SIX DECADES OF HERPETOLOGICAL EDUCATION

Mike Clifford, VHS Education Committee Chair October 27, 2018 VHS Fall Meeting

The Virginia Herpetological Society was founded in 1958, sixty years ago! Think back to those days. No Internet, no email, no websites, no personal computers. Long distance communication mostly relied on the U.S. mail and the telephone. Yet despite the limitations, fifty amateur and professional herpetologists from across Virginia were able to gather in October at Camp Shawandassee (BSA) near Chesterfield Courthouse for the inaugural state meeting. Highlights of the meeting included election of officers, live-animal exhibits, color slides of the Dismal Swamp and its herpetofauna, and display of the hot-of-the-press first edition of Roger Conant's reptile and amphibian field guide.

1958 was a banner year for herpetology!

The VHS founders made it clear that education was a top priority of the Society. My presentation here today is intended to highlight some of our educational outreach activities over six decades. The sources for this information are buried in our VHS Bulletins (1958-1979), Catesbeiana (1981- present), and the VHS Newsletters (1990-present). These publications are all available on our VHS website. I've also included some material from my own herp journals and my memories.

Many of the Society's early leaders had connections with scouting programs. Several of the VHS annual meetings were held at scout camps. Articles in the VHS Bulletins encouraged our members to serve as merit badge councilors for Reptile Study and Zoology. In 1959, VHS set up a large display of native snakes at the huge Scout-O-Rama event at the State Fairgrounds in Richmond. Camp naturalists, scouting and otherwise, were another audience who received VHS Bulletins and educational support.

Early on, the Society reached out to high school science teachers and guidance counselors to offer educational support to them and to their students. Interested educators were added to the VHS Bulletin mailing list. Science fair *exhibitors* with a project in herpetology were offered a year's free subscription to the Bulletin and science fair *winners* were awarded a year's paid membership in the VHS. My own first experience as a herp educator came in 1963 with my high school science fair project on the feeding habits of native snakes, winning 2nd place. The display included a large Black Rat Snake (as it was known then) who drew lots of attention. Unfortunately, the snake escaped overnight in the gymnasium and reportedly was seen on occasion around the school for many years.

The Society also formed a valuable partnership with VDGIF. The June 1958 edition of *Virginia Wildlife* magazine carried a notice of the formation and objectives of the Virginia Herpetological Society. Membership increased from thirty to nearly eighty. The September1959 edition of *Virginia Wildlife* contained a "Checklist of Virginia's Mammals, Birds, and Reptiles & Amphibians" The herp list was supplied by the VHS. Later, in the 1970's, Joe Mitchell wrote a series of *Virginia Wildlife* articles on snakes, turtles and lizards, frogs and toads, and salamanders, with artwork by Spike Knuth. These were reprinted as four separate publications, available to the public (show booklets). The partnership with DGIF continues to this day.

Early in 1964, thanks to a *Virginia Wildlife* magazine article, I discovered the existence of the Virginia Herpetological Society and quickly joined. By happy coincidence, the spring meeting was at the nearby Norfolk Museum and the field trip was in my Dismal Swamp stomping grounds. There I met Frank Tobey the long-time VHS editor & secretary and Roger de Rageot, the Society president, museum curator, and resident character. The meeting was great but the hike along the feeder canal into the swamp was really memorable. We caught four species of skinks but saw very few snakes, and captured about ten thousand ticks. The temperature and humidity were both in the 90's. So led by Roger our president, we headed to the ocean at Sandbridge to drown the bloodsucking parasites.

In 1966, I enrolled in Wildlife & Forestry at Virginia Tech, and continued my herp activities as time permitted. Like many teenagers, I was pretty shy when it came to speaking before a group. So to overcome this limitation, I took Public Speaking as one of my electives. Each student in the class was required to do a demonstration and a two other types of speeches later in the course. So I decided to demonstrate "Three Techniques for Catching a Snake" using a large and very nasty Northern Watersnake that I had caught previously during a Soils Lab field trip. As I pulled out the snake, our instructor shrieked and climbed on top of a desk in the back of the classroom. (He wasn't exactly the John Wayne type). I completed the demo without getting bitten and thankfully without the instructor fainting. My fellow students seemed to enjoy the show. I got an A for the course.

