SEPTEMBER, 1959

VIRGINIA HERPETOLOGICAL SOCIETY 2d ANNUAL STATEWIDE MEETING

The second annual statewide meeting, exhibit, and election of 1959-'60 society officers will be held at:

** CAMP SHAWONDASEE, near Chesterfield Court House, Virginia, on SATURDAY OCTOBER 10th, 1959

Camp Shawondasee, the Robert E. Lee Council Scout Camp is located south of Richmond, Va. near Chesterfield C.H. and at the edge of the Pocahontas State Forest in Chesterfield county. We have invited any of the Richmond area scouts or scouters interested in nature, reptile study, conservation or zoology to attend. Camp sites may be occupied by Richmond scout troops. VHS will use center-of-camp facilities only.

CAMPING: Tents, trailers, welcome near trail to lake, Ranger DeChamp will direct you. His home is at entry to camp. Occupation Friday night after supper possible. Clear area Sunday A.M.

MOTELS: Motels & hotels are available on all approaches to state Capital or in town for non-campers. VHS cannot arrange.

MEETING: Will start Saturday morning with orientation, activities and exhibit of live reptiles and amphibians; domestic and foreign. VIRGINIA SPECIES PARTICULARLY DESIRED FOR EXHIBIT:

CAGES: Supply your own. Cages, vivariums, aguaria, terrariums must be secure to protect yourself and the viewers. Fasten, bolt, or lock cages or place tape over glass corners. Padlocks are preferred on cages containing poisonous varieties of snakes.

Business session will be held(after lunch) in the stone

FOOD: Bring your own meals - two box dinners apiece will see you through the program. Lunch and supper should tide you through 'til after the evening films or slides. Bring any of these & your projector, slides or other visual ades.

COMFORT: Bring your own blankets or bedroll if camping. Scout camp will not supply bedding. Bring cushion for seat in stone council ring. Dust socks and shoes with sulphur powder (mites:)

DRIVING INSTRUCTIONS: THROUGH RICHMOND TO ROUTE # 10 which can be picked up south of the James river from Routes 161, 60, 360 1 or 301. Turn right from # 10 on 604 at curve big sign for Camp Shawondasee. COMING UP FROM PETERSBURG take exit # 6 to Route # 10, heading west toward Chester and Chesterfield C.H. From 1 & 301 take Route # 10, or #144 & # 145 through Centralia, picking up # 604 on left after going through Chesterfield C.H. Area is well marked. Routes on any good road map.

SEE YOU NEXT WEEK AT CAMP SHAWONDASEE :::: BRING YOUR SPECIMENS::

Families and friends of members are welcome. Members who wish to participate in the election make certain your dues are in for 1959. Status can be quickly determined from the membership roster carried in the last bulletin (No. 13).

A FLEXIBLE TURTLE VIVARIUM

by: E.D.B. Rogot, Bethesda, Md.

Assuming that most small pet turtles are neither wholly equatic nor entirely terrestrial, a compound situation must be met, particularly when various species are kept together. A"natural" model leads to two alternatives: a "pond" in a terrestrium: or an "island" in an aquarium. The latter is convenient for care and observation, and is flexible as well, in providing sufficient "land" and "lake" areas for different animal preferences. The major disadvantage is that the turtles should be transferred to a feeding dish each time they are given a full meal; however, this does insure adequate food for each animal and eliminates mealtime distractions.

Starting with a clear, colorless plastic refrigerator dish (see size below), air holes can be made through the lid using a hot blade or rod. For hatchlings, a secure lid is essential to prevent escape, though a 4-inch-deep tank MAY be as safe without the lid. At least half of the bottom surface is covered by a piece of slate or other thin flat stone with no sharp edges or points. Some smooth and rough pebbles of various sizes will finish the underwater terrain, leaving some area where the water will be deep enough for swimming. (A very deep tank with deep water is unnecessary and, in fact, some turtles may drown during a period of illness unless they can reach the surface to breathe by stretching the neck while all four feet remain on the bottom.)

