

THE SOUTHEASTERN CAVER

Volume 22 March 2017



Climbing in Stupendous Pit,
Rumbling Falls Cave, TN

The Southeastern Caver is the official newsletter of the Southeastern Region Association (SERA) of the National Speleological Society and is published once a year for distribution to SERA member grottoes and the NSS archives. Statements and opinions expressed herein do not necessarily reflect the policies or beliefs of SERA or the National Speleological Society. Reprinting of articles is allowed if proper credit is given to the author and/or photographers represented in this publication. Send correspondence and exchanges to: The Southeastern Caver, c/o Don Hunter, address given below.

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Cover: Jay Manneschmidt on rope in the vastness of Stupendous Pit, Rumbling Falls Cave, Van Buren County, Tennessee. Matt Tomlinson photo.

Back Cover: On Rope in Enigma Cave, Jim Fox photo.

66th ANNUAL SERA SUMMER CAVE CARNIVAL

The 66th annual SERA Summer Cave Carnival will be held at the Trials Training Center in Sequatchie, TN, May 18 – 21, 2017. It will be hosted by the Smoky Mountain Grotto. The Trials Training Center is located at 300 Woodland Rd., Sequatchie, TN 37374-3019, at the head of Coppinger Cove, right in the heart of TAG. Many great TAG classic caves, along with many other fantastic caves, are just a short drive or hike away. Register at: <http://sera2017.subworks.com/> Questions can be directed to the 2017 SERA Cave Carnival Facebook page at: <https://www.facebook.com/events/259264771159830/>

2017 TREASURER'S REPORT

(Submitted by John Hoffelt for period covering 1/01/16 – 12/31/2016)

Beginning balance, brought forward from 12/31/15.....	\$929.40
Income, from 2016 SERA Cave Carnival.....	\$496.50
Subtotal.....	\$1,425.90

Expenses:

2016 SERA Awards:	
Cash Awards.....	\$100.00
Plaques, Frames, Mailing.....	\$42.09
2016 Web Space.....	\$12.00

Subtotal Expenses.....\$154.09

Ending Balance.....\$1271.81

2016 SERA WINTER BUSINESS MEETING

The 2016 SERA Winter Business Meeting was hosted by the Smoky Mountain Grotto on March 12, 2016 and was held at the Tennessee Valley Unitarian Universalist Church, Knoxville, Tennessee. The following meeting notes are subject to discussion and approval at the 2017 meeting.

2016 SERA WINTER BUSINESS MEETING (Cont.)

Officers for the meeting:

Chair: Candice Eagle

Vice-Chair: Peter Michaud (absent)

OPENING SESSION:

Matt Tomlinson welcomed everyone on behalf of the Smoky Mountain Grotto.

Maureen Handler announced that the Sewanee Mountain Grotto will host the NSS BOG meeting Halloween weekend, 2016. She also announced the NSS 404 Team funding opportunity on behalf of Bill Jackson.

Matt Fisher announced that the River City Grotto is hosting the Florida Cave Crawl during March 18-20, 2016.

A silent auction was held during the Winter Business Meeting, proceeds to benefit the Smoky Mountain Grotto to defray meeting hosting costs.

Salons:

Fine Arts Salon

Fifteen entries by three photographers in four categories. One non-photographic artistic entry, for show only.

Judges: Chrys Hulbert, Matt Tomlinson, Jim Whidby

Color/People Category:

1st Place: Frank Bogle, "Virgin Pit"

2nd Place: Cheryl Pratt, "Popping Out"

3rd Place: Cheryl Pratt, "Pool Room"

HM: Frank Bogle, "Slimed"

Color/Macro-Closeup Category:

1st Place: Cheryl Pratt, "Sallie"

2nd Place: Mendy Swain, "Almost There"

3rd Place: Frank Bogle, "Sharks Tooth"

HM: Frank Bogle, "The Drip"

Color/Artistic Catergroy:

1st Place: Frank Bogle, "Formation"

2nd Place: Mendy Swain, "Reflecting Pool"

3rd Place: Mendy Swain, "Baby Rimstone"

HM: Cheryl Pratt, "The Wall"

Color/Entrances-Exterior Scenes:

1st Place: Frank Bogle, "Anticipation"

Best of Show:

Frank Bogle for "Formation", with score of 40.5 points out of maximum 45 maximum points.

Map Salon

Seven maps entered by four cartographers.

Judges: Brent Aulenbach, Frank Bogle, Matt Tomlinson

Merit Awards:

Stephen Brewer for River Top Drop, Jackson Co., AL

Jason Hardy for Only Used Once Pit, Marion Co., TN

Third Place:

Jason Hardy for Snowflake Pit, Franklin Co., TN

Second Place:

Alan Grosse for Earth Day Cave, White Co., TN

Best of Show:

Ben Miller for Shiver Hole & Copena Skull Pit, Overton Co., TN

Old Business:

1. Amend 2015 WBM minutes to note 13 IOs represented (see 2015 Sign-in sheet) and Richard Schreiber Award judge changed from Lyle Lassiter to Kyle Lassiter.
2. No IO changes (additions, subtractions) over last year.
3. Will need to expand award plaques within 2 to 4 years. Also, secretary will contact NSS about hanging award plaques in new headquarters.
4. SKTF conducted two cleanups at Run to the Mill Cave. Newsome Gap cleanup scheduled for March 19, 2016.
5. Cory Holliday (Tennessee Nature Conservancy) provided WNS update. Northern Long Eared Bats are most seriously affected.
6. Expansion of SERA to include IOs in surrounding states – notice was provided to member IOs 60 days prior to the meeting. Motion to amend Section III of SERA

Old business (Cont.)

constitution to read:

"Membership shall be extended to all active members of the NSS residing within the states of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and any adjacent state wishing to participate."

