



# The Region Record

Vol. XXV No. 3 Summer 2012

## Fall VAR Meeting September 21–23 Lexington, Virginia

by Rolland Moore

I (Roland Moor) am hosting the Fall VAR outside Lexington, Virginia, on September 21–23 to benefit the Proyecto Sierra Mazateca.

The Proyecto Sierra Mazateca is dedicated to the exploration and conservation of the karst ecosystem in the Sierra Mazateca, Oaxaca, Mexico. In addition to discovering and exploring caves, our group is focused on preserving the highland cloud forests, precious water resources, and Mazatec cultural pride. With generous funding, we develop conservation programs to educate the students. We also help generate markets for the organic foods produced in the Sierra Mazateca region, such as coffee, sugar, and honey. Future goals include the preservation and restoration of Cafetal Carlota.

Rockbridge County is a cave-rich area more often driven by than explored. Still there are many interesting caves here and the potential to discover more. Leads for Rockbridge County will be provided by the Virginia Speleological Survey for people seeking to survey new passage. There will be cavers from all over the U.S. and a few from as far away as Mexico and Canada, so there will be some new faces in the crowd.

Registration is \$30 in advance, \$35 at the gate. You can pre-register online at [www.fallvar2012.com](http://www.fallvar2012.com) or you can

also preregister by mail through September 14, 2012. There is no registration form. Just mail your name, address, contact information and \$30 check or money order to:

Fall VAR  
c/o Rolland Moore  
104 Johnstone St.  
Lexington, VA 24450

Sorry, pets are not allowed in the campground.

The Saturday night dinner will be a Mayan Taco Bar planned by Aida Ferreira of Quintana Roo, Mexico and this includes vegetarian frijole tacos. The vegetarian option is more authentic to the Mazatec culture.

Tentative list of led cave trips not yet available. Check [www.fallvar2012.com/updates.html](http://www.fallvar2012.com/updates.html) for late information.

Port-a-pots will be available throughout the camp, but there are **no showers**. On-site potable water is available for emergency use only! **Please bring your own water!**

The guest speaker will be Tony Akers, founder of the Proyecto Sierra Mazateca. See [www.proyectosierramazateca.org](http://www.proyectosierramazateca.org) for more information.

There will be live music Saturday night by the Graham Spice Band, 8:00 pm to midnight.

RVs are welcome, but no hookups are available.

A list of vendors is not yet available. Check [www.fallvar2012.com/updates.html](http://www.fallvar2012.com/updates.html).

There will be a trash clean up at Bare Cave. You can do a through-trip in this 250-foot cave with its two entrances. In the middle of the cave is a pit still unexplored by survey crews. One entrance was used extensively as a land-fill by several former neighborhood residents for many years. This antique pile of trash could be full of untold treasure . . . finders, keepers.

We will be completing a gate on Hickman Cave. Said to be one of the prettier caves in the county, the owner wants this cave gated to protect his family from the 15-foot entrance pit. Hopefully much of the work will be done so that the gate can be installed in the morning and the cave can be open for visitation Saturday afternoon and Sunday. Survey leads will be available with little other information; surveyors may be responsible for initial landowner contact and permission.

Learn about surface activities on the Web at [www.fallvar2012.com/surface.html](http://www.fallvar2012.com/surface.html). This will link you to the Lexington Visitor Center Web page. It is full of detailed descriptions of local hiking, canoeing, bicycling, geocaching, horseback riding, sporting clays, and other local activities. There also are links for dining, shopping, attractions, and lodging. There will be

(continued on page 3)

## The *Region Record*

The *Region Record* is the quarterly publication of the Virginia Region of the National Speleological Society. Any articles, announcements, or other materials of general interest to cavers in the Region are welcome. Send all material to Bob Hoke (6304 Kaybro St., Laurel, MD 20707 (301)725-5877, e-mail [editor@varegion.org](mailto:editor@varegion.org)). Electronic submissions (e-mail or disk) are encouraged, but any form of input is welcome. Non-copyrighted material contained in the *Region Record* may be reprinted by organizations that are affiliated with the VAR or the NSS, provided that proper credit is given to the *Record* and the author. The opinions expressed herein are those of the individual author, and do not necessarily reflect those of the editors, the VAR, the NSS, or their internal organizations.

