



TAG Caver    Volume 8 Issue 2

**TAG Caver** is the official newsletter of the Sewanee Mountain Grotto & is published on a quarterly basis. Sewanee Mountain Grotto is a non-profit internal organization of the National Speleological Society dedicated to the exploration, mapping and conservation of caves. If you are interested in joining the Sewanee Mountain Grotto we invite you to attend one of our monthly grotto meetings. Meetings are held the second Saturday of each month at various locations in the heart of TAG. A typical meeting starts with a potluck dinner at 6pm CST, followed by the meeting at 7pm. On occasion we also have special presentations following our meetings. Annual dues are \$10 per person and are due in January. Please email [sewaneemountaingrotto@caves.org](mailto:sewaneemountaingrotto@caves.org) or one of our officers for more information. You may also visit our website at: <http://www.caves.org/grotto/sewaneemountaingrotto>.

#### **2017 Sewanee Mtn Grotto Officers:**

Chairperson:	Kyle Lassiter
VC & Programs	Kristine Ebrey
Treasurer:	Blaine Grindle
Secretary:	Vacant
Member at Large:	Shari Lydy
Conservation Chair:	Maureen Handler
Survey Chair:	Kyle Lassiter
Webmaster:	Tina O'Hailey

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Email articles and photos for submission to the editors (formats: docx, pdf, tiff, jpeg). Content may include articles and/or photos from non-members as well as other caving regions.

Statements and opinions expressed in the TAG Caver do not necessarily reflect the policies or beliefs of the Sewanee Mountain Grotto or the NSS.

#### **Photo credits:**

Front cover: Tina O'Hailey and Shari Lydy

Back cover: Auction Donors

Page 7: Julie Schenck-Brown and Kristine Ebrey

Page 8: Kenneth Storey-Nickajack Cave

Page 9: Maureen Handler and others

Page 10: Cindy Ingram and Maureen Handler

Page 11: Chattanooga Grotto-Gourdneck map

Cave descriptions and maps: TN Cave Survey



## *Cave Fest Fall 2017 Volume 8 Issue 2*

### *Connect with the Grotto*

If you are new to the Grotto, here are a few ways you can get to know other members:

- Join us on a Grotto Trip, Survey Trip or a cleanup.
- Sewanee Mountain Remailer. After you have joined the grotto, join our mailing list to keep up to date with cave trips and meetings.

Go to:

[https://groups.yahoo.com/neo/groups/sewanee\\_mountain\\_grotto/info](https://groups.yahoo.com/neo/groups/sewanee_mountain_grotto/info) and click join. Please provide your real name so we'll know who you are.

Facebook – Join our official unofficial Facebook Page to meet other area cavers and plan trips. Search for Sewanee Mountain Grotto under groups.

Grotto Merchandise: The Grotto has sold out of patches. We do still have plenty of KOOZIES for \$1. Please contact Kristine Ebrey at [kristine@visualworld.com](mailto:kristine@visualworld.com)

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Welcome to Cave Fest 2017. This event has become the place to be on Labor Day Weekend in TAG! Sewanee Mountain Grotto hosts this event to raise money for the caving community. We donate our proceeds to the NSS, the SCCi, Chattanooga-Hamilton County Rescue Squad and the SKTF. In addition, we have provided funding for the equipment to re-bolt vertical, pulldown caves such as Solution Rift and Pryor Springs. We have donated money to Tenn-Green to help purchase land in the Sequatchie Valley for conservation. Our auction has been supported by many vendors and grotto members who donate items to sell. The auction Saturday is great entertainment. Bring your wallets, bid high and bid often. All of this supports the caves we love. We thank everyone for their support of Sewanee Mountain Grotto and Cave Fest!

Maureen Handler

Cave Fest 2017 Chair

### Cave Fest 2017 Staff

Chair:	Maureen Handler
Registration	Sue Milburn
Auctioneers:	Maureen Handler and Philip Rykwalder
Auction organizers:	Kristine Ebrey and Bambi Dunlap
Auction recorder:	Kyle Lassiter
T-shirt	Tina O'Hailey
Banquet:	Cindy Ingram & Martha Mills
GrillMasters:	Cindy Ingram & Peter "Mudpuppy" Michaud
BrewMeisters	Blaine Grindle, Leslie Lytle, & Eric Schoonover
Band:	Albert Ogden
Guidebook editor:	Shari Lydy
Facilities:	Maureen Handler
Rope Course:	Chad Dubuisson
Lake Nickajack Bat Flight float:	Maureen Handler
Recycling:	Maureen Handler/SMG/SKTF
Trip leaders:	See trip sign up sheets and please thank 'em all



# 15th. Annual Cave Fest - Schedule of Events

*\*All times are Central\**

## Friday 09/01/17

*Registration opens at noon.*

*All day—Caving! See registration for led trips and sign-up sheets.*

*All day—Rope Course*

*6:10 pm—leave campground for Nickajack Cave bat flight paddle*

*Dark-ish— Popcorn and Movies: NatGeo Mysteries Underground (kids) and McBrides Rescue (adults)*

*7:00 pm—Homebrew*

## Saturday 09/02/17

*All day —Led cave trips! See registration for sign-up sheets.*

*All day —Rope course*

*5:00 pm—Potluck dinner*

*7:00 pm—Auction and Homebrew!*

## Sunday 09/03/17

*All day—More caving*

*All day—Ropes Course*

*6:10 pm— Leave campground for Nickajack Cave bat flight paddle*

*8pm-11pm—Band—Albert Ogden and Friends —git up and shake your booty!*

## Led trips

### Friday

Solution Rift, South Pittsburgh Pit, Pennington karst hike

### Saturday

Sweet Pot, Cagles Chasm, Bluff River, Bible Spring, Whiteside, Waterworks, Cedar Ridge Crystal, Gross Skeleton, local campground hike

### Sunday

Bain Cave (paddle), Sycamore Falls (hike), Hang Em High, Catacombs, Buggytop, Gourdneck

## Important Things to Remember

- Sign up and meet for Cave trips and Float trips at Registration (only sign up for float trips if you need a boat).
- The Ropes Course is located in the Party Zone near the Hot Tub and Sauna.
- Beer is only served to those who purchase a CUP and are over 21.
- Do Not SPEED! Please be careful when you are driving around the campground and watch for children and dogs at play.
- Please pickup after your furry kids and ensure their good behavior and know their whereabouts.
- Keep your campsite free of trash and make sure all food is secure from animals.
- Recycle all glass, plastic (no caps), and aluminum in the bins provided.
- Watch for snakes and spiders around woodpiles.



