in the dark shadows. And some subjects are very unhappy in sunlight.

Cloudy or hazy skies make for easier work, but they may give flat, uninteresting pictures. They may also give poor color, especially with certain films.

The use of artificial lighting is usually desirable, either alone or in combination with sunlight. In using a flash with sun, the exposure can be based on either light source, the other being taken as fill light. Floodlights should ruled out; they require special film for color balance, and they are too hard on the subjects.

Blue flashbulbs and electronic flash are both suitable. Electronic flash is usually more satisfactory. Excellent small units using penlite batteries are now available for less than \$25. These are cheaper in the long run than bulbs.

Your scientific purposes can usually be achieved by the use of a single flash at the camera. More pleasing results can be obtained by moving the light source to one side and using a reflector on the opposite side. Easier and better is the use of two flashguns. Exposure for multiple flash can be determined from the principal light source. Only if two or more lights are at nearly equal distances from the subject is it a MUST to allow for both.

The best lighting for really exciting shots is usually two lights in front of the subject and one behind it. Care must be taken to prevent rays from the backlight from striking the lens.

PARTTWO

The use of a number of lights requires practice and experimentation. It also requires some sort of equipment to hold the various guns. Multiple flash is accomplished in two ways: You can have "slave" units triggered by the flash of the main unit connected to the camera. Or you can obtain multiple conand nectors extension cords and hook everything up to the camera. The various units must all be the same phase (i.e., wired the same way) or the flash contacts in the camera may be damaged. One way to insure this is have all identical units.

Perspective can be a problem. The recommended bellows and long-focus lens eliminates many problems arising from working too close to the subject, but there are others. Too high a viewpoint can give very unpleasant renditions. The ways to avoid this are:

COLLECTING WITH A CAMERA: (continued)

(1) Use a short tripod. Unfortunately, satisfactory short tripods for use with bellows-equipped cameras are virtually unobtainable.

(2) Put the subject on a table, and the tripod on the floor or ground. This isn't always as easy as it sounds; quite a bit of experimentation may be necessary before you find suitable positions for subject and tripod.

subject and tripod. (3) A better solution is the author's homemade platypod, which consists of a heavy universal tripod head mounted on a wooden board a $\frac{1}{4}/20$ screw will fit the socket of a standard tripod head. Four long screws mounted in Teenuts at the corners provide adjustments for rough terrain.

Some thought should be given to the set-up or location where the pictures will be made. There is much to be said for photographing the animal in its natural habitat -including, alas, the fact that it's commonly impossible. The larger reptiles can often be photographed where they are found. Snakes brought to bay often pose beautifully. The natural surroundings where lizards are found are often ideal backgrounds. But, those creatures who live under things have to be photographed elsewhere.

Such salamanders as the Plethodons may be coaxed into lying quiet on a nearby patch of moss, or perhaps on top of the log under which they live. Elaborate lighting setups for these field shots are unusually impractical except for such patient animals as toads.

Most of the best pictures are made at home. borrowed animal should be returned not to what you consider a suitable habitat, but to the place where it was found.) A few large flat stones of different colors make fine settings for most amphibians and the smaller reptiles. With a suitable camera angle, the stone serves as both support and background.

Busy backgrounds are annoying. Obviously artificial ones are disliked by most people. A plain background, such as a rock, log, or tree is usually inoffensive. Some photographers like more elaborate set-ups which simulate natural habitats. Such arrangements best left to the ingenuity and artistry of the individual.

A neutral cardboard may be used, and may, coincidentally, serve as a reflector. Such a device can also be a nuisance; a plain wall of a house, far enough away to be cut of focus, can be quite as satisfactory. The corner between a wall and the back steps may make a good location. Among other things, it limits the escape routes available to a nervous animal.

MAKING THE PICTURE

back-Camera, lights, ground, should all be in before the position animal introduced. is net handy for Have a emergency recaptures. Focus at least approximately on the spot where the aminal will be placed. When everything is ready, bring on the animal. is highly desirable to have a helper to manage the specimen. Very skittish critters can then be held down while you focus and frame the picture. When you are ready, the helper, sensing a moment of relaxation, gives a signal and removes his hand or hands, whereupon you shoot -- fast.

Lacking a helper, you have to keep putting your back until he animal stays put long enough to correct aim and focus, and stop down, shoot. Gray treefrogs (Hyla v. versicolor) are no problem whatever; with some of the Squameta (lizarda and snakes) it is all but impossible! Cooling will quiet down all amphibians and reptiles eventually.