The island is one or more thick stones, securely arranged so that an area is above the water that is large enough for all to bask. Freshly cut wood (i.e., not chemically treated in any way) is a nice floating island but far more difficult to keep clean.

For shelter and hiding some opaque plastic, moulded by heat into a tent or lean-to is fine; it can also be high enough to provide extra "dry land" on its roof. (A re-usable plastic drinking cup that is sold for picnic-ware as a substitute for paper or plastic-coated paper cups, has been excellent for moulding, cleaning and acceptability to animals. It shrinks in moulding, becoming thicker and more opaque, but it is light enough to be moved around by the smallest of the animals.)

During cool weather, when they eat only once a week, the tank need be emptied and cleaned only once a month. In summer, both the feeding and cleaning become at least twice as frequent. A sponge, used for nothing else, and bare hands with cold running tap water (NO SOAP) will clean the stones, "house" and tank. Stale water is used to refill the tank; during warm weather, especially if the tank is placed outdoors for sunning, evaporation may make it necessary to add water now and then to keep the level high enough for swimming. Small plastic boxes with stale water (or some of the tank water) make the feeding dishes. If tank water is used, it is replaced by new "stale" water. Before transferring the turtles back to the vivarium after feeding, they are gently rinsed in tap water and adherent food is rubbed off with the fingers. When the tank is cleaned, they are bathed more thoroughly.

September, 1959

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Turtle vivarium, continued:

by: E.D.B.Rogot

This thorough washing employs room-temperature tap water and a cotton swab. (This is a good time for measuring them for your records, too.)

For heat during cool nights and in winter, a goose-neck lamp with shield and 75-watt bulb directed at the island is bent over the tank: close enough to warm the stone, but not close enough to make it hot or to melt the plastic. About half of the tank is shaded with cardboard over the opposite end in place of the tank lid, or over it.

	TABLE I							
	APPROXIMATE AREA	TANK SIZE for DEPTH (inches)	NUMBER	.THIS MANY & SIZE PER TANK SIZE (inches, carapace lg)				
#	12"x 10"	4"	2	large, up to 3-4"				
#	10"x 7"	4"	1	large to 4", or hatchlings, almost to 2" or				
	12"x 6"	3½"	2	medium, 2-3" or				
#	8" x 5½"	4"	2	hatchlings (may be unstable) " ,up to 2"				
#	7" x 5"	2½" 3"	1 (or 2	small) " , lid essential.				
	$8'' \times 3\frac{1}{2}'' \times 3\frac{1}{2}''$		1	hatchling, less than 2"				
	$3^{\circ} \times 4^{\circ}$	2½" 2½"	for feed	ding 1 - 2 small hatchlings				

These have been most satisfactory sizes and arrangements tried.

Queries, notes, or comments to: E.D.B. Rogot, 5516 GreenTree Rd. Bethesda 14, Nd.

William Keeler, Falls Church, took a trip to Philadelphia to see the famed Zoo and to meet Dr. Roger Conant. Bill took along an unusual water snake found in southern Alexandria, Va. Dr. Conant identified it as a "highly aberrant Natrix s. sipedon" He noted that its dorsal pattern could pass as N. s. insularum and its belly pattern as Natrix sipedon pleuralis. Dr. Conant recommended that the specimen be preserved for scientific record. A close eye should be kept on the Water Snakes in the Potomac river area. Quite a variety of colors and other characteristics seem to occur. (Cont'd on page four....)

The bulletin cut short this time -- to get earlier date for duplication. The editor hopes this reaches members in time for them to plan for attendance at the coming:

2d ANNUAL MEETING of VHS at

CAMP SHAWONDASEE, near

Chesterfield Court House,

Route 10, south of the

state Capital, Richmond.

SATURDAY, OCTOBER 10th 1959

Fabulous exhibit :: We look forward to seeing you there:
Opportunity to compare notes with the Faculty members and many
others with an active interest in the field of herpetology.