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### Region Record Subscriptions

- New NSS members in the Region receive two complimentary copies of the *Region Record*.
- Current NSS members moving into the Region from elsewhere receive two complimentary copies. Current NSS members who move within the Region get no freebies.
- When a subscription is going to expire, the last issue will be stamped "Time to Renew." No renewal notice is sent.
- When a person attends a VAR meeting he/she is automatically added to the list to receive the next four issues. If he/she is already on the list, four additional issues are added to the subscription.
- When multiple people live at the same address only one copy of each issue will be sent to the address unless a box requesting individual issues is checked on the VAR registration form or a request is sent to the Circulation Manager.

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## Regional Calendar

July 31 **Last day** to submit applications for membership in The Robertson Association (so you can attend the Old Timers Reunion as a member, not a guest). See [www.otr.org](http://www.otr.org) for more information.

Aug. 30 - Sep. 2 **Old Timers Reunion** in Dailey, WV. Join about 1,800 other cavers for a weekend of fun and (maybe) a little caving. You must be a TRA member to attend.

Sep. 14 **Deadline for getting the preregistration discount** for the Fall VAR meeting. On-site registrants might not get dinner.

Sep. 15 **Deadline** for submitting material for the Fall issue of the *Region Record*.

Sep. 21-23 Fall VAR Meeting near Lexington, Va. See more info in this issue.

Aug. 5-9, 2013 **NSS Convention** in Shippensburg, Pennsylvania. See [www.nss2013.com](http://www.nss2013.com) for more info.

### List your Event Here

If you have a caving event that is of regional interest please send information to the Editors listed above so it can be included in the calendar.

## Fall VAR Meeting

(continued from page 1)

staff at registration all day Saturday to help with directions and recommendations

Check

[www.fallvar2012.com/updates.html](http://www.fallvar2012.com/updates.html) to see if the Front Royal Grotto will be doing its famous Sunday morning breakfast in the campground.

Driving Directions:

The recommended and signed route from Exit 50 on I-64 (5 miles west of Lexington) is:

- Take exit 50 for US-60 East/VA-623/Fredericksburg Road
- Turn onto VA-623/Fredericksburg Road towards US-60 East for 0.5 miles
- Take the 1st right onto VA-631/W Midland Trail/State Route 850 for 0.3 miles
- Take the 1st left onto VA-631/Still House Drive
- Continue on Still House Drive for 2.6 miles (beware hidden stop sign)
- Turn right onto State Route 638/Still House Drive for 1.1 miles
- Turn right onto State Route 641/Jacktown Road for 0.6 miles
- Turn left to stay on State Route 641/Sugar Creek Road for 1.9 miles
- The campground will be on the right (518 Sugar Creek Road, Lexington, VA 24450)