Moved, East Tennessee Grotto; Seconded, Central Alabama Grotto and Tennessee Cave Survey. Vote carries 9 for, 3 against.

7. 2015 SERA Cave Carnival Report by East Tennessee Grotto, 376 people, providing spreadsheet and templates.
8. Upcoming 2016 SERA Cave Carnival report, Nashville Grotto, to be hosted at Cherokee Farms (Smokey Caldwell's place), LaFayette, GA, June 2-5, 2016.
9. Upcoming 2017 SERA Winter Business Meeting, to be hosted by the Upper Cumberland Grotto, most likely in the Cookeville, TN area, date to be determined.

New Business:

Roll Call/Grotto Reports – 13 IOs represented, including:

Athens Speleological Society
Augusta Cave Masters
Central Alabama Grotto
Chattanooga Grotto
Dogwood City Grotto
East Tennessee Grotto
Georgia Speleological Survey
Nashville Grotto
River City Grotto
Sewanee Mountain Grotto
Smoky Mountain Grotto
Tennessee Cave Survey
Upper Cumberland Grotto

Business:

1. East Tennessee Grotto moves for SERA to obtain patches for sale (seconded by Sewanee Mountain Grotto); motion passes 10 – 0; ETG will follow up.

2. Green River Grotto membership; Candice Eagle will send letter to GRG;
3. Insert for Responsible Caving; tabled, may be brought up to the NSS Conservation division.
4. Request to have WBM reports posted within 45 days of the meeting; passed unanimously.
5. Request to format SERA webpage for providing Summer Cave Carnival logistics and information. Will need to be developed by the Nashville Grotto Cave Carnival committee and Brent Allen.

SERA Awards:

Francis McKinney Award to Ben Miller

Judges: Jay Manneschmidt, Gerald Moni, Jeff Patton

Richard Schreiber Award – not awarded this year

Judges: Emily Davis, J. P. McClendon, Jeff Patton

Alexis Harris Conservation Award – no nominees

Larry S. Adams Landowner Appreciation Award, to Marie Winfree

Judges: Frank Bogle, Doug Luther, Cheryl Pratt

Meritorious Service Award to the East Tennessee Grotto for the 2015 SERA Summer Cave Carnival event, reporting, and information sharing.

Cave Trips:

March 11, 2016, Cheryl Pratt led a trip to Blue Spring Cave

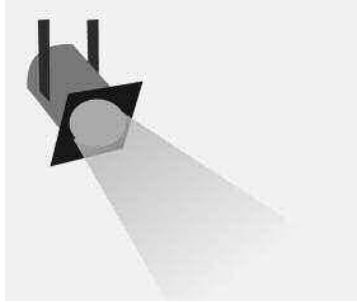
March 13, 2016, Jay Manneschmidt led a trip to Blowing Hole and Keller Bend Cave, and Chris Kerr lead a trip to Cherokee Bluff Cave.

Elections:

2017 Vice-Chair: Jeff Patton

2017 Secretary/Treasurer: John Hofflelt

The banquet speaker was Chris Kerr.



Spotlight On: Upper Cumberland Grotto

Editor: The Upper Cumberland Grotto has been very active, both locally and internationally, in recent years. Here is a summary of their activities in 2016, provided by Chuck Sutherland.

XP kids visit Blue Spring

Xeroderma Pigmentosum is a genetic disorder where the ability to repair damage from UV is deficient. For some folks the sun is a major problem. There are scarcely 1000 individuals facing this disorder worldwide, it is extremely rare. In November Upper Cumberland Grotto members were graced with the opportunity to assist a group of 50 children with the condition and their families into Blue Spring Cave and introduce them to caving! What better environment could there be for these folks to explore and experience nature?

A tour bus with the families and volunteers pulled up and the children were prepared with UV suits - Tyvek type overalls with additional hoods that had clear plastic face shields that blocked UV. Neuromuscular degeneration is a common symptom so some of the older visitors needed assistance. The families enjoyed a couple of hours in cave. Some of the children were very excited to be able to remove their hoods and play in the new environment presented to them. Small tours were completed according to the abilities of the visitors. UCG members assisted in guiding and photographing the exploits of this unique group of visitors. Included were: Peyton McKee, Warren Wyatt, Kathie Ferrari, Jack Durham, Alfred Crabtree, Jason Lavender, Zeke McKee, and Stephanie Owen. And, as always, special thanks to Lonnie Carr for sharing his cave with us.

Merrybranch Connection and Survey

Zeke McKee, Warren Wyatt, and Marion O. Smith discovered and began mapping newly discovered passage in Lost Creek Resurgence Cave in June of 2016. By the third survey trip they recognized the passage and knew they were in Merrybranch Cave. The final survey numbers made the cave 4859.6' in length with a vertical extent of 60'. A nice through trip is now possible between the entrances at Merrybranch to the Lost Creek Resurgence entrance, which feeds the above ground waterfall at Lost Creek State Natural Area.

Tires-to-Spare Presentation

In early 2017 the UCG hosted a public talk featuring our former faculty advisor, Dr. Ric Finch. The talk, entitled Urban Karst Drainage Problems spoke of the complications of a city having its stormwater routed through caves, the science behind understanding the hydrologic network, and best management practices for Cookeville, Tennessee. The meeting was attended by several Cookeville City

employees and a city council member, as well as many non-cavers. The event was recorded and live streamed to Facebook. Our final head-count was approximately 90 people, and the live video has more than 1,000 views.