## **Local Day Hikes**

### **Foster Falls**

Foster Falls is a spectacular 60-foot waterfall plunging into a deep pool. Mountain laurel, azaleas, and hemlocks growing above the falls, along the sandstone overlook, and in the gorge below add to the beauty of this area. An easy hike will take you to the top of the falls. From there a trail will take you down a short but steep route into the gorge, over the creek on a suspension bridge and to the base of the falls for a delightful view and experience. The Fiery Gizzard Trail continues downstream from here for 13 miles, with many more delightful falls and natural features along the way. This is a good hike if you have a few hours to spare, or want to go swimming.

Directions: From Cavers' Paradise, drive to Monteagle and follow US-41 south out of town. Pass through Tracy City, making a right turn at a stoplight to stay on US-41. From this turn, it is 7.8 miles to Foster Falls Rd. on the right. It is well signed.

### **Stone Door**

One of Savage Gulf State Natural Area's primary geologic attractions, the Great Stone Door is a 10-foot-wide, over 100-feet-deep crack in the sandstone bluff that rims Big Creek Gulf. Along with Savage Gulf and Collins Gulf, Big Creek Gulf helps form a crow's foot-shaped maze of canyons, or "gulfs" as they're known in this part of the country, which drains into the Collins River. The Great Stone Door has been used for centuries as a means for people and animals to get up and down over the bluff. Native Americans used it before the arrival of European settlers. It's also rumored that bison used it when they inhabited the Cumberland Plateau before the mid-18th century. Stone Door Trail is a 1.6 mile moderately trafficked out and back trail that features a waterfall, access to the Great Stone Door, and is good for all skill levels. There are numerous other trails to explore from here as well. Directions: From Cavers' Paradise, drive to Monteagle and follow US-41 south out of town and into Tracy City. Turn left on TN-56 north in Tracy City, and follow it for 20 miles to the town of Beersheba Springs. Turn right onto Stone Door Rd (look for signs for Savage Gulf and/or Stone Door), and follow it for 1.5 miles to the parking area.

### **Buggytop Trail and Cave**

A 4 mile roundtrip hike to one of the largest cave openings in Tennessee. A through trip hike through the cave can be done by entering one of the entrances, hiking through the cave to exit a different entrance, and then returning to the main trail. You can travel through the borehole and keep your feet dry with just a little effort, unless you push the breakdown-filled upstream section of the cave. The hiking trail closes at dark. The cave narrative from TCS is provided below:

The main entrance of Buggytop Cave (Lost Cove Cave) is one of the most impressive cave mouths in the State. It is 100 feet wide and 80 feet high and opens at the base of an overhanging bluff 150 feet high. The cave stream cascades down from the mouth and drops 40 feet in less than 100 yds. A cold draft of air blows from the cave in summer and can be felt in the creek valley nearly half a mile from the entrance.

From the main entrance the cave extends northeast for 375 feet through a breakdown-strewn passage 60 feet wide and 40 feet high. A second, higher entrance is developed on the east side of the passage here. A rimstone-filled side passage extends northwest for 175 feet opposite this second entrance and has a narrow branch which extends much farther. The cave continues for another 600 feet northward along the stream to a large breakdown, over which the explorer must climb. From the top of this climb one views the largest single chamber in the cave, a huge, sand-floored room 200 feet wide and 300 feet long, with the stream flowing through the middle. An opening at the east side of this room leads out via the Peter Cave entrance. Thus, the cave has three entranc-

es. From this large room to the point where the cave ends in breakdown 2200 feet from the mouth, it is necessary to climb up and down over large rocks and wade through the stream in order to traverse the remainder of the cave. At this point the cave crosses under the saddle between Crow Creek Valley and Lost Cove, and breakdown is extensive. The stream has cut down along its left side and has left a steeply sloping pile of breakdown on its right. The cave stream is undoubtedly the same one that sinks in the floor of Lost Cove at the Big Sinks. (Barr, 1961)  
 Directions: From Cavers' Paradise, travel north on TN-156 to the intersection of US-41A near Sewanee. Turn left on US-41A north and travel for about 2 miles, passing through the small town of Sewanee (not the university). Turn left on TN-56 south, then travel for 6.5 miles to the pull-off and parking area on the left.

## Fiery Gizzard Trail

The Fiery Gizzard Trail is a 12.5 mile long one-way trail that connects the Grundy Forest and Foster Falls. Hikers may observe nature, swim in Fiery Gizzard Creek, see spectacular rock formations, cascading streams, waterfalls, rocky gorges, panoramic overlooks and lush woodlands. This trail has been rated by *Backpacker* magazine as one of the Top 25 in the country and should not be missed! The northern end of the trail is accessed via Tracy City at the Grundy Day Loop trail, and the southern end is accessed via Foster Falls.

Here are some day hike options from the state park website:

- **Grundy Day Loop** - This moderate 2 mile roundtrip hike will take you past multiple waterfalls, ancient trees, and plenty of enjoyable swimming holes.
- **Sycamore Falls Loop** - A moderate, 3 mile hike that drops off the top of the plateau and brings you to some interesting geologic formations and waterfalls. Don't forget your bathing suit to take a dip in the refreshing Sycamore Falls swimming hole!
- **Climber's Loop** - This 2 mile roundtrip hike takes you along beautiful cliff line and along the base of towering bluff walls. Oh, and the picturesque Foster Falls is located on this hike!
- **Raven's Point Loop** - A difficult 10 mile trek into some of the more remote areas of the Fiery Gizzard. Please allow adequate time to make this hike (and of course to see the many springs, sinks, caves, overlooks and waterfalls). Meet this trail by way of the Fiery Gizzard below Sycamore Falls and be sure to check out the Raven's Point spur trail.
- **Foster Falls to Small Wilds** - A 5 mile out-and-back hike that will take you past waterfalls and some pretty cool overlooks.