## An Update on White Nose Syndrome in Virginia June 6, 2012

Wil Orndorff,  
DCR Karst Protection Coordinator

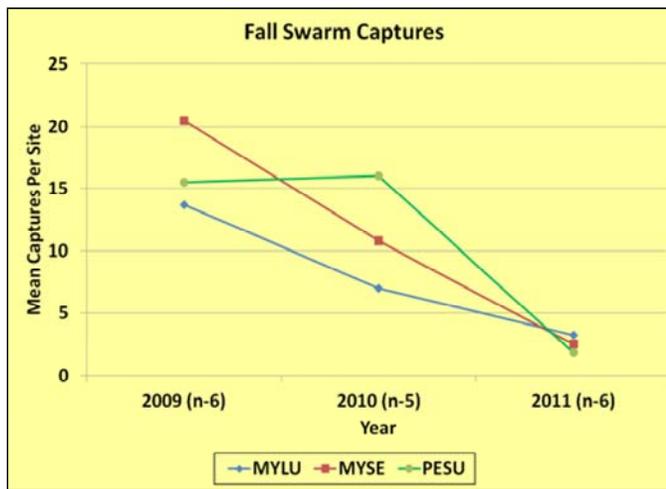
The winter of 2011–12 marked the fourth year that bats hibernating in Virginia's caves have been under attack from white-nose syndrome (WNS), a disease characterized by a white fungus on wings and/or muzzles of many affected bats and resulting in death rates of up to 90 percent in some affected bat species. Research published in the last year has verified that the fungus (*Geomyces destructans*) is the sole cause of WNS. The last two issues of the *Virginia Cave Owners' Newsletter* (Summer 2009; Winter 2010) provided information on WNS and what actions cavers and cave owners might be able to take in order to slow its spread or lessen its effects.

Fortunately, not all cave bat species are equally affected by WNS. Most mortality to date in Virginia has been among little brown bats (*Myotis lucifugus*), tricolored bats (*Perimyotis subflavus*), and northern long-eared bats (*Myotis septentrionalis*). Unfortunately, little brown and tricolored bats are the two most common cave bat species in Virginia, so high mortality among these species has greatly reduced the total number of bats present in most caves. Death rates among WNS-susceptible eastern small-footed bats (*Myotis leibii*) are hard to estimate due to low observation rates. Although heavily impacted in the northeast, populations of the federally endangered Indiana bat (*Myotis sodalis*) in Virginia have to date experienced little apparent mortality from WNS. Federally protected Gray bats (*Myotis grisescens*) have been exposed to *Geomyces destructans* since at least early 2010. Only last month (May 2012) was the actual disease confirmed in this species, from specimens collected in the early months of 2012 during hibernation monitor-

ing in Tennessee, including one cave where Virginia's Gray bats are known to winter. Fortunately, no Gray bats have yet been observed to die from WNS, but only time will tell the degree to which they can tolerate the disease.

The big brown bat (*Eptesicus fuscus*) is known to develop WNS, but with relatively low mortality from the disease. The federally endangered Virginia big-eared bat (*Corynorhinus townsendii virginianus*), which uses caves year-round and shares caves with WNS-infected bats of other species, appears to be immune to WNS. White nose syndrome has not been observed to affect tree bat species.

In January 2012 at the Northeast Bat Working Group meeting in Pittsburgh, Rick Reynolds of Virginia Department of Game and Inland Fisheries (DGIF) presented a summary of collaborative efforts with Virginia Natural Heritage Program, Radford University, and National Speleological Society volunteers to study the impacts of WNS on Virginia's bat populations. To date, approximately 4,000 bats of three WNS-susceptible species have been banded to track movement, survivorship, and disease progression (little browns ~2,600, northern long-eared ~400, and tricolored bats ~850). Fall swarm capture rates for these species at entrances to known affected hibernacula have fallen 70%, 90%, and 80% respectively since 2009 (see Figure). Declines in hibernating little brown bat populations where WNS has been documented for more than one year generally exceeded 90% over the same period. Populations of hibernating tricolored bats show a highly variable degree of decline, with highest declines observed in caves with large little brown bat populations. Hibernation counts (Jan–Feb, 2011) of Indiana bats in several WNS-positive caves were consistent with pre-WNS level, and fungus has only been observed on Indiana bats in a single Virginia cave. Indiana bats have also appeared in a handful of Virginia caves where they had not previously been documented, and in



higher than normal numbers in some caves from which they've traditionally been known. Finally, bat biologists in Virginia have banded over 1,600 Gray bats, a species that is closely related to many WNS-susceptible species. Presence of *Geomyces destructans* on Gray bats was first documented in 2010 in Missouri, but associated pathology was first observed during the winter of 2012, with no confirmed deaths.