Mill Pond Discovery

The location of a large karst spring inside of the Flynn Creek meteor impact site was recently described by Chuck Sutherland. This cave is unique due to its large size, its geology, and it may represent the first underwater cave inside a meteor impact structure. UCG cave diver Thorn Walthall is spearheading the exploration and survey of this unique cave. It is our hope that geology exposed in the passage will shed light on the geometry of the impact structure.

Natural Trap Cave, Wyoming

Natural Trap Cave, in the Bighorn Mountains of Wyoming, is a pit cave in which thousands of animals, from the late Pleistocene to present, fell in and are buried. While it is a world class paleontological site the Bureau of Land Management, who owns the cave, hasn't allowed a dig take place there since 1972. In 2014, they opened it back up for a team of paleontologists, whose work is ongoing.

In June of 2016, Clinton Elmore, while doing work on his master's degree assisted in the survey of Natural Trap Cave. A few week later, for Ryan Gardner and Chuck Sutherland showed up and provided general assistance for the dig crew. To learn more about the work done at Natural Trap Cave, follow the QR code.

QR Code: https://c1.staticflickr.com/1/636/32220784785_29d7231e27_o.png

Karst Waters Institute conference in San Juan, Puerto Rico

UCG cavers Ryan Gardner and Chuck Sutherland attended the Karst Waters Institute conference in San Juan, Puerto Rico in January and February of 2016. Both presented posters related to their work on karst issues.

Ryan's poster, "Delineation of a Major Karst Basin with Multiple Input Points, Roaring River, Tennessee" related to his work in 2015 conducting a geographic inventory of the region upstream from The Boils (a large artesian karst spring in Jackson County, Tennessee) and the subsequent dye tracing. Chuck Sutherland's poster, "Cave Life Relational Database" was a proof-of-concept which related numerous regional biological databases.

Other cavers present included Maureen Handler and John Hoffelt. Several caves were visited including Cueva Ventana, and Las Cuevas Del Rio Camuy.

Cave Map Georeferencing

In the last year cavers in the UCG have georeferenced 36 cave maps allowing cavers to look at them using GIS software, or Google Earth as an overlay. This data will be available at the next Tennessee Cave Survey data release or in advance by emailing cjsuther21@gmail.com.

LiDAR Initiative

UCG caver Jon Zetterberg is spearheading an initiative to use newly released LiDAR data in the state of Tennessee in hopes of finding new caves. The scope of this project covers 32 counties from the Kentucky border to the Alabama/Georgia border along the Cumberland Plateau and surrounding region, and contains 72% of the known caves in Tennessee. Volunteers use GIS to search through the highly detailed elevation data and identify sinks, springs, and swallets. These points are then field checked to see if they are caves or just karst features. This is a collective effort to contribute to the Tennessee Cave Survey, working as a team rather than secret caving individually. To get involved email Jon Zetterberg at jzett33@gmail.com. The project is open to all who are willing to do GIS work or field check potential caves.

Blackwater Spring Cave

Ryan Gardner and Jon Zetterberg discovered a spring cave on the Blackburn Fork River but the passage was underwater. Cave diver Thorn Wathall was called in and explored the cave to 300' before running out of line and returning. A survey and push trip is scheduled in the future.

Mammoth Cave Historical Research

In early 2016 Dr. Joe Douglas secured a research permit with the National Park Service to find and investigate signatures of Civil War soldiers that visited Mammoth Cave. This would also include caves of Mammoth Cave National Park.

Joe Douglas, Marion O. Smith, and Kristen Bobo made over a dozen excursions in the past year primarily to the main cave but also to several smaller caves inside the park. Numerous notable signatures have been collected and researched. The most recent being B. W. Thomas in February 1862 as a part of Morgan's Squadron. Thomas is one of only four confederate signatures found in the cave to date. The following papers were published in 2016 detailing the results of this research:

Marion O. Smith and Joseph C. Douglas, "Civilian and Soldier Names of Hundred Dome (Coach) Cave, Kentucky, 1859-1862" (April 18, 2016). Mammoth Cave Research Symposia. Paper 5.
http://digitalcommons.wku.edu/mc_research_symp/11th_Research_Symposium_2016/Day_one/5

Joseph C. Douglas, Alan Cressler, George Crothers, Marion O. Smith, Kristen Bobo, and Justin Carlson, "Recent Investigations at 15Ed23: Historic and Cultural Resources in a Disturbed Cave Environment"

(April 18, 2016). Mammoth Cave Research Symposia. Paper 8.

http://digitalcommons.wku.edu/mc_research_symp/11th_Research_Symposium_2016/Day_one/8

Tennessee Chapter of the Nature Conservancy - Bat Work

For the past six years, Kristen Bobo has been contracted with the Tennessee chapter of the Nature Conservancy to census bats throughout Tennessee for TWRA. Unfortunately this has largely been documentation of the decline of bat populations as a result of white nose syndrome. Research within these caves has yielded important prehistoric cultural resources which are reported to and researched by appropriate professionals.

Enigma Survey

After assisting Lee White with a bolt climb in Enigma Cave for Marion O Smiths 74th birthday, Zeke McKee was hoodwinked by "The Goat" into taking over the dormant survey of the cave. Receiving survey documents from the original explorers, including but not limited to: Hal Love, Joel Buckner, Jason Wyatt, Trey Caplener, Dave Parr, as well as a survey by Jim Smith and Marion Smith, and a more recent vertical survey by Derek Bristol, the data was compiled into a working map and the survey could resume.