:: SEE YOU THERE :::

The VIRGINIA HERPETOLOGICAL SOCIETY Rt. # 2, Box # 241, McLean, Virginia Return Postage Guaranteed

LIST OF VIRGINIAN AMPHIBIANS AND REPTILES

bу

W. Leslie Burger Virginia Fisheries Laboratory Gloucester Point, Virginia Revised August, 1959

Salamanders

Ambystoma jeffersonianum (Green) Jefferson Salamander
Ambystoma maculatum (Shaw) Spotted Salamander
Ambystoma opacum (Gravenhorst) Marbled Salamander
*Ambystoma texanum (Matthes). West Small-mouthed Salamander
*Ambystoma tigrinum tigrinum (Green). "Virginia" Eastern Tiger Salamander
Amphiuma means means Garden
Aneides aeneus (Cope) Green Salamander
Cryptobranchus alleganiensis alleganiensis (Daudin) Hellbender
Desmognathus fuscus fuscus (Rafinesque) Northern Dusky Salamander
Desmognathus fuscus brimleyorum Stejneger Central Dusky Salamander
Desmognathus fuscus welteri Barbour Black Mountain Dusky Salamander
Desmognathus monticola monticola Dunn Appalachian Seal Salamander
Desmognathus monticola jeffersoni Hoffman Virginia Seal Salamander
Desmognathus ochrophaeus ochrophaeus Cope Allegheny Mountain Salamander
Desmognathus ochrophaeus carolinensis Dunn Blue Ridge Mountain Salamander
Desmognathus planiceps Newman Flat-headed Salamander
Desmognathus quadramaculatus (Holbrook) Black-bellied Salamander
Desmognathus wrighti King Pigmy Salamander
Diemictylus viridescens viridescens (Rafinesque) Red-spotted Newt
Eurycea bislineata bislineata (Green) Northern Two-lined Salamander
*Eurycea bislineata rivacola Mittleman. West Midwest Two-lined Salamander
Eurycea bislineata wilderae Dunn Blue Ridge Two-lined Salamander
Eurycea longicauda longicauda (Green) Long-tailed Salamander
Eurycea longicauda guttolineata (Holbrook) Three-lined Salamander
Eurycea lucifuga Rafinesque
*Gyrinophilus danielsi danielsi (Blatchley). West Blue Ridge Spring Salamander
Gyrinophilus porphyriticus porphyriticus (Green) Northern Spring Salamander
Gyrinophilus porphyriticus duryi (Weller) Kentucky Spring Salamander
Hemidactylium scutatum (Schlegel) Four-toed Salamander
Leurognathus marmorata marmorata Moore Northern Shovel-nosed Salamander
*Manculus quadridigitatus Holbrook. East Dwarf Salamander
Necturus maculosus maculosus (Rafinesque) Mudpuppy
Necturus punctatus (Gibbes) Dwarf Waterdog
Plethodon cinereus cinereus (Green) Red-backed Salamander
*Plethodon dorsalis dorsalis Cope. West Zig-zag Salamander
Plethodon glutinosus glutinosus (Green) Slimy Salamander
Plethodon glutinosus chlorobryonis Mittleman Carolina Slimy Salamander
Plethodon jordani metcalfi Brimley Metcalf's Salamander
Plethodon richmondi richmondi Netting and MittlemanNorthern Ravine Salamander
Plethodon richmondi hubrichti Thurow Thunder Ridge Salamander

*Plethodon richmondi nettingi Green. West Cheat Mountain	
Plethodon richmondi popei Highton and Grobman Southern Ravine	Salamander
Plethodon wehrlei wehrlei Fowler and Dunn Wehrle's	Salamander
Plethodon wehrlei dixi Pope and Fowler Roanoke	Salamander
Plethodon welleri ventromaculatum Thurow Weller's	Salamander
Plethodon yonahlossee Dunn Yonahlossee	
Pseudotriton montanus montanus Baird Eastern Mud	
Pseudotriton montanus diastictus Bishop Midland Mud	
Pseudotriton ruber ruber (Sonnini) Northern Red	
Pseudotriton ruber nitidus Dunn Blue Ridge Red	
*Siren intermedia nettingi Goin. West Western Le	
Siren lacertina Linnaeus Gre	ater Siren
Stereochilus marginatus (Hallowell) Many-lined	Salamander