White nose syndrome continues to spread southwest through Virginia. The first affected caves in Scott County were discovered in January, and bats with WNS were discovered in two additional Scott County caves in early March. Lee County may be the only county in Virginia's karst belt as yet unaffected by WNS. However, several WNS-positive caves are literally visible from the county line, with WNS known in caves to the north, south, east, and west. In all likelihood, WNS will be in Lee County by the time you are reading this. For purposes of management, all caves throughout the rest of the state are considered positive for WNS, and state agencies are no longer tracking the WNS outbreak on a cave by cave basis.

The U.S. Geological Survey and U.S. Fish and Wildlife Service continue to recommend universal implementation of decontamination procedures, equipment restrictions, and site closures in effort to combat the spread of WNS. Proposals to add additional

bat species to endangered species lists are under consideration at both state and federal levels for several species, including little brown, northern long-eared, and eastern small-footed bats. No formal proposals for state listing in Virginia have yet been submitted.

In contrast, Virginia DGIF and Natural Heritage staff are only implementing decontamination and equipment restrictions in Lee and portions of Wise counties. The Virginia Cave Board policy remains as established in July 2010, and is posted online at the Cave Board Web site – [www.dcr.virginia.gov/natural\\_heritage/cavehome.shtml](http://www.dcr.virginia.gov/natural_heritage/cavehome.shtml). The main thrust of the policy is to avoid the transport of *Geomyces destructans* spores from the WNS-affected areas to caves in areas where *Geomyces* has not already spread. The national WNS range map can be found online at <http://www.fws.gov/whitenosesyndrome>. Fortunately, no major range extensions for WNS have been documented in 2012, suggesting that its spread may be limited by the distribution of caves with high populations of susceptible species.

*[This article is an expanded and updated version of an article that appeared in the April, 2012, issue of the Virginia Cave Owners' Newsletter published by the DGIF].*

## Breathing Cave Access Changes

by Rick Lambert

The parking area and trail to Breathing Cave in Bath County, Virginia, have been changed by the cave owners.

Please use the new parking area and new trail ONLY.

1. Sign waiver at owner's house.
2. Drive 1/4 mile past the old parking area to the NEW parking area, which is on the right side of the road. Look for a bright orange mark on the road.
3. The new route to the cave is marked by bright orange blazes.

Eventually the new trail joins with the old road to Breathing Cave, well past the new houses.

Above all, Do Not walk past the new houses near the old parking area!

Please keep to the new route; do not take shortcuts or "bushwhack".

There are new houses in the area; these property owners value their privacy.

If these changes do not solve the current problem, the cave will be closed.

This is a small change to keep the cave open in the summer.

Breathing Cave is limited access; open May 15 - Sept. 15. It is closed the rest of the year.

## VAR Letter to Monongahela National Forest

June 15, 2012

Clyde N. Thompson, Forest Supervisor  
Monongahela National Forest  
200 Sycamore Street  
Elkins, WV 26241-3962

Re: Re-opening of caves in the Monongahela National Forest, West Virginia

Dear Mr. Thompson,

The Virginia Region (VAR) of the National Speleological Society (NSS) approved a motion at its Spring meeting to request that the caves on the Monongahela National Forest be re-opened when the closure order expires. We hereby make that formal request.

We also urge that the U.S. Forest Service work with our members under its Memorandum of Understanding with the NSS, the provisions of the Federal Cave Resources Protection Act, and the Forest Service's own National WNS Interim Strategy to determine the best program for conservation and access for the caves within the Forest. Those details are presented below.

The VAR of the NSS consists of nearly forty local NSS caving organizations (grottos) and other individual NSS members from the greater Virginia, West Virginia, Maryland, North Carolina, and District of Columbia region. The NSS and affiliated cave conservancies own and manage many caves in the region, including those harboring bats affected with White Nose Syndrome (WNS).

The NSS is dedicated to the scientific study of caves and karst; protecting caves and their natural contents through conservation, ownership, stewardship, and public education; and promoting responsible cave exploration and fellowship among those interested in caves.