## JUST A FEW OF THE AUCTION ITEMS

### BRING LOTS OF MONEY

### BID OFTEN

### DRINK HEARTILY

BAT YARD ART	COLLECTOR'S ITEMS FROM MOORE J SMITH'S ESTATE			ROPES, ROPES, ROPES!	
LIGHT WEIGHT COT	CAMPING GEAR	DISNEY VACATION PACKAGE		TENNESSEE AQUARIUM TENTS	
CAMP FURNITURE	ARTWORK	HENNESSEY HAMMOCK	STONEWARE MUGS	CARBIDE CANNON	
FLEECE	CAVE BOOKS	SCCI MEMBERSHIP	CARBIDE LAMPS	ACCESSORY CORD	CAVE GEAR
SNORKELING GEAR	KNEE PADS	SEE ROCK CITY	DINING AND LODGING PACKAGES		ADVENTURE PACKAGES
TICKETS TO THE SYMPHONY		KORBET TOOLS	GIFT CERTIFICATES	MEAD AND HOMEBREW	FOOD
LOTS OF HIGH VALUE MYSTERY BAGS		HELMETS	TROY'S SPECIAL FINDS	COOKING GEAR	CAMP CLOTHES
ONE OF A KIND	ECLECTIC ITEMS	BACKPACKS/DAYPACKS	GIFT BASKETS	LIST OF ALL ITEMS ONSITE	

*John Attaway: A Landowner who makes a Difference*  
*Julie Schenck-Brown, NSS 30493, RL, FE*

In 2005 the Sewanee Mountain Grotto was reactivated by a dedicated group of cavers living on Jumpoff Mountain. The core group was composed of veteran cavers who were interested in recruiting younger members into the grotto and the NSS. Looking to expand the range of opportunities for grotto members, I was approached by Myrna Attaway and Maureen Handler about surveying a few caves on a large tract of land in Grundy County that was owned by Myrna's father, John Attaway. The caves were located in Payne Cove, a convenient drive from Jumpoff, and thus Myrna, Maureen, and John were hoping this would be an ongoing project for the Sewanee Mountain Grotto to teach other grotto members all aspects of survey, including setting point, reading instruments, and sketching. I was intrigued and willing to help, as I had known John for several years as a friend and wanted to help him as a landowner. So after the annual 2006 spring meeting of the Tennessee Cave Survey, Myrna, Maureen,



John, and I traveled to Payne Cove that afternoon for a tour of John's property. As we eased into Payne Cove, John's sense of pride was evident as we discussed our first survey objective, Red Trillium Cave. John explained that the cave was explored to 3,000 feet in length and had several beautiful formation galleries, a rarity for caves on the Highland Rim of Tennessee. Because of the cave's natural beauty, John also discussed his plans for ongoing protection of the cave and the nearby fauna for which the cave was named. However, John also explained that he welcomed NSS members to his caves, as long as they followed the conservation ethic of "Take Nothing But Pictures, Kill Nothing But Time, and Leave Nothing But Footprints."

John was especially interested in seeing the cave surveyed as he thought the cave was much longer than the estimated 3,000 feet. And he knew that a survey project would promote comradery among current grotto members, while welcoming others. As we discussed these plans, John,

Myrna, Maureen, and I crawled inside the small entrance and christened the beginning of the survey, setting plans to survey Red Trillium Cave and then the other significant caves in Payne Cove. Over the next few years, John's love for Red Trillium Cave and devotion to protecting it and the other caves in Payne Cove remained evident when he talked about the survey. And his gentle assurance pushed us through the grim crawls that rewarded us with over 1,000 feet of virgin borehole as we surveyed Red Trillium to a length of 5,299 feet.

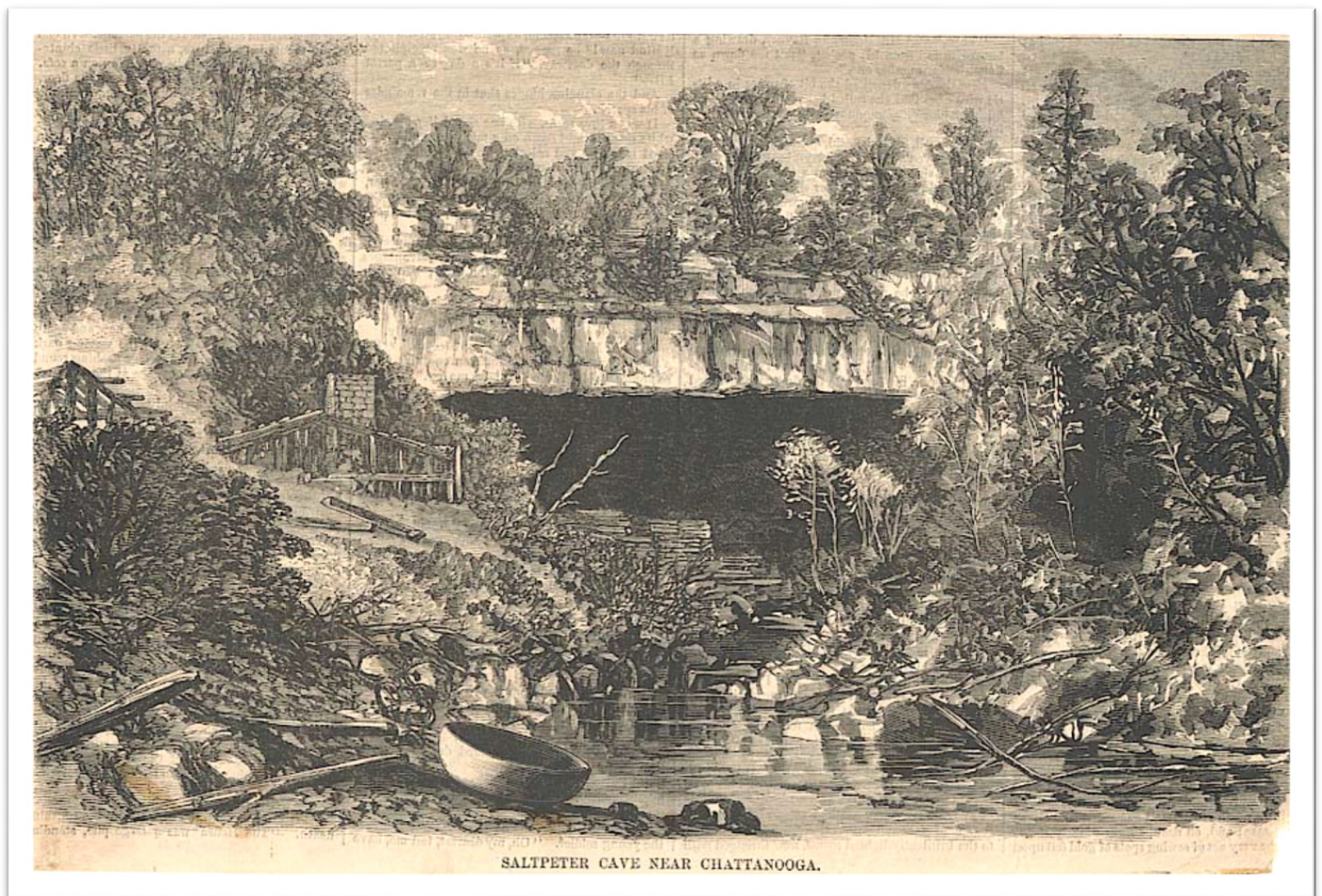
As the Sewanee Mountain Grotto adopted Payne Cove for their initial survey project, John encouraged the survey and exploration of his other caves, with his kindness and generosity serving as the main inspiration for all who participated. John was even the first male surveyor to help the Psycho Survey Bitches, an all-female survey group that was founded during the survey of Red Trillium Cave. Protection of the caves in Payne Cove, as well as access by NSS members, whether or not they are a member of Sewanee Mountain Grotto have been part of John's legacy of kindness towards cavers. And in the past year, John has even initiated

arrangements with the Southeast Cave Conservancy, Inc. (SCCi) to donate his caves and ensure perpetual protection and conservation.