Several trips have been performed at this date. One through the vertical maze of the dome complex up and into the waterfall window at 246' up the impressive "Enigma Dome". Over 1000' of passage surveyed at the top with no end in sight. Also survey of the shortcut to the large room via Thanny Mann's "lasso dome". Trips have also been performed in the lowest level of the cave. Many more trips will be necessary, and with Marion's attempt to have every dome in the cave climbed, a certain vertical maze of a map will be the end result.

As of 12/30/16 there has been a total of 11,658.1' surveyed. The horizontal extent is 10,913' with a vertical extent of 309.2'. There is still much work to be done in the cave. Anyone wanting to participate should contact Zeke McKee.

Survey of Blue Spring Cave at the T27 Sump

Taking advantage of unprecedented drought this summer, Alfred Crabtree, Chris Higgins, Jim Fox, Robert Oakes, Ryan Gardner, and Zeke McKee conducted a difficult survey in a remote part of the cave in deep water and low airspace. They surveyed 4,863.6' down what was normally sumped passage before finding yet another sump.

UPPER CUMBERLAND GROTTO PHOTO GALLERY

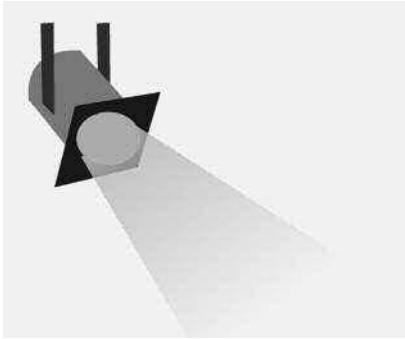


Top: XP kids in Blue Spring Cave (photo: Alfred Crabtree); Middle: Merrybranch Cave (photo: Chuck Sutherland); Bottom: Mill Pond Cave (photo: chuck Sutherland).

UPPER CUMBERLAND GROTTO PHOTO GALLERY (CONTINUED):



Enigma Cave (Photo by Clinton Elmore)



Spotlight On: The Nashville Grotto

Provided by Justin Hydrick

"These are exciting times in the Nashville Grotto. We formed in 1953 so next year, 2018, will be out 65th anniversary as a grotto of the NSS!"

Our current, up-to-date dues paying membership is at 33. We may be small in numbers but we have a great, enthusiastic group of cavers from all walks of life. We of course have some terrific caving pioneers like Gerald Moni, Ed Yarbrough, Larry E. Matthews, Dr. Bill Hailiday and more but we also have an amazing group of a new generation cavers, eager to make their mark in the Caving Community. In just 2016, Nashville Grotto cavers have turned in 36 new caves and 26 new maps to the Tennessee Cave Survey.

Also in the past year we have donated \$1,000 each to the SCCi and NSS. Other grotto donations are: \$50 to the Blue Spring Cave outhouse fund, \$680 SCCi Tumbling Rock, \$500 NSS HQ, \$100 Friends of Dunbar Cave; \$1000 SCCi Run to the Mill; \$500 Hamilton County Rescue Team; \$500 TennGreen Grassy Cove Fund, \$500 TennGreen Belle Forest Cave Protection; \$250 Manitou Cave of AL, \$250 Karst Springs Initiative.

Our chairman, Larry E. Matthews, has a new book out called The Caves of Fall Creek Falls (available for purchase at the NSS Bookstore).

Justin Hydrick has brought back the monthly newsletter, Speleonews. He also organizes and leads monthly grotto cave trips.

Ben Miller did some work on dye tracing caves, published in TAG-IN Guidebook. Gerald Moni prepared an article on saltpeter caves in Jackson County, published in "Cave Science" in 2016 TCS Data CD.

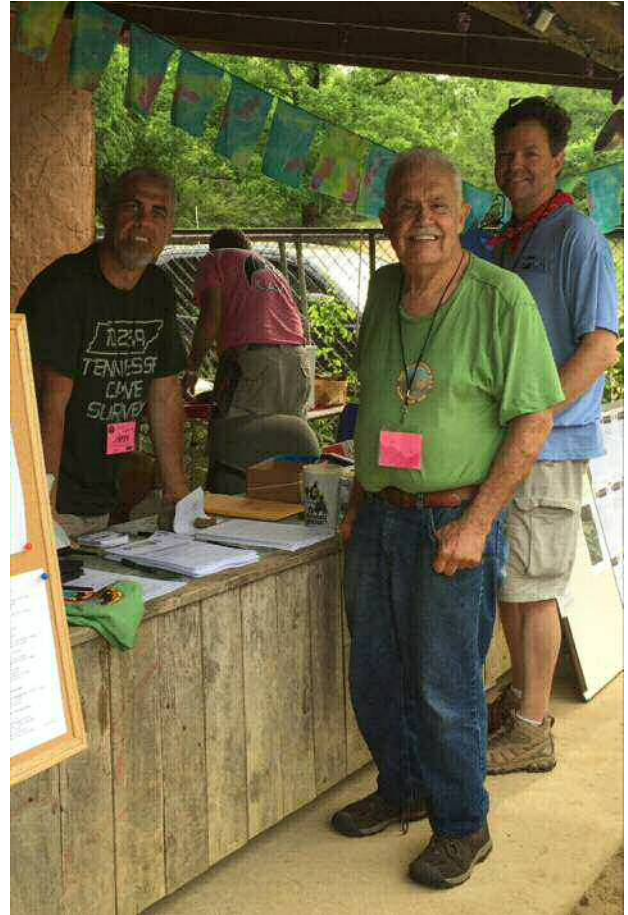
The Nashville Grotto hosted the 2016 SERA Cave Carnival with a turnout of 331 cavers.