We are aware that the current closure order (Order # 21-104) expires on June 30, 2012. This is an opportune time to consider a more nuanced and targeted approach to caves within the Monongahela National Forest, one that we believe will be of mutual benefit to the Forest Service, the organized caving community, and the cave and bat resources we all consider dear.

When WNS first sprang upon the scene in 2007, the NSS and affiliated cave conservancies were the first to act and we closed most of our own cave preserves within the affected region. A year later, the U.S. Fish and Wildlife Service issued their caving advisory, and several Forest Service units and Regions followed suit. Like most, we believed we needed to err on the side of caution and call a time-out until we understood this phenomenon called WNS a lot better.

Now, five years later, we know a whole lot more about the disease, and this developing knowledge should inform developing management responses.

We should acknowledge that West Virginia's cave and bat regions are completely saturated with WNS. While we may have hoped that closing caves administratively would have mitigated against the spread of WNS, the facts have shown that was at best naïve. Keeping caves closed to keep WNS out of West Virginia at this point is closing the barn door after

the horses have all gone.

Second, we should also recognize some of the unintended consequences of the blanket cave closure. As representatives of the organized caving community, the VAR was shocked - but not surprised - to learn of the vandalism discovered this past year at the popular Bowden Cave. Shocked, because we do not understand the mindset of people who are so disrespectful of the fragile nature of caves and the many resources they contain; but not surprised, because we know that administrative closure orders are nearly impossible to enforce, and that casual cave visitors continue to cave, while the conservation-minded cavers have stayed away. We are deeply concerned that what took nature thousands or millions of years to create has been quickly and deliberately destroyed, and don't want to see that continue.

It is well-understood by all involved that bats are spreading the disease through physical contact among themselves. In the published research where the fungus *Geomyces destructans* was determined to be the cause of WNS ([www.caves.org/WNS/nature10590.pdf](http://www.caves.org/WNS/nature10590.pdf)) the U.S. Geological Survey's National Wildlife Health Center Laboratory researchers also investigated whether or not the disease could be passed through the air by bats. This was unsuccessful. While beliefs vary as to whether or not there is any soil or human transmission vector, after six years of investigation, the most

### The Caves and Karst of West Virginia

The *Caves and Karst of West Virginia* (WVASS Bulletin #19, by George Dasher) was published by the West Virginia Speleological Survey in April 2012. The bulletin is 264 pages long and contains descriptions of West Virginia's karst and limestones, summaries of the state's caves by river basins, and lists of West Virginia's long caves, deep caves, deep pits, saltpeter caves, significant caves, karst springs, dye traces, VAR cave accidents, and reprints of the 2000 and 2012 NSS Convention Geology Field Trips.

The bulletin can be purchased for \$20 from many speleo vendors or \$25 (includes mailing) from WVASS: Ray Garton, PO Box 200, Barrackville, WV 26559; [garton@prehistoricplanet.com](mailto:garton@prehistoricplanet.com); 304-282-2306.

recent published research on WNS – in this case by the Centers for Disease Control in their May, 2012 Infectious Disease Bulletin ([wwwnc.cdc.gov/eid/article/18/5/11-1711\\_article.htm](http://wwwnc.cdc.gov/eid/article/18/5/11-1711_article.htm)) could only state, “Although no direct evidence has emerged, a role for anthropomorphic activities (occupational or recreational) in this spread is a distinct possibility (9).” with the cited reference only a generic overview of pathogens moving in a modern world, not a WNS-specific study.

The Monongahela National Forest must also be looked at in the context of the rest of the caves in West Virginia. The National Forest caves don't exist in isolation. Rather, they are part of an intense karst landscape that includes private caves, show caves, state-owned, and federally-owned caves. Bats and White-Nose Syndrome do not recognize these political distinctions. Keeping the caves closed in these National Forests does nothing to contain the spread of WNS.