*Certificate of Appreciation*  
*Landowner Relations*







One of the regular trips during Cave Fest is the **Nickajack Cave bat flight paddle**. We go on Friday & Sunday evenings. -Maureen Handler

In the late 18th century during the ongoing war with the Chickamauga, the area was inhabited by Chickamauga Cherokee and Muscogee-Creek warriors residing in the "Five Lower Towns" on the Tennessee River (near present-day Chattanooga). The warriors were mostly made up of the Cherokee, led by Dragging Canoe. Small groups of Shawnee and Creek lived with and fought with them, in addition to the occasional bands of Muskogee, who also served as allies. Renegade whites; white traders; Spanish, French, and British agents; and runaway slaves also inhabited the area.

Nickajack Cave, formerly called Tecallassee, near the site of the former town, may have been used as a hideout and cache by the Chickamauga Cherokee. Its deposits of bat guano were mined by Confederate forces during the Civil War, and the cave became one of the leading sources of saltpeter for the Confederate Powderworks at Augusta, Georgia. The road used to transport the material became known as the "Nickajack Trail".

Nickajack Cave, partially flooded by its namesake lake, is considered to be biologically one of the most important caves in Tennessee. This is primarily because of the thousands of gray bats that inhabit it from late April through early October. The gray bat, a medium-sized short-eared species, is one of over a dozen in Tennessee and is listed as federally endangered. During the time of year they roost in Nickajack Cave, which is also when they give birth to their young, they emerge each evening around sundown from the mouth of the cave to search for food in a continuous stream estimated to contain over 100,000 bats and lasting about 45 minutes. It is estimated they consume 274,000 pounds of insects a year. Although they prefer mayflies and stoneflies, they also eat mosquitoes, caddis flies, beetles, moths and other aquatic insects. In the fall, the bats move to cooler caves for hibernation.





**From Thomas C. Barr "Caves of Tennessee", 1961.**

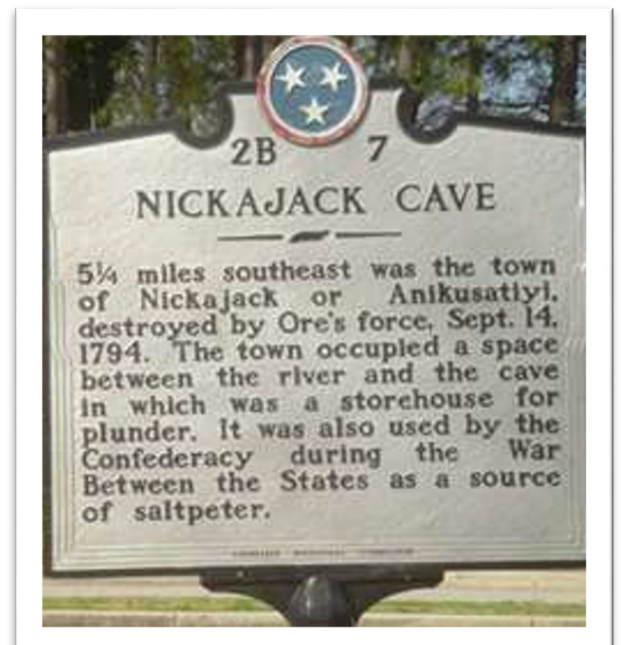
Nickajack Cave is described before being flooded. "The huge mouth is probably the largest cave entrance in the eastern United States. It is 140 feet wide and 50 feet high, and it is possible to drive automobiles a short distance into the cave. The stream is dammed up at the entrance to create a fishing lake. A short distance from the mouth of the cave is nearly 200 feet wide with a floor of dry, mud-covered areas, broken rocks, and the large cave stream flowing below. In a short distance the passage narrows to about 60 feet wide and 20 feet high and extends south-southwest for 2,100 feet into a large room 300 feet long, 90 feet high, and 125 wide. There are many broken rocks on either side of this room, and the stream flows through the middle. Beyond the breakdown the cave forks. One branch is 325 feet long and trends southwest. It has several side branches, mostly crawls, and a cutoff back to the stream channel.

The other fork, actually a continuation of the main cave though above the stream level, extends southeast through the breakdown, following the stream for 50 yards into a dry, sandy passage 30 feet wide and 8 feet high. The large avenue runs for 850 feet to the Bat Room, which is a low breakdown chamber 30 feet wide and 90 feet long. Beyond the Bat Room, a crawlway 8 feet wide, 16 inches high, and 210 feet long leads to the final room of the cave, a chamber

35 feet high, 40 feet wide, and 100 feet long. Many attractive formations are developed in the room, including several large draperies, and a huge flowstone formation-"Mr. Big"-which is 60 feet high and 75 feet in diameter.

The total length of the main cave is thus only 3,500 feet. A network of small passages, southeast of the main passage, is accessible by two or three openings 300 yards from the mouth of the cave. About 1,500 feet of passages were explored in this section.

Nickajack Cave extends beneath Jackson County, Alabama and probably also Dade County, Georgia. The extensive breakdown a half mile from the mouth coincides with Barton Hollow, which crosses the cave in Alabama."





## History of Cave Fest By Maureen Handler



I bought my original property (the party zone and where I built my house) in August 2002. I had the first Labor Day weekend for family and close friends 3 weeks later. In July 2003, Pup was helping me build my house and he asked if he could have a Labor Day weekend party in the Party Zone. Sure!! We all love a good party. That was Pupfest 1. In mid- 2004, the Sewanee Mountain Grotto re-activated and we all joined in at Pupfest for a fabulous weekend party and even built the first plastic shelter sauna.

In 2005, I suggested to the grotto that we have a fundraising auction at Pupfest to raise money for caving. We solicited a few donations and had another great party. By 2006, Pup asked me if the grotto wanted to take over the party and have a grotto event. Great Idea!! SMG took over the planning for the weekend.