And this year we are having our grotto Christmas Party in The Volcano Room inside Cumberland Caverns. We are all looking forward to that. Rumor has it that Gerald Moni will be entering the cave dressed as Santa and riding a reindeer.

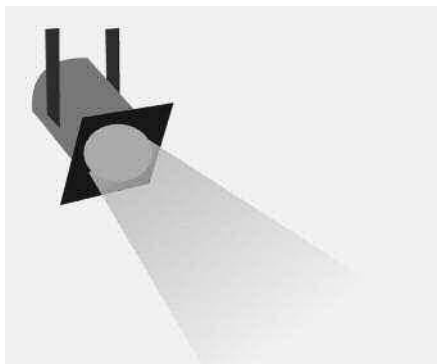


Nashville Grotto members on Run to the Mill Cave Trip(No photo credit). See next page for more photos in the Nashville Grotto Photo Gallery

NASHVILLE GROTTO PHOTO GALLERY



Clockwise, from upper left: At Cagles Chasm; Gerald holding court at 2016 SERA Cave Carnival registration; At Tumbling Rock; At Grassy Cove Saltpeter Cave. No photo credits.



Spotlight On: Chattanooga Grotto

Provided by Tripp Lichtefeld

Members of the Chattanooga Grotto have several projects and events ongoing, several of which are occurring on Fox Mountain. Marty Abercrombie is the lead in the Byers Cave resurvey project. There are a little over 4 miles resurveyed of the 5.5 known miles of cave. There is some likelihood that the cave could reach 6 miles. Remaining trips will consist of long stays underground to reach the back of the map in the "New Section" and the Downstream Section. There are some easy mop-up trips in easy to reach passages, as well.

Also on Fox Mountain, and also led by Marty Abercrombie, is a dome climb ongoing in Cemetery Pit. Tim White also has a permitted dome climb in another section of Cemetery that has involved others in the Grotto- Patrick Wilson and Michael Hopkins. No timeline is known as to the completion of these climbs.

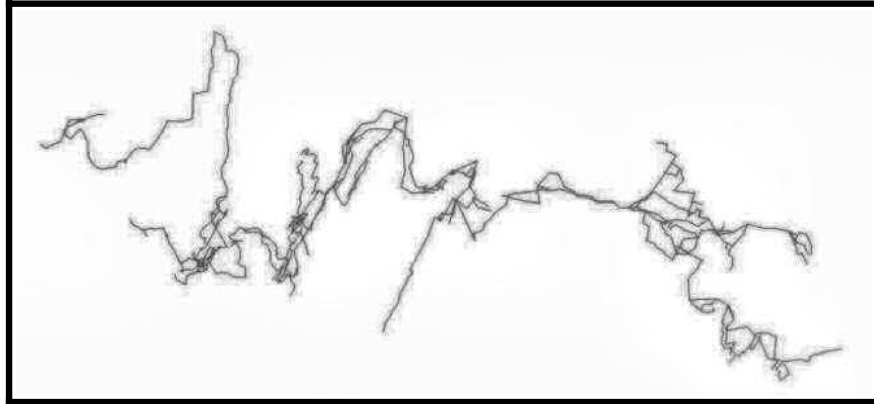
The fires on Fox Mountain cleared the tornado debris and underbrush from a large portion of the SCCi property. As such, the Chattanooga Grotto organized a ridge walk to see if anything was now revealed. A few leads were found on the north end of the preserve, but nothing that demanded an immediate return trip.

Odds and Ends: Donations were made to the NSS, SCCi, NCRC, and CHCRS totaling over \$2000. The grotto has also held vertical training days and had many well-attended meetings. Tripp Lichtefeld and Patrick Wilson were both recently accepted as members of the CHCRS Cave Cliff Technical Team. This makes at least 6 grotto members on the team. 2017 will be the 4th consecutive year that the Chattanooga Grotto will field a Bridge Day team. This team is led by Patrick Wilson. We have had great interest in this event, and the interest is increasing. Perhaps in a year or two, the Grotto will be fielding 2 teams. The 2016 Grotto Christmas party was also a hit. It was well attended and fun was had by all. 2017 will be another fun, adventurous, and productive year for the grotto.



Still smoldering fire on Fox Mountain, Dade Co., Georgia. The fire took care of much of the tornado damage.
(More photos on next page)

More Spotlight On: Chattanooga Grotto



Current line plot of Byer's Cave Re-Map Project by Chattanooga Grotto



Tripp Lichtefeld and Mike Furry working on a possible lead found by Rebecca McNabb.



Grotto vertical practice at Eagle's Nest, Lookout Mt.

Dead End With No Leads...The newest surprise in Blue Spring Cave

as recounted to the editor by Clinton Elmore, with photos by Alfred Crabtree

Deep in the recesses of Blue Spring Cave, White County, Tennessee, lay a surprise, just waiting on discovery. After recently putting the survey of Blue Spring Cave over the 40 mile mark, survey teams, lead and coordinated by Clinton Elmore, have been entering the cave on survey forays, cleaning up loose ends here and there, based on a review of the current map for noted leads or dig possibilities. Each trip has resulted in adding significant additional footage to the survey. The goal of this flurry of survey activity?..... surpassing Hellhole Cave on the US long caves list. Here is the story of a day of discovery.