During my college summers I worked on St. Joe National Forest trail crews in the conifer forests of northern Idaho. Although this was not exactly a herper's paradise, I was able to find most of the expected reptiles and amphibians at that latitude and elevation. Among the most interesting were the Northern Alligator Lizard and the Rubber Boa. The Idaho Giant Salamander presumably lived in the area, but I never saw one.

Meanwhile, the VHS Bulletins continued to promote herpetological education. In 1970, Bulletin #65 featured "An Open Letter to Biology and Science Teachers in Virginia Secondary Schools." The article stated how VHS assists teachers: "(1) VHS Bulletin suggests projects to alert students which will require your minimum supervision. (2) It provides a ready reference source on the amphibians and reptiles of the state of Virginia. (3) It is an activity requiring little expenditure of money - built for a department with a small budget, or little leeway. (4) VHS is a way to help interested students who seek information • Try VHS."

After graduation from Tech, I went to work in 1971 as an Extension 4-H Agent for Virginia Cooperative Extension, with a position in Amelia County. In our youth

education work, we utilized 4-H project books as guides. Since we had nothing like this covering herpetology, I wrote a 4-H Reptile & Amphibian Project Book and pilot-tested with about 1,000 Amelia and Nottoway 4-H members (see VHS Bull.69). The 25 page booklet was printed and distributed at the state level as Pub. 676. It introduced thousands of young people to Virginia herps and to the VHS. Locally, we also prepared a four page booklet, Snakes of Amelia County, for distribution to farmers, scouts, 4-H members, and other residents.

Word spread quickly in our small piedmont county that that the new extension agent could identify their snakes and he even kept live specimens in cages at the office. Good information on snakes was hard to come by in those days, the people wanted it, and we provided it. I recorded all of the snakes that were brought in (dead or alive), plus the ones that I caught or saw in the county. From 1972 to 1975, I identified 278 snakes of 18 species, categorized by month. The resulting paper, *Relative Abundance and Seasonal Activity of Snakes in Amelia County* was published in VHS Bulletin # 79 (1976) ... the result of an unusual partnership with large number of county residents. I still get snake-calls to this day.

During the 1970's, I was writing species accounts for all of Virginia's snakes. Working with a former Tech classmate who was photographer and printer for the local weekly, we planned to publish and sell an inexpensive book on the snakes of Virginia. However, he changed jobs (and went on to become a millionaire). The Extension Wildlife Specialist at Virginia Tech knew of my work and eventually got me in touch with Don Linzey, also at Tech at that time. We collaborated and the 173 pp hardcover book, *Snakes of Virginia*, published in 1981 by the University Press of Virginia. Amazingly, the book is still in print.

The **final** VHS bulletin was published in 1979. Bulletin # 90 was a roster issue. By that time, the bulletins were being mailed to over 200 members and friends, plus hundreds of additional copies were sent to youth camps, game biologists, extension agents, science teachers, and colleges and universities around the state. That was a lot of outreach!

Catesbeiana was the new publication that replaced the old VHS Bulletins. Two editions of the journal were published per year, usually including two or three major articles along with a section of shorter field notes. Most articles and notes pertained to Virginia herp distribution and other scientific investigations. The contents also included brief meeting announcements, news and notes, and membership information. However, in my research for this presentation, I had difficulty finding much information on VHS educational outreach efforts in those years. I expect that there was some, but it just didn't get reported.

By 1988, our30th anniversary, the VHS roster had dwindled to less than a hundred paid members. At least partly in response, *The VHS Newsletter* was first published in 1990. In the opening article, then-president Joe Mitchell stated: "The VHS is entering a new era. This newsletter signals our increased commitment to the education of students and other amateurs interested in herpetology. Education of VHS members and the public about herpetology in general, and Virginia herpetology in particular, is one of the original goals of our society. The idea of a newsletter was generated by an increased realization that the VHS was not providing secondary school students and other amateurs with activities and information that stimulated their interest. Catesbeiana, published twice a year, adequately serves the more professional members by being an outlet for communications on the natural history of Virginia's amphibians and reptiles. We originally had hoped that it would be adequate for everyone. It wasn't. The new VHS newsletter will allow nonprofessional members to find out what is going on in herpetology and read a variety of things which we hope will be entertaining." And so, it came to be that to this day we publish both Catesbeiana and The VHS Newsletter.