The event continued to grow! Caving, Food, Beer, Fundraising and a cool place in the woods to hold it. We even started having live music with Anne & Blaine Grindle's son's band on Saturday night. In 2009, I purchased the old Wildheart Ranch campground, which has become Cavers Paradise. We moved Pupfest over to the campground completely by 2010. By that time we had built the sauna and purchased Jim Wilbank's old wood fired hot tub for the party zone. After moving

the event to Cavers Paradise the grotto changed the name of Cave Fest.

The event continued to grow in attendance, since it was the best party in TAG on Labor Day weekend. Caving trips became more plentiful, paddle trips to the Nickajack Cave bat flight became a staple and the pot luck dinner is one of the best feeds I've ever been to. We added home brew from the TAG Brewery, in addition to the store bought kegs. We moved the auction to Saturday night and had a big crowd.

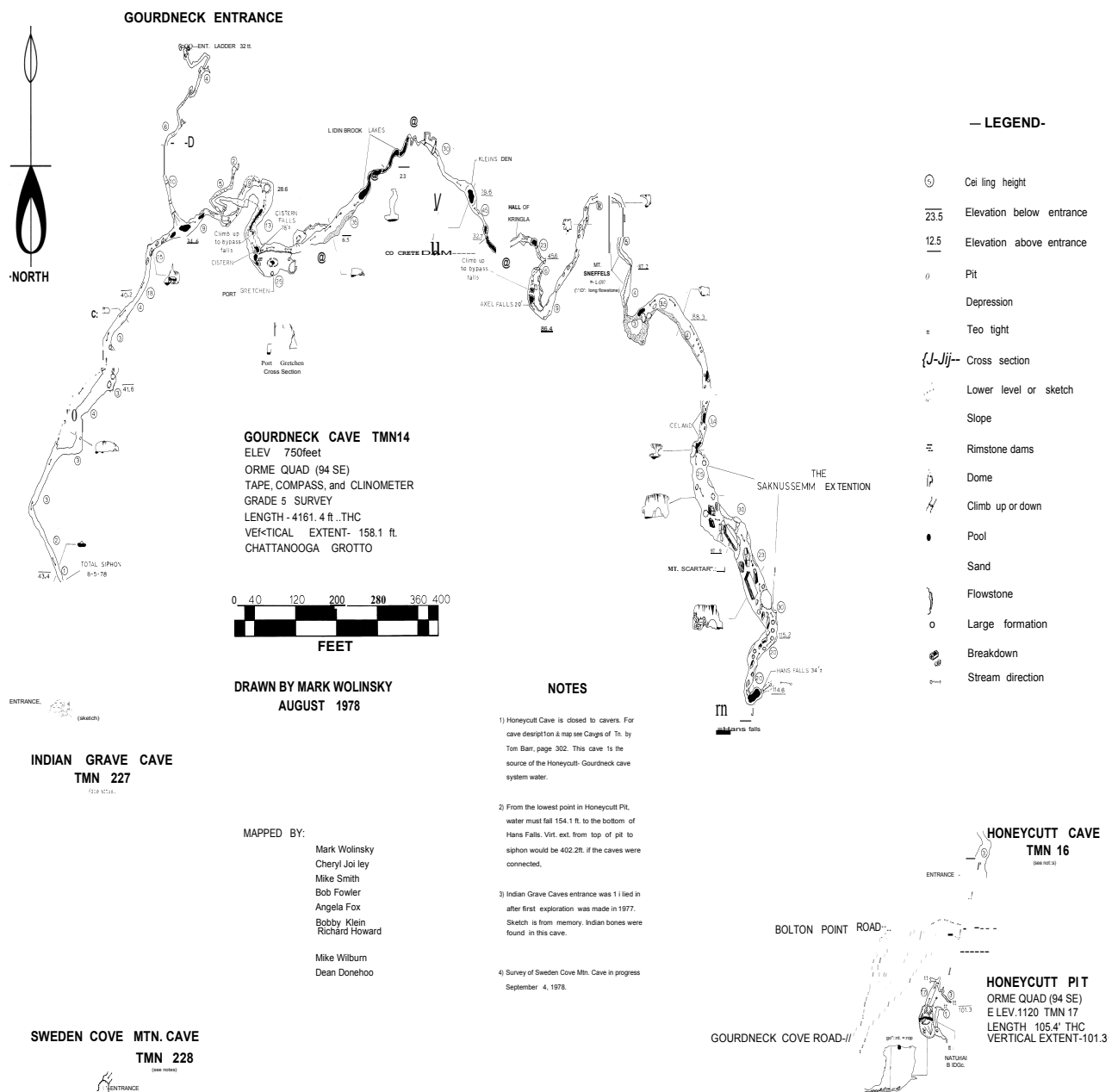
The auction grew in size too. In addition to the caving and local vendors, corporate sponsors were solicited and we started getting donations from the likes of Coleman, Hennessey Hammocks and Keson Tapes. The more the crowd grew and the more auction items we obtained, the more money we raised.

In less than 10 years, we were able to donate over \$10,000 to the NSS and a similar amount to the SCCI, while also supporting the SKTF, Hamilton County Rescue Squad and Tennessee Green among others. Now that SMG is a 501c3 non-profit organization, our corporate vendor list has grown. The Tennessee Aquarium now donates to us as does Disney, Bass Pro, Birkenstock and many more.



# Gourdneck Cave by Kyle Lassiter

Sewanee Mountain Grotto has started a new survey project: Gourdneck Cave! Located in Sweetens Cove (just down the mountain from Cavers' Paradise), it is a local classic because of its many fun waterfall climbs, towering canyons, and formations. The SCCi preserved access with a lease agreement in 1997, and since then thousands of cavers have enjoyed the beauty and sport this cave has to offer. Partially mapped by the Chattanooga Grotto in 1978, it is now our goal to resurvey the already mapped lower cave using modern survey techniques, and then to continue with new survey in the unmapped upper cave, which has not been visited by cavers in many years since the rope to that section was removed. A technical climb will be necessary to re-access the upper cave, which is rumored to be beautiful and lengthy by those who had the chance to explore it. Soon enough we plan to find out!





Our first survey trip occurred June 6, 2017, and so far we have had a total of four trips yielding several thousand feet of passage, with much more to go! The survey project is open to any grotto members and their guests, and all survey experience levels are welcome. No experience is fine too...we will teach you the basics in-cave. Basic vertical competence and physical ability is required to navigate this cave, and do expect to get wet on every trip.