However, many West Virginia caves are closed for reasons other than WNS. Many are seasonally closed to protect hibernating bats, and it has been common caving knowledge and practice for decades to avoid hibernating bats. Other caves have significant populations of endangered bats or other endangered or threatened species, and warrant additional protection. Some are fragile, or have archeological or paleontological relics deserving of protection.

The VAR and the members of its parent organization, the NSS, have long been leaders in cave and bat conservation. We were at the forefront of advocating for the Federal Cave Resources Protection Act (FCRPA), and are intimately involved in helping to gain “significant” designation for caves warranting special protection for a variety of reasons.

We understand that while we can no longer prevent WNS from arriving in this area, we can prevent even the remote possibility of anthropogenic

transfer to unaffected areas of the country by following the U.S. Fish and Wildlife Service's cleaning and disinfection protocols.

We are well aware that following the July 28, 2010 memo from Joel Holtrop, Deputy Chief of the National Forest System ([www.caves.org/WNS/USFS\\_July\\_28\\_memo.pdf](http://www.caves.org/WNS/USFS_July_28_memo.pdf)), these protocols are nationally applied on U.S. Forest Service lands and that they continue for all NF caves and mines.

Further, we also understand that the single most important preventive measure that can be taken is not to take any gear used in any WNS-affected site to unaffected regions. This has been the NSS' policy and practice since the arrival of WNS and is now considered a best practice.

That said, the Holtrop memo and the July, 2010, USFS Interim Responsive Strategy ([www.caves.org/WNS/USFS\\_Interim\\_Strategy\\_7-10.pdf](http://www.caves.org/WNS/USFS_Interim_Strategy_7-10.pdf)) both directed Forest Service staff to collaborate with the caving community. Other key sections of the Strategy called for evaluating and prioritizing sites for bat habitat, to identify bat-free caves where recreational caving can take place, to evaluate restrictions and consider their effectiveness and level of public support for

The VAR strongly believes the expiring closure order is the perfect time to make a distinction for the Monongahela National Forest, given its specific context and location, and not to continue the closure order. We further ask that we be involved in helping the Forest develop a more sophisticated and nuanced management plan for the caves on these lands going forward, as envisioned in the USFS memo and Strategy, the MOU between the U.S. Forest Service and the NSS, and the provisions of the FCRPA.

To give just one example from the Northeast, some caves that had been open year-round prior to WNS are now seasonally closed. This is a recovery strategy, permitting bats to

be left alone. While it is no longer possible to prevent WNS from arriving at Monongahela National Forest caves, refocusing on conservation and recovery are very much in order.

Taking an approach of avoiding hibernation sites (or maternity roosts) as appropriate in season, following decontamination protocols, avoiding taking gear used in the region to unaffected parts of the country, and education of the public are areas where we can easily collaborate.

We look forward to working with you and hope that management of the Monongahela National Forest caves can be done in a flexible way, one that adapts to evolving knowledge and collaboration on resource access and conservation.

Thank you for your commitment to management of the forest lands owned by the citizens of the United States, for their conservation and multiple uses, and for the protection and enjoyment of the resources for and by all of us.

Sincerely,

Craig Hindman, President  
Virginia Region of the  
National Speleological Society  
7600 Pindell School Road  
Fulton, MD 20759

## **2012 Spring VAR Report**

by J. C. Fisher

Tri-State Grotto offered to host the 2012 Spring VAR at the earlier Spring VAR in Durbin. We thought we had several possible sites. By mid-fall of 2011 several sites had gone down to one and the cost was very expensive. Thankfully Bill Balfour suggested we check out Poor Farm Festival Grounds. Peter and Carolyn Stephens of Poor Farm came over to the West Virginia Cave Conservancy Dinner and gave us a sales pitch. We

checked the site on Sunday and while primitive, they offered both a site and catering. Such a deal! We said yes and signed a contract. Meanwhile we found we had the offer of a second site. The Boy Scout Camp in Pocahontas County became a second option and now the site of the 2013 Spring VAR. More about that in the Fall *Region Record*.