Frogs and Toads

Acris gryllus gryllus (Le Conte)
Gastrophryne carolinensis carolinensis (Holbrook) Eastern Narrow-mouthed Frog
*Hyla andersoni Baird. East Anderson Treefrog
Hyla cinerea cinerea (Schneider) Green Treefrog
Hyla cinerea evittata Miller Northern Green Treefrog
Hyla crucifer crucifer Wied Northern Spring Peeper
Hyla femoralis Sonnini and Latreille Pine Woods Treefrog
Hyla gratiosa Le Conte Barking Treefrog
Hyla squirella Sonnini and Latreille Squirrel Treefrog
Hyla versicolor versicolor Le Conte Eastern Gray Treefrog
Limnaoedus ocularis (Bosc and Daudin) Little Grass Frog
Pseudacris brachyphona (Cope) Mountain Chorus Frog
Pseudacris brimleyi Brandt and Walker Brimley's Chorus Frog
Pseudacris nigrita feriarum (Baird) Upland Chorus Frog
Pseudacris nigrita kalmi Harper New Jersey Chorus Frog
Rana catesbeiana Shaw Bullfrog
Rana clamitans melanota (Rafinesque) Green Frog
Rana palustris Le Conte Pickerel Frog
Rana pipiens pipiens (Schreber) Northern Leopard Frog
Rana pipiens sphenocephala Cope Southern Leopard Frog
Rana sylvatica sylvatica Le Conte Eastern Wood Frog
Rana virgatipes Cope
Scaphiopus holbrooki holbrooki (Harlan) Eastern Spadefoot

Turtles

Amyda ferox spinifera (Le Sueur) Spiny Softshell Turtle
Caretta caretta caretta (Linnaeus) Atlantic Loggerhead
Chelonia mydas mydas (Linnaeus) Atlantic Green Turtle
Chelydra serpentina serpentina Linnaeus Common Snapping Turtle
Chrysemys picta picta (Schneider) Eastern Painted Turtle
Chrysemys picta marginata (Schneider) Midland Painted Turtle
Clemmys guttata (Schneider) Spotted Turtle

Clemmys insculpta (Le Conte) Wood Turtle
Clemmys muhlenbergi (Schoepff) Bog Turtle
Deirochelys reticularia reticularia (Latreille) Northern Chicken Turtle
<u>Dermochelys</u> <u>coriacea</u> <u>coriacea</u> (Linnaeus) Atlantic Leatherback
*Eretmochelys imbricata imbricata (Linnaeus). East Atlantic Hawksbill
Graptemys geographica (Le Sueur) Map Turtle
*Graptemys pseudogeographica ouachitensis Cagle Ouachita Map Turtle
Kinosternon subrubrum subrubrum Lacépède Eastern Mud Turtle
Lepidochelys olivacea kempi (Garman) Atlantic Ridley
Malaclemmys terrapin terrapin (Schoepff) Northern Diamond-backed Terrapin
Pseudemys floridana floridana (Le Conte) Florida Cooter
Pseudemys floridana concinna (Le Conte) River Cooter
Pseudemys rubriventris rubriventris (Le Conte) Red-bellied Turtle
Pseudemys scripta scripta (Schoepff) Yellow-bellied Turtle
Sternotherus minor peltifer Smith and Glass Stripe-necked Musk Turtle
Sternotherus odoratus (Latreille) Stinkpot
Terrapene carolina carolina (Linnaeus) Eastern Box Turtle

Lizards

*Anolis carolinensis carolinensis Voigt. East Carolina Anole
Cnemidophorus sexlineatus sexlineatus (Linnaeus) Eastern Six-lined Racerunner
Cnemidophorus sexlineatus pauciporus HoffmanMiddle Atlantic Six-lined Racerunner
Eumeces anthracinus anthracinus (Baird) Northern Coal Skink
Eumeces fasciatus (Linnaeus) Five-lined Skink
Eumeces inexpectatus Taylor Southeastern Five-lined Skink
Eumeces laticeps (Schneider) Broad-headed Skink
Ophisaurus attenuatus longicaudus McConkey Eastern Slender Glass Lizard
*Ophisaurus ventralis (Linnaeus). East Eastern Glass Lizard
Sceloporus undulatus hyacinthinus (Green) Northern Fence Lizard
Scincella laterale (Say) Little Brown Skink