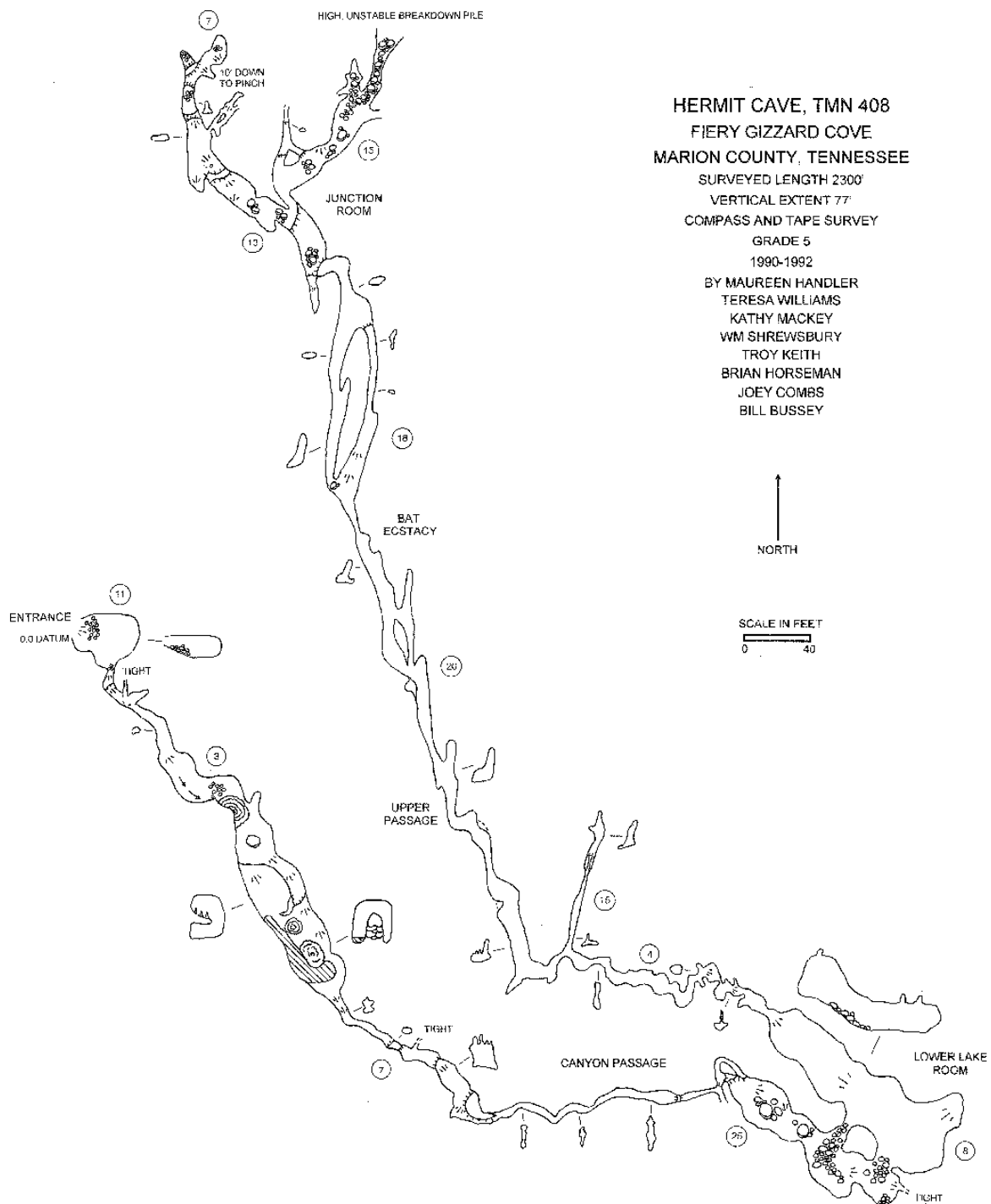
Special thanks to these cavers who have participated so far (in no particular order): Maureen Handler (3 trips), Jeff Patton (1 trip), Kristine Ebrey (1 trip), Lee White (1 trip), Blaine Grindle (1 trip), Devin McGinty (1 trip), Jim Smith (1 trip), and Jay Manneschmidt (1 trip).

If you're interested in helping out, or if you just want to follow along and see how we're doing, I've set up a Facebook page for news: <https://www.facebook.com/groups/452072271819911/>

Or, you can contact me directly through Facebook or at [kyle.lassiter@gmail.com](mailto:kyle.lassiter@gmail.com). Happy surveying!

***Hermit Cave TMN408*** The entrance is 12 feet wide by 4.5 feet high. It slopes into a large room where a hermit once lived. The room is 20 feet wide and 15 feet deep. A canyon passage on the right becomes a small belly crawl into a small room that leads to some walking passage. At this point there is a step-over, which is rigged, but the rope position is not especially helpful on the way in. The passage continues past some beautiful totem poles to a large haystack formation. You then have to cross a pool, usually about knee deep, and climb up a rigged sandy slope to the top of the passage. A stretch of exposed canyon passage leads to a climbdown that looks scary, but which has decent holds upon careful examination. At the bottom of this climb you will be in walking passage that goes into a large room with a ceiling covered with some spectacular anastomosis. There are ropes in both directions in the room and ascenders may be required. The rope to the left is a difficult climbup into a series of crawling tubes. The rope to the right leads to the upper levels. Approximately 40 feet beyond the rope is a free climbable crack to the upper levels. The upper levels contain 900 feet of dry phreatic passage with many fossil specimens. The upper level forks near the end of the cave. The left fork leads to some low muddy crawls. The right fork leads to a breakdown blocked passage. This cave is a real "caver's" cave, with many different types of passage, from canyons and free climbs to impressive formations and fossils. Cave length 2300'.

***Cedar Ridge Crystal Cave TMN6*** Located in the roadcut where U.S. Highway 41 (now Tennessee Highway 2) crosses over I-24, immediately north of Big Fiery Gizzard Creek. The cave is developed in the southern extremity of Cedar Ridge. The cave is gated. The entrance to this cave is 5 feet high and 7 feet wide, but the gate opening is 2 feet square. It opens into a room 30 feet in diameter and 10 feet high. A crawlway leads east into a passage which heads northeast for 150 feet and averages 10 feet wide and 5 feet high. Numerous formations decorate this passage. This passage leads into a room 75 feet long, 150 feet wide, and 25 feet high. The cave continues northeast, but another passage extends from this room to the northwest. Northeast the cave continues for 30 feet as a crawl, then opens into a room 75 feet in diameter and 15 feet high in the center. The cave may continue northeast past the point, but this section of the cave is very unstable and dangerous because of the nearby blasting to build I-24. Northwest from the largest room, the cave continues for 75 feet through a maze of flowstone columns and stalagmites. It then narrows to a small drip-stone grotto, beyond which a crawlway continues for an undetermined distance. Map on p 17.