The Discovery

On December 21-22, 2016, Clinton Elmore and Jason Alexander entered the cave to clean up a couple of the loose ends on the map. One of the objectives of this day's survey was to return to the end of a passage that Clinton had previously visited to see if there was additional passage to be had. While Jason was working on digging in one of the many nearby belly crawl leads, Clinton checked out the passage that was to yield the discovery. Clinton went to the mapped end of the passage, annotated on the map as "Dead end, with no leads", and determined, after a quick look, that more passage probably lay beyond that point. As soon as Jason finished digging on one of the crawls, Clinton approached him and asked him to return with him to further check out the "dead end" passage. After squeezing through a near formation choke, they encountered a void on the other side. There wasn't any air movement but it was obvious the passage continued on. They broke out the survey gear and began surveying the passage that lay ahead. They surveyed over 100 feet of tight and awkward sinuous canyon passage before Jason popped out into a room while Clinton was sketching. Clinton soon heard Jason hailing him, in a very excited state, urging him to come on ahead to see what he had found. Clinton continued to sketch, working his way towards Jason's location. The narrow canyon passage had hit a little room, with an awkward window crawl, located a few feet off of the floor, which led into the new room.

The Room

As Clinton entered the room, he saw that it was packed full of very long soda straws (some over 4 feet long!) and had many examples of flowstone formations scattered throughout the room, some white and some a mixture of beautiful soft, creamy colors. Though it was exciting, the excitement was tempered somewhat by the problem of traveling through the room. Despite being extremely careful, everywhere they went, it seemed impossible to avoid accidentally breaking soda straw formations and tracking mud, which was present in large patches across the floor of the room. They tried to avoid making a mess as much as they could while surveying the room.

The room is essentially a dead end, with no obvious passage leading out of it. One deep mud drain exists to one side that does not lead to any passage. This drain should be avoided because there is nothing to see down there and you would get covered with mud if you ventured into it. Another passage heading towards the hillside becomes too low. Those two "leads" are the only accessible leads in the room and shouldn't really be considered leads. Neither have air. While checking out the side passages, Jason found what is likely Ice Age raccoon bones, partially covered in flowstone. After finishing the survey in the new formation gallery, they headed out, planning to come back to photograph the room before setting up a trail to keep future impact down. (see Alfred Crabtree's photos in this newsletter).

On January 6, 2017, Clinton returned with Alfred Crabtree to photo-document the room in its near pristine condition and lay out unobtrusive black para-cord to define a restricted path through the room in an attempt to minimize damage in the future. The defined path allows for freedom of movement in the room

while also providing access to all areas for photography. Because the floor is extremely muddy, getting off-trail onto the flowstone is discouraged. If you feel there is a need to go off-trail, water shoes or clean overbooties should be worn. But, one more time, try to avoid going off-trail, if at all possible. This is a very fragile room (more so than any other area in Blue Spring) so it will be very difficult to preserve but hopefully the measures taken, to date, will help prevent future damage while making it accessible to future cavers so that they may gaze on and appreciate it's beauty.

PHOTOS OF THE NEW FORMATION GALLERY (All photos by Alfred Crabtree)



**Wide main gallery shot (upper left) and assorted nice ceiling and formation shots.
(More on next page)**

MORE PHOTOS OF THE NEW FORMATION GALLERY



**Top: Calcite encased raccoon bones, possibly Ice Age
Center: Flowstone covered wall with neat stalactite/stalagmite pairing
Bottom: Jason Alexander gazing at beautiful flowstone wall with creamy draperies.**



Ryan's Toolbox, A Facebook Live Event

Based on "Ryan's Toolbox, the Facebook Live Broadcast, Alan Cressler" and personal communication with Ryan and Alan

The long Thanksgiving weekend usually finds a horde of cavers descending on Marion Smith's and Sharon Jone's home in Bone Cave, Tennessee, to spend some time engaged in a little caving and, as is true most times, a little buffoonery. This past year was no different, with Alan Cressler, Ryan Mauer, Jeff Moore and others on-hand. The plan for Thanksgiving day was to head over to Russell Mountain and bounce Farewell Hole, not too far from Marion's place. After bouncing the pit, the group headed back to Marion's and on the way, Ryan stopped to check out a suspicious looking hole in a shallow depression. After a little hand digging, the surface layer of soil was penetrated, exposing a clean jumble of rock through which rocks could be tossed, falling down an apparent shallow pit. After it was obvious Ryan and Marion were not going to just walk away, Alan, using Facebook Live, began what may have been the first live broadcast of a dig in TAG. A run was made back to Marion's to tool up with a sledge and digging bar and the group worked into the night for a while trying to get the hole open. After an hour and a half or so, they had made some progress but had not opened up the hole. A decision was made to return on Saturday, properly equipped, with Alfred Crabtree accompanying the group to do a little rock shaving to take off some rock corners, or nubs, that were preventing even the smaller of the group from entering the feature. The nubs were removed and the hole was finally opened and was ultimately plumbed to a depth of 32 feet, making it a qualifying pit.

In the process of opening the cave, which took a total of about four hours (or about a hundred man hours), and amidst all of the buffoonery, Alan's favorite sunglasses and the head and handle of Marion's sledge hammer, in separate instances, were lost to the pit. Because of the sacrifice of the sledge hammer and Alan's sunglasses, the pit was named Ryan's Toolbox. It was the 100th cave that Ryan has visited since he began caving.

Famous quotes from the events transpiring during the dig:

"You can tell by the lack of air there ain't a damned thing here except for four idiots!" - Marion

"No, this is a learning experience!" - Marion

"I was really disappointed. I thought it would be 37 feet." - Marion

"Well, I had 'em for five years!" - Alan

"I got a grown cat!" - Marion

"About a hundred man hours to get in it (the 32-ft deep blind pit)." - Alan



Photos screen captured from Alan Cressler's Facebook Live telecast of the Thanksgiving Day dig at Ryan's Toolbox

**MORE SCREEN CAPTURES FROM ALAN CRESSLER'S THANKSGIVING DAY AND FOLLOWING SATURDAY
FACEBOOK LIVE BROADCASTS DURING EFFORTS TO OPEN RYAN'S TOOLBOX CAVE:**



Previous page, left to right: Ryan, at the beginning of the dig; MOS looking thrilled to be working on what he is sure is a dud; the big bar proved no match for the BFR; for the guys, Thanksgiving dinner was a shared bag of pepperoni on the mountain.