Snakes

Abaster erythrogrammus (Latreille)
Lampropeltis calligaster rhombomaculata (Holbrook)
Lampropeltis doliata triangulum Lacépède Eastern Milk Snake

Lampropeltis getulus getulus (Linnaeus) Eastern Kingsna	
Lampropeltis getulus niger (Yarrow) Black Kingsna	
Natrix erythrogaster erythrogaster (Forster) Red-bellied Water Sna	ke
Natrix rigida (Say) Glossy Water Sna	ke
Natrix septemvittata (Say) Queen Snat	ke
Natrix sipedon sipedon (Linnaeus) Northern Water Sna	ke
Natrix taxispilota taxispilota (Holbrook) Brown Water Sna	ke
Opheodrys aestivus (Linnaeus) Rough Green Sna	
Opheodrys vernalis vernalis (Harlan) Eastern Smooth Green Sna	ke
Pituophis melanoleucas melanoleucas (Daudin) Northern Pine Sna	
Storeria dekayi dekayi (Holbrook) Northern Brown Snal	ke
Storeria occipitomaculata occipitomaculata (Storer) Northern Red-bellied Snal	ke
Tantilla coronata coronata Baird and Girard Southeastern Crowned Snal	ke
*Tantilla coronata nutrifer (Schwartz). West Appalachian Crowned Snal	ke
Thamnophis sauritus sauritus (Linnaeus) Eastern Ribbon Snal	ke
Thamnophis sirtalis sirtalis (Linnaeus) Eastern Garter Snal	ke

Explanation

This list includes amphibians and reptiles that may be found, as well as those definitely known, in Virginia. An asterisk (*) in front of a name indicates that the form is expected but has not yet been found in Virginia. All forms listed without asterisks are represented by preserved specimens from precise localities in the state. When I first prepared a mimeographed list in June, 1958, 128 kinds of amphibians and reptiles were included as definitely recorded from Virginia. Because of information obtained in the meantime, four forms have been deleted from the list and eleven forms added, so that the total now rests at 135 species and subspecies. They include 45 salamanders, 26 frogs and toads, 22 turtles, 8 lizards, and 34 snakes - all supposedly definitely known in Virginia.

One of the most interesting aspects of a faunal list is the class of borderline cases, the species and subspecies for which there are inexact records, verbal reports, or other strong indications that they occur within the study area - but no positive evidence. Indication of such forms, starred in the present list, may suggest to naturalists the kinds of animals to be especially sought in areas in which they are working. Most of the amphibians and reptiles that are starred in the present list are expected in specific parts of the state as indicated after the scientific name.

Of the 18 forms starred in my 1958 list because their discovery in Virginia was expected, four have since been discovered in the state and five others (all subspecies) struck from the list of "possibles" on the basis of new distributional data. This shows the skepticism with which starred names should be regarded, for, although they can be sought for with anticipation, probably only about 50 percent will be found in Virginia. The 15 starred forms in this list are not included in the totals.

Most of the names used in the present list conform to those used in the Sixth Edition of the Checklist of North American Amphibians and Reptiles by Karl P. Schmidt (1953) and in the Field Guide to Reptiles and Amphibians of Eastern North America by Roger Conant (1958). The latter publication is highly recommended as an identification guide and brief summary. Data that has been recently obtained requires some changes in names and in details of distribution. I plan to summarize this new information on the Virginia herpetofauna in a publication to appear in late 1959. Detailed acknowledgment of assistance must be postponed until then. Many members of the Virginia Herpetological Society have contributed valuable information and advice. Mr. Roger Conant of the Philadelphia Zoological Society has been most generous with information.