HERMIT CAVE, TMN 408  
 FIERY GIZZARD COVE  
 MARION COUNTY, TENNESSEE  
 SURVEYED LENGTH 2300'  
 VERTICAL EXTENT 77'  
 COMPASS AND TAPE SURVEY  
 GRADE 5  
 1990-1992  
 BY MAUREEN HANDLER  
 TERESA WILLIAMS  
 KATHY MACKEY  
 WM SHREWSBURY  
 TROY KEITH  
 BRIAN HORSEMAN  
 JOEY COMBS  
 BILL BUSSEY



SCALE IN FEET  
 0 40

## *Waterworks Cave TMN52*

Waterworks Cave is located 1800 feet north of Orme; it is shown on the Orme quadrangle topographic map as a spring which emerges for a short distance and then disappears into a large sink. The town of Orme still gets some water from the spring above the cave. Take I-24 west from Chattanooga to Exit 152 (South Pittsburg). At the

bottom of the curving exit ramp, turn right onto U.S. 72 going south. Drive another 15 miles or so, following very obvious signs to Russell Cave National Monument (and making lots of turns). Drive past the Monument entrance, and continue another 2 miles to the tiny town of Orme, TN. Bear right at the fork and start up a hill. About 100 yards up the hill, bear left at another fork, up a steeper hill. Follow this road about 200 yards to a water tower. Drive past the water tower on a dirt road into the trees, ending at a large sinkhole.

The cave entrance is in the bottom of the sink. Water drains into the entrance in wet weather. Ten feet inside the entrance MN-180 is a climbable 12-foot pit and a second pit to the right into which the wet weather drainage flows. Beyond the climbable pit is 50 feet of dry stream passage averaging 6 feet wide and 10 feet high, leading to a 45-foot domepit. The pit bells out to 40 feet in width. On bottom is 300 feet of passage, heading directly under the entrance sink. A possible second entrance to the same cave has been located, although no physical connection has been made. Facing the waterfall, this entrance is to the right and has continuous dripping water due to a leak in the water pipe just above it. Inside the entrance a steep slope enters what was once an apparently large room. The only lead was an unpleasant-looking stream crawl; not checked. A portion of the room extends under the sink toward the passage at the bottom of the 55-foot domepit, but is blocked with breakdown. At the top of the slope straight ahead were three pits, two of which were climbable, but didn't look very promising. The third pit is a 35-foot drop into a huge breakdown room. Evidence of passage is present, but no route could be found through the breakdown.

Waterworks Cave appears to have been at one time a huge underground room which collapsed on one side, forming a sinkhole. The description and location of Waterworks Cave appeared in the Nashville Speleoneers (December 1970), pp. 79-80. (Mark Wolinsky, 1970). The entrance is a walk-in to a 12-foot pit within 40 feet (parallel to this is a 21-foot pit which drops into the same passage the 12-foot pit leads to). Then there is 150 feet of mostly nice walking passage to an offset 45-foot pit into a sizable chamber. At one end one can climb up and go 100 feet. At the floor level a hands/knees crawl leads to stoop/walking passage down 20 feet of climbdowns to the breakdown and rubble end (above this are 100 feet of rooms and pockets). (Marion O. Smith, 1993). At the bottom of the 45-foot pit, a climb up and over a large breakdown block leads to a 3-foot-tall crawlway. After 20 feet this T's into another fossil stream passage, with right going upstream as a crawl for 50 feet to a too-tight area, and left getting larger and larger until a walking-size passage is reached. There is one 5-foot climbdown, and one tricky traverse over a pool of water. Beyond that, the cave continues another 50 feet to a heavily decorated grotto and a flowstone end. Back at the pool in the floor, one can slide down a flowstone slope, around the edge of the pool, and into a decorated belly crawl. Thirty feet farther the cave opens back up into a large borehole, 20 feet tall and 20 feet wide. After another 200 feet the cave appears to end in hillside retreat and breakdown.



# WATERWORKS CAVE

MARION COUNTY, TENNESSEE ~ TCS # MN-52

Grade 5 survey, April 2013 - December 2013 by:

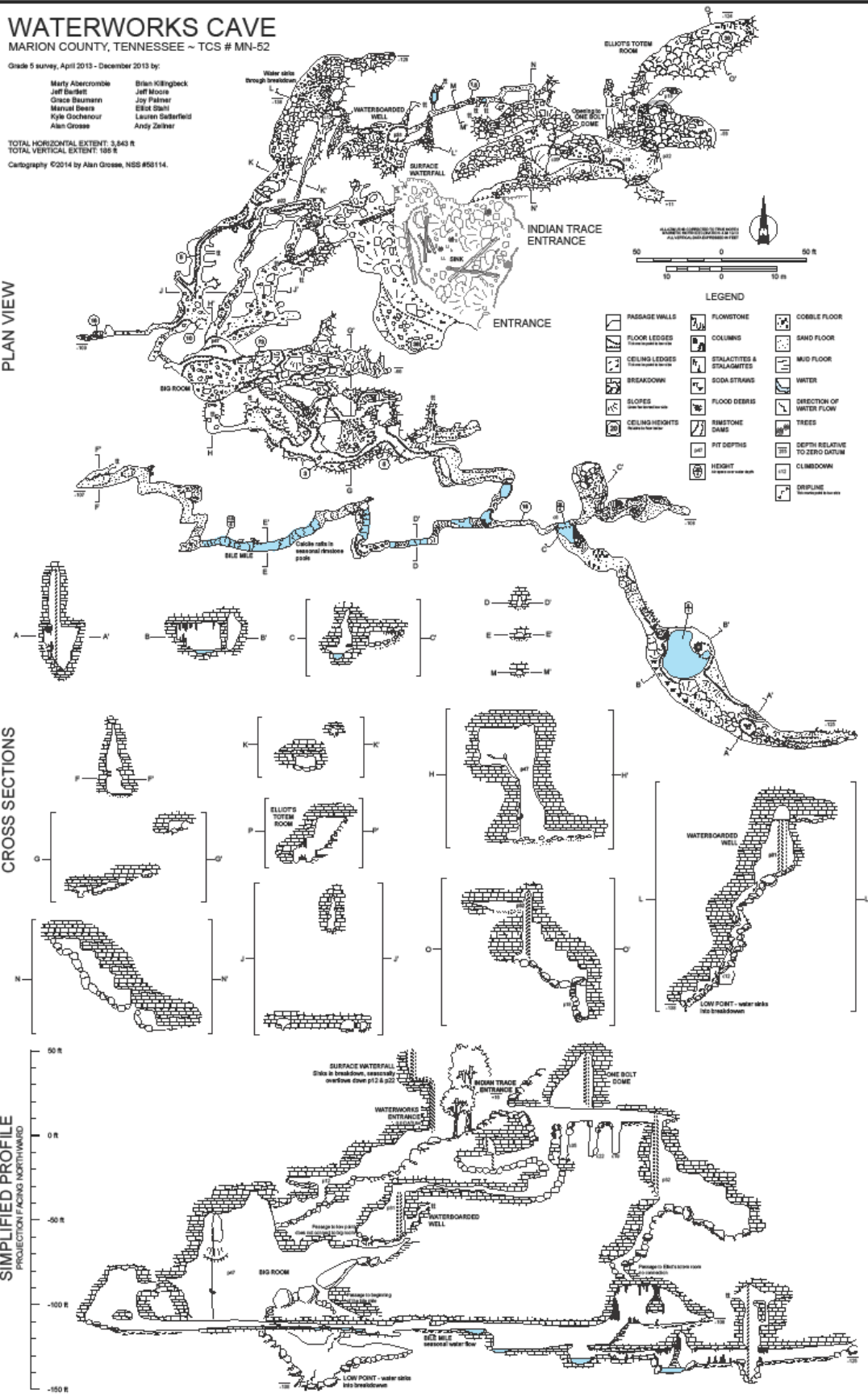
Marty Abercrombie  
Jeff Burdett  
Ozma Baumann  
Manual Beers  
Kyle Gochneour  
Alan Grosse