On the plus side, Bob Bennett organized a large number of led trips. John DiCarlo set up the Friday night wine tasting. George Dasher presented a wonderful slide show and John Fox was our evening DJ. Sunday morning Front Royal Grotto set up its highly acclaimed pancake breakfast. On the negative side, the weather turned wet and the Poor Farm folks told us this was their first catering job. There was plenty of barbeque, but the side dishes ran into short supply. Overall, everyone seemed to have a good time.

Income	\$7,375
Expenses:	
VAR Dues	904
Camping	2,170
Food	2,120
Electric	100
Misc. (Beer, soda, other)	744
Total Expenses	6,037
Net Income	\$1,338

We had 226 adults register and several children, making this a normal Spring VAR. Tri-State would like to thank all those who attended and we hope to see you in the Spring.

## What Is the VSS Doing With Your Cave Data?

by Mike Futrell

During the NSS Convention in Lewisburg, at the State Cave Surveys session, I presented a talk on the current data activities of the Virginia

Speleological Survey (VSS). Following is a summary of my presentation that started off with a map showing the distribution of Virginia’s caves.

With the transition of database management responsibilities from Phil Lucas to Mike Futrell (me) a few years ago, wider industry standard software was brought into play—Microsoft Access and ESRI ArcGIS (shapefile). Anticipating the question from the purists—true, I could do the same thing in open source software. However the ubiquity, user base, vastness of resources, reliability, expectation that the data formats will not go “poof” in five years, coupled with the fact that this is what I do for a living, motivated my decision.

With a largely geek audience, I spent some time on related data tables. For example, one cave can have multiple entrances. The cave has length, depth, description, and so on. Each entrance has a different location, perhaps owner, entry status, hydrologic function, and so on. That’s a one-to-many relationship. We have about two dozen related tables, each of which was briefly discussed.

Of course database queries are limited by your imagination. A standard cave report form was presented as well as a map representation of original cave reports by the previous VSS gurus, Douglas, Holsinger, and Lucas. Queries in GIS format allow any form of map presentation to take place from familiar printed topo map recreations to Google Earth. Applications presented included visualizing what we have, say, in the context of geologic setting to pulling geological attribution from available geology resources back into the database fields for future query.

Some recent activities covered were rescanning the large cave maps (about a thousand) at higher pixel resolution, as well as full color or gray scale. The Ron Simmons photo archive scanning project is over the half-way point. We’ve started photographing (instead of scanning) the perhaps tens of thousands of pages

of information in the individual cave folders held by the VSS. Several individuals, such as the prolific Whittemores, have donated their life compilation of cave survey notes from the 60s and 70s to the VSS. These have been photographed, archived, and several caves will soon be entered in the computer for the first time to support current projects. Data files such as Compass, Walls, and Survex are actively sought. My policy is that the VSS is currently not going to set a standard format because we’re not likely going to do anything with it other than archive for future research. At that time at least something will be available. Asking everyone to reformat their data for submission is a non-starter.

A very large project recently completed by the VSS was to determine the owner (as best as possible) of every cave in Virginia for the Cave Board’s *Virginia Cave Owners’ Newsletter*. This was accomplished through GIS techniques and data collaborations.

Closing thoughts focused on loss of data as individuals fade out of caving or into retirement, taking that “I’ll get to it someday” cave information with them. Unfortunately we all know of surveys where little was produced and notes were not shared. My call to cavers everywhere is to help preserve this information via the state cave survey. Find it. Copy it. Share it. Secondly, help not to repeat the problem. Strongly encourage fellow surveyors to share and backup copies of notes and data.

During discussion among several state survey managers, it was agreed that we would work together more closely on various technological and social aspects of running a state collective. Thoughts are welcome.

I am available to give grotto presentations on the VSS database and GIS to the extent possible within the constraints of my “real job” and that I go caving rather often. So call me. And above all, send in that data.

Thanks.

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Grotto (or other caving organization that I claim as my primary caving affiliation) \_\_\_\_\_

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