COLLECTING WITH A CAMERA: (continued)

They can be kept in a refrigerator until curtain call, and a pail of ice cubes can be kept handy.

Some can still be difficult after long coolingoff periods. Northern water snakes are quickly subdued by refrigerator temperatures, but freezing temperature hardly slows up the eastern ribbon snake. To photograph an eastern worm snake, I have resorted to an island of rock in a washtub of water and waited until it wearied of swimming.

Smaller animals can be photographed in a terrarium or aquarium if necessary. Great care is needed in photographing through glass. Both surfaces must be clean, and lights must be placed so that none will be reflected into the lens. aquarium is the obvious place to photograph the of amphibians, venters most of which can adhere to a vertical glass face.

Some animals will be practically unmanageable under any conditions, and must be restrained by an assistant while being photographed.

The resulting pictures may serve for records, but will never win prizes as works of art.

THE PICTURES

Usually you will want more than one picture. The specific identifying details should, of course, be shown, and this could more than one require picture. Different views are usually desirable, especially if you look on your specimens as things of beauty as well as things to document. One picture should include a ruler or scale, if size (Keep the is important. scale near to the subject, and at right angles to the optical axis.) You will probably want one picture as esthetically pleasing as possible, and free of irrelevant matter even the hardened scientist looking for a illustration textbook will pick the prettier of two pictures of equal scientific value.

Some specimens will change patterns and color while under your care. Records of these changes are very interesting, and are one of the things a collection of specimens

won't give you. Depending on your particular interests, you may want other special slides. to record individual as well as specific characteristics, and go out of my way to photograph variants. You could make extras for exchange with other collectors, and you should certainly have one for the VaHS records. Duplicates can always be made, but extra originals are cheaper and better.

Specimens should be num. bered just as they would be in any collection. The slides should all carry the specimen number and another number. equivalent of a museum label could be kept in a 3"X 5"card file. I keep another record for all species: an extra looseleaf page or pages as an appendix to the monograph of the species in the Catalogue of American Amphibians and Reptiles, where all my notes are recorded along with the numbers and description of slides and negatives. Needless to say, I have personal appendices to monographs that haven't yet been published; it makes my copy of the catalogue one of the most interesting in existence.

LETTERS, IDEAS, COMMENTS:

Dr. CONANT IN NEW MEXICO

Dr. Roger Conant retired as Director of the Philadelphia Zoological Garden and Curator of Reptiles, Philadelphia Zoo, on May 31, 1973. Dr. Roger and Mrs. Isabelle Hunt Conant are honorary life members of the Virginia Herpetological Society (VaHS). The Conants moved to Albuquerque, N. Mex., in mid-October 1973.

Dr. Roger Conant's address is: Department of Biology, University of New Mexico, Albuquerque, N. Mex. 87106

N. Mex., 87106
He notes that the second edition of the Peterson Field Guide to Amphibians and Reptiles has been delivered to the publisher and he anticipates reading proof and checking most of the spring (1974).

"I am working in Shenandoah National Park and living at Simmons Gap. I expect to be here until December 21, and will resume at SNP in April. In my spare time, I am attempting a rattlesnake census in the Park. I saw over 300 thus far plus some babies. "(See item under "Collecting Notes" on Kingsnakes in Shenandoah National Park.) Sincerely,

(Mr.) * W. H. Martin, III 139 Shenandoah Street Leesburg, VA 22075

On May 23, 1973, at Franklin, VA., I captured a northern fence lizard (Sceloporus undulatus hyacinthinus) climbing out of a loblolly pine. It was an adult female. (Snout-vent length 7cm. tail length 6.5cm.). The temperature was in the low 80's. It was about 1 p.m. On June 1, within the Buckingham-Appomattox State Forest about 7miles into APPOMATTOX County, I captured a male northern fence lizard skittering about in a pile of dead leaves. An immature male, (snout-vent length 4.5cm.) (tail length 5cm.) Time: about 3:30 p.m., temp.was in the 70's. Previously, a male adult fence lizard was sighted in the fields behind the old Appomattox Court House (20 May 1973).

(Mr.) Bruce A. Johnson * E-2 Draper's Meadow Blacksburg, VA 24060

On Sunday, 10 February, 1974, near Lovettsville, LOUDOUN County, VA., I saw an eastern garter snake (Thamnophis s. sirtalis). What struck me was that it was resting on the snow; temperatures were mild at noontime. I picked it up and it contracted its body in a defensive manner.

(Ms.) Brenda Snowden Brunswick, Md. "I have some data on snakes that I have seen during the last year that might aid the survey of Virginian amphibians and reptiles.