This page, top row to bottom row, left to right: One of the final and futile attempts to get in on Thanksgiving night; Alfred Crabtree was called in on Saturday with the drill to do a little rock shaving to knock of some stubborn knubs; after a number of shaves, Ryan was finally able to enter the hole; bottom left is the view looking in at Ryan, in silhouette, at the top of the pit; final plumbing resulted in a qualifying depth of 32 feet, into a blind pit; Ryan's Red Badge of Courage, a severe contusion, resulting from a close encounter of a sledge handle and rock, with the finger in the middle.

MOTLOW CAVE, LYNCHBURG, TENNESSEE

Text and photos by Kelly Smallwood

In the fall of 2016, Jason Hardy and I were contacted by the Jack Daniel's Distillery about surveying Motlow Cave, located on their property in Lynchburg, Tennessee. We, of course, jumped on the wonderful opportunity and enlisted a few of our good friends to help out (Ben Miller, Katie Ingram, Brian Ham, Nicole Miller, Hali Steinmann and Jason Lavender). During September 2016 we surveyed the cave in two trips and later made a third trip to the cave to photograph the cave and to document historical signatures with Marion Smith. After we finished the survey, another fellow caver, who is a Tennessee Squire, nominated both Jason and I to become Tennessee Squires. The Tennessee Squire Association is a private organization, membership by nomination only, created more than 60 years ago to recognize loyal friends of Jack Daniels.

Motlow Cave (MR7) is located in the northeast corner of Lynchburg, on the east side of Stillhouse Hollow, 300 yards northeast of Jack Daniel Cave (MR6). Motlow Cave is the most impressive and the most frequently visited of Moore County caves. It is reputed to connect with Jack Daniel Cave, however, after the 2016 survey, it is noted that no physical connection can be made but is likely that the water that flows through the passage near the entrance does flow into the famous spring cave. It is also suspected that Motlow Cave is an old paleo-trunk passage that was once connected to the spring cave but is now blocked by breakdown in the New Discovery room.

As noted by Tom Barr in his 1961 book, *The Caves of Tennessee*, the cave opening was a small hole on the hillside. During the Brown-Forman renovations in 1982, the distillery made some significant renovations to the cave, which included enlarging the entrance to 28 feet wide and 25 feet tall. They installed large western cedar doors that were made by Larry Shockley, from Belvedere, TN. Larry re-used the lock that was on the old gate on the new doors. The lock is noted to be over 100 years old and each door weighs 400 pounds.

The cave consists of three large rooms. The entrance room and the Big Room are connected by a passage 300 feet long, a narrow extension of this passage, and two side passages 150 feet long. The entrance room is 30 feet in diameter and 30 feet high, and the Big Room is 75 feet by 40 feet by 40 feet high. The main passage connecting the two rooms runs northeast, and the side passages run northwest approximately at right angles to the main passage. In 1982, the Brown-Forman Corporation spent \$97,000 in renovations to commercialize the cave and remapped it. During their renovations, a 62-foot pit system in the Big Room was filled-in and a new portion of the cave was discovered and named the New Discovery.

The side passage off of the entrance of the cave runs in a southeast direction for 150 feet to the Signature Room and a very tight, 20-foot long crawlway. In the Signature Room, there are hundreds of signatures. There are three notable signature observations to be seen in the Signature Room. The first is a collection of signatures, dated January 16, 1863 and attributed to the "51st ALA". It is believed these signatures are from Civil War soldiers who belonged to the 51st Regiment of Alabama. The second observation is the signature of one of the cave's namesakes, Tom Motlow, who was the younger brother of Lemuel Motlow. There is no date associated with this signature. Finally, there is the oldest noted signature in the cave, from 1834, scratched into the right wall of the room. During wet weather, a rimstone dam in this area actively flows into the tight crawlway. After the tight crawlway there is a 20-foot deep pit into a mud room. From here, there is a 10-foot climb up through breakdown into the New Discovery room. The New Discovery room is approximately 240 feet long by 100 feet wide and is 40 feet tall. There is also evidence of saltpetre mining in the cave but no written documentation has been found to support this.

The Brown-Forman Corporation operated the cave as a commercial cave for approximately 20 years before it was closed to tours. In 2016, the Brown-Forman Corporation reached out to Jason Hardy and Kelly Smallwood to re-map the cave. Their plan was to re-open the cave for VIP tours. The total cave length is 1672.7 feet long and 97.7 feet deep. (Barr, 1961; Jason Hardy and Kelly Smallwood, 2017. (Follow Kelly's TAG Caver blog at <http://www.tagcaver.com/>)

(More Motlow Cave, continued on next page)