Our Society carried on with its tradition of spring and fall meetings, with surveys in the spring. In October 1996, a herpetology workshop was offered to local teachers in conjunction with the VHS Fall Meeting at Maymont Park in Richmond. It was very successful and teacher workshops have been offered at many subsequent fall meetings.

To my mind, the end of the 20th century marks the beginning of **the modern age of herpetological education**. In 1998, our Society's homepage first appeared on the worldwide web. In 1999, a committee was formed to develop and update our website. John White, me, and a couple others were appointed to this committee. John took over the website management in late 1998. By the dawn of the 21st century, the proliferation of personal computers, email communication, digital photography, and other technologies allowed us to interact with each other and with the public to a magnitude far greater than could be imagined back in 1958.

The VHS website has become the leading public information source concerning the state's native reptiles and amphibians. The photos, range maps, texts, & links for all Virginia species, plus features such as the "identification guides" and the "look-alike guides", have generated wide-spread utilization and inquiry by the public, and by the VHS membership as well. The Education pages (found under the "Departments" heading) provide smorgasbord of information for teachers, parents, and people of all ages. John White has done a masterful job of developing the entire website. By the way, he has also designed colorful walking trail signage for the nearby Lewis Ginter Botanical Gardens and very recently for Charlottesville City Parks

Our herp email-based identification service has handled thousands of inquires from the general public. Visitors to our website and to our FaceBook page are directed to submit their questions and photos via email to:

animal-identification@virginiaherpetologicalsociety.com.

For many years, these requests were processed by John White, Kory Steele, and me. Recently Bonnie Keller, Alonso Abugattas, and Mark Khosravi have been added to the team to help us meet the demand. In recent years, we have handled about 500 ID requests annually. Our replies typically state the correct common name of the animal in question, provide a link to it on the website, and often add some other pertinent natural history information. Not only are we providing a needed service for the public, but sometimes the public provides us with unique photos or new county locality records.

The VHS Newsletter has evolved into an entertaining mixture of beautiful photography, VHS news, colorful survey summaries, herp trivia, science updates, featured native species, book reviews, Virginia literature, and more. Both the newsletter and Catesbeiana have shed the restrictions and costs of the printed page, and are now available as digital publications.

Our Society's face-to-face educational outreach has also reached impressive levels. In 2005, the Virginia Master Naturalists program was born and we gained a new audience and a new partner. Our VHS instructors provide basic and advanced herpetological training and the VMN members help spread the word about the wonderfulness of reptiles and amphibians, and sometimes they get involved in our herp conservation and research projects.

Over the last ten years, our audiences have included school students and their teachers, 4-H and scout groups, military families, natural resource festivals and conferences, local and state parks, natural resource professionals, museums and libraries, summer camps, pest control operators, landscape professionals, garden clubs, Master Gardeners, medical personnel, and a host of others. Details can be found in the annual Education Committee Reports on the VHS website at: http://www.virginiaherpetologicalsociety.com/education/educationalcommittee. httml

Also to be found in these reports are the names of the fantastic VHS members who have contributed so much to our Society's educational efforts, many of whom are here with us today: John White, Susan Watson, Tim Christensen, Kory Steele, Jason Gibson, Paul Sattler, Larry Mendoza, Bonnie Keller, Temple Moore, Dave Perry, Caroline Seitz, J.D. Kleopfer, Rachel Goodman, Matt Close, Travis Anthony, and probably some others that I've missed. Take a look at these reports and you will see that some of these names show up in every one of these annual reports. That's a massive amount of educational outreach. All of you have enriched the lives of a lot of people, and no doubt have saved the lives of a lot of our animal friends as well. Thank you all ... and please don't forget to email me with reports of your herpetological educational activities!