August 6, 1972: Young copperhead (Agkistrodon c. mokasen) on a hillside facing Holmes Run, ½ mi. downstream from the Iake Barcroft Dam. Coloration blended in with surrounding leaves, tail was greenish. When angry (disturbed), snake beat end of tail on the ground making a rattling sound.

September 10, 1972: Eastern worm snake (Carphophis a. amoenus) 6 inches, gray above, pinkish below, very small eyes, found under 1 foot of debris (part of old trash pile from 1940's and 1950's) in pine woods not from Holmes Run, about 1 mile from Lake Barcroft Dam, near Lilian Carey Elem. School. Another small worm snake found while digging in same trash heap on November 18, 1972.

July 25, 1973: Ringneck Snake (Diadophis punctatus edwardsii) 12 inches, found under a log while hiking along South Run in FAIRFAX County.

(Mr.) Martin Brandwein 6537 Baytree Ct. Falls Church, VA 22041

^{*} VaHS Member

Organization Page:

OCTOBER 20, 1973 - AUTUMN VaHS MEETING AT VIRGINIA COMMONWEALTH UNIVERSITY

The VaHS gathering at VCU Richmond, VA., on 20 Oct. was greeted by Dr. Lewis C. Goldstein, chairman of the biology dep't of VCU, Dr. Charles R. Blem, VaHS' host, and Mr. Joseph C. Mitchell, vice president of the VCU biology club and long-time VaHS member. Organizational matters discussed were: Report on Va. Herpetological Survey including VaHS cooperation with Dr. Conant in revising his Field guide maps (Va. portion); co-operation with VPI&SU Cooperative Wildlife Res. Unit on the Virginian endangered species list; announcement of the forming of a VaHS directorate composed of college and university faculty in biology, zoology, and natural science departments in Virginia and adjacent states.

Interesting talks were given by a number of the people present. Among them, not in the order of their appearance, were:

Dr. Charles R. Blem, VCU; Mrs. Dale L. Brittle of Bowling Green, VA; Mr.

Michael Clifford, Amelia, Mr. Howard Fenton, VA; Manassas, VA; Mr. D.E. Richmond, Figg, Dr. John B. Funderburg, Randolph-Macon College, Ashland, VA; Mr. Robert J. Gagnon and Mr. William Gagnon, Mechanicsville, VA; Mr. Richard E. Goetz of Williamsburg, VA; Dr. L.C. Goldstein, VCU; Mr. Wm. D. Hart, Richmond, VA; Mr. Peter T. Hertl, Randolph-Macon College, Ashland; Mr. Dennie R. Hollowell of Portsmouth, VA; Dr. J. Michael Jones, Emory and Henry College, Emory, VA; Mr. Christopher Keeble, Emory and Henry College; Mr. Joseph A. Lewis, E&HC, Richmond, VA; Ms. Liza Lundell (ESHL) Bethesda, Md; Mr. Michael McMillan, Charlottesville, VA; Mr. Joseph C. Mitchell, VCU; Mr. Jeffrey R. Muenster, E&HC, Warrenton, VA; Dr. John F. Pagels, VCU; Mr. Richard C. Pavey, VCU; Mr. Nick Schley, Portsmouth, VA; Mr. Spilman Short, E&HC, Richmond, VA; Mr. John Steiner, Chester, VA; Mr. Franklin J. Tobey, Loudoun Heights, VA; Dr. George R. Zug (USNM) and Mr. Jon Zug, Arlington, VA.

Come to the next VaHS meeting prepared to talk about your projects and bring your slides. .

ANNOUNCED AT VaHS OCTOBER MEETING:

"... we have completed the thesis "The Rare and Endangered Terrestrial Vertebrates of Virginia," by Mr. Wayne Russ. It is 338-page report and contains a good treatment of the Virginia herpetofauna. As you well know, a lot of assistance was given this study by members of the VaHS. ... I shall be happy to send a copy for the files of the Va. Herpetological Soc .. "

(Dr.) Burd S. McGinnes Va. Cooperative Wildlife Research Unit Blacksburg, VA 24061

A list of the rare and endangered species and their status will be carried in a future issue of the VaHS BULLETIN.

DON'T FORGET THE APRIL 20 VaHS MEETING IN NORFOLK! (see bottom of p.2)

Membership cards will be enclosed with VaHS B#74 instead of the current issue to get ESHL meeting notice to all members, if possible. The details of the Balto. area meeting came in mid-February.

This is inside cover of VaHS BULLETIN #73.