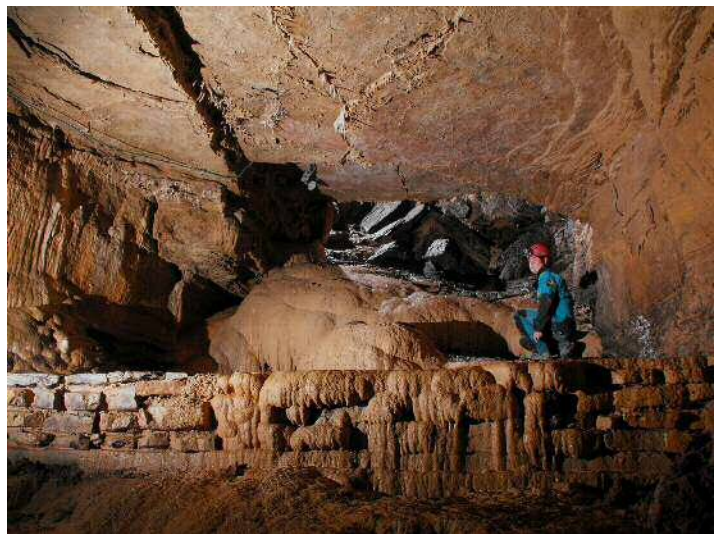
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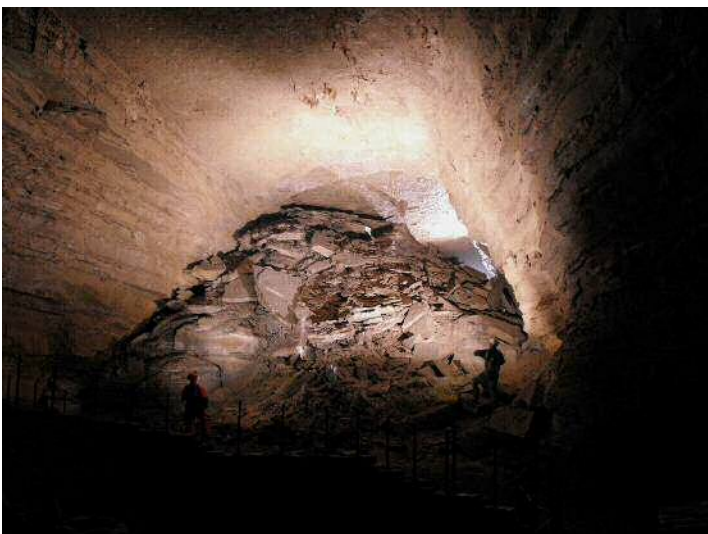
MORE MOTLOW CAVE PHOTOS (All photos, Kelly Smallwood)



Stairs at the entrance



Man-made rock wall, partially encased in flowstone



Terminal breakdown in the New Discovery room

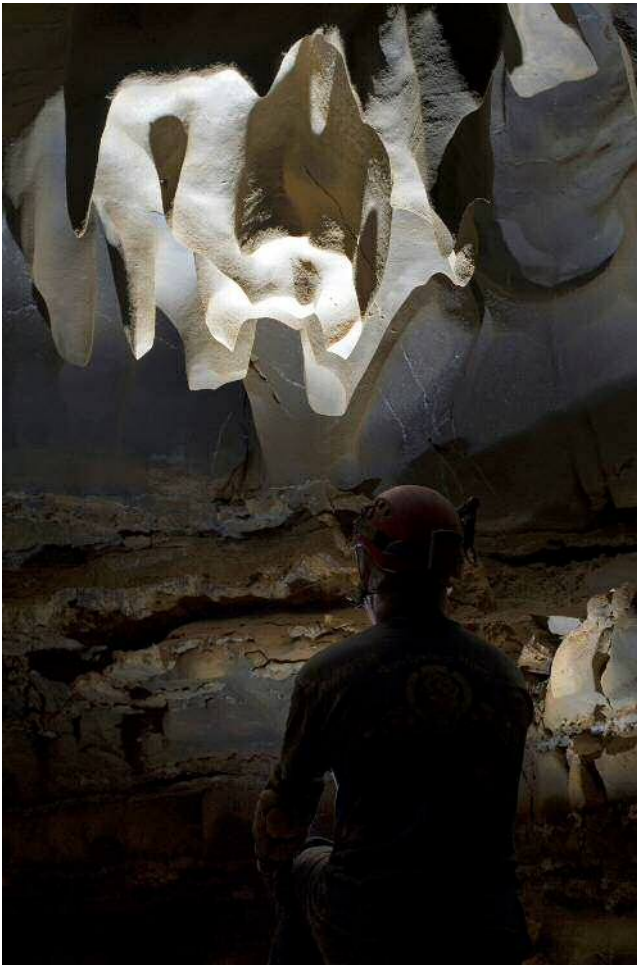
MATT TOMLINSON PHOTO GALLERY

Matt has long been recognized as an excellent TAG and SERA cave photographer. He is a past winner of Best in Show at the SERA Fine Arts Salon and most recently provided photo documentation support for the 2016 expedition of the Proyecto Espeleológico Sistema Huautla (PESH). Here is a sampling of a few of his recent TAG/SERA cave photographs.



Top: Abby Harmon, in register room, Marion County, TN cave
Bottom: Chris Kerr, Love's Court Cave No. 2, Knox Co., TN

MATT TOMLINSON PHOTO GALLERY (Cont.)



Clockwise, from upper left: Anastamosis, Blue Spring Cave, White Co., TN; Matt Lee descends 30 ft. pit, Fentress Co., TN; Jason Lavender ascending 70 ft. pit.

JIM FOX PHOTO GALLERY

Jim has been shooting in caves for several years and in 2016 picked up a Sony Alpha a6000 and has stepped up his game, capturing many nice images in Tennessee caves. We're looking forward to what he has to offer in the future. Here's a sampling of his work during the past year.



This page, clockwise from upper left: Barbara Gaby in Blue Spring Cave; Darien's Dome, Enigma Cave; Ryan Gardner in Doomsday Pit; Shaft of Sun in Conley Hole.

Back Cover: Jim Fox photo "On Rope in Enigma Cave"