Brian Klingbeck  
Jeff Moore  
Joy Palmer  
Erik Stahl  
Lauren Stedfield  
Andy Zeller

TOTAL HORIZONTAL EXTENT: 3,840 R  
TOTAL VERTICAL EXTENT: 185 R

Cartography ©2014 by Alan Grosse, NSS #58114.

PLAN VIEW



## Cagles Chasm TMN5

From the main entrance (E1) contour around the mountain to the right for 200 feet to the smaller entrance of Jeepside Pit (E3). To find Shallow Pit (E2), start at the main entrance (E1), and go 150 feet straight uphill. The entrance to Cagle Chasm is 15 feet wide and 20 feet long. The shortest pit which can be rigged is 184 feet. The pit is 50 feet in diameter at the bottom. A talus slope leads into a large room from which a 20-foot pit into a passage leads for 50 feet into a second large chamber. It is also possible to climb along a ledge at the bottom of the entrance shaft and come out near the top of this second large chamber. A crawl to the west at the base of the entrance shaft leads into a huge chamber 100 feet in diameter and 150 feet high. A waterfall in the center of the room falls into calcite pools. The chamber can also be entered by a window 60 feet above the floor which connects to the entrance crawl.

Two pits near the main shaft also connect to this complex. One, (Jeepside Pit) 200 feet northeast of the main shaft, consists of a 15-foot pit followed by a 95-foot pit through a 40-foot-wide shaft. The total pit depth is 110 feet. A passage leads several hundred feet to a 30-foot climb to a short passage which ends at the bottom of an 80-foot shaft opening to the surface (Shallow Pit). A crawl from the passages connecting the two shorter pits opens into the side of the main pit approximately 100 feet above the floor.

## Cagle Chasm Complex

T MN 5

### PLAN VIEW

CRG 5 Survey

1970

May 8, 1983

John Smyre  
Ron Zawislak  
Charles Clark  
Jeff Sims

Survey Length: 629.2 m

Horiz. Length: 409.1 m

Vert. Extent: 74.4 m

Approximately 12 drops totalling  
261 meters may be rigged.

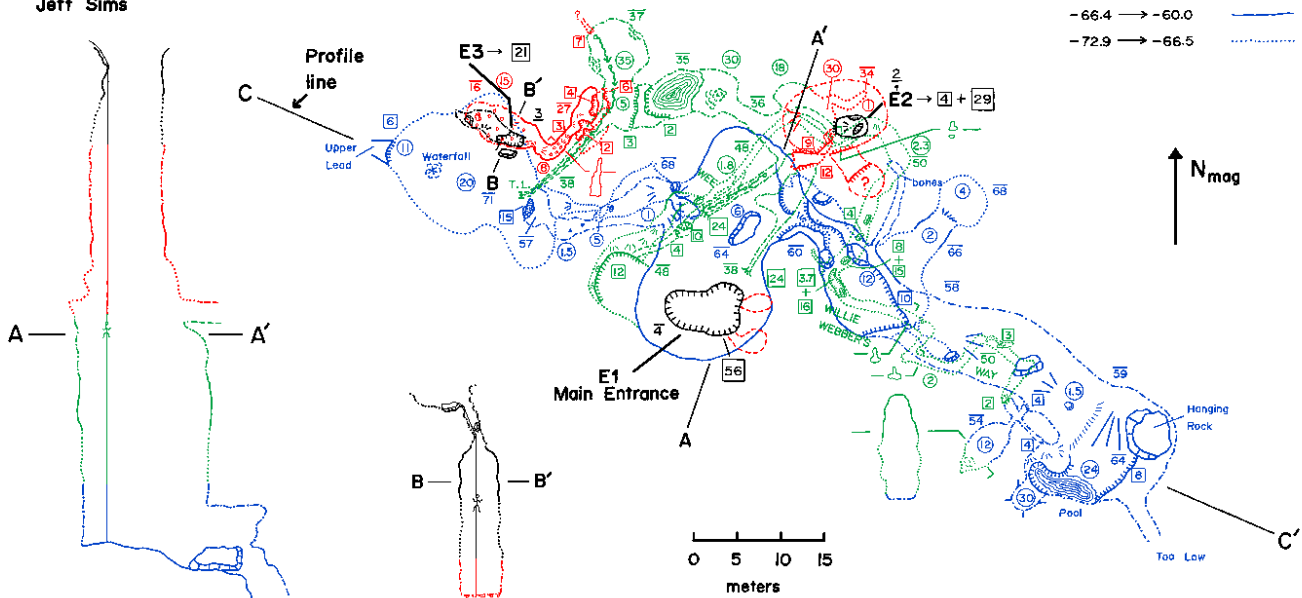
Legend

Relative Floor Elevations  
(meters)

-1.4 → +5.0	-----
-7.9 → -1.5	-----
-14.4 → -8.0	-----
-20.9 → -14.5	-----
-27.4 → -21.0	-----
-33.9 → -27.5	-----
-40.4 → -34.0	-----
-46.9 → -40.5	-----
-53.4 → -47.0	-----
-59.9 → -53.5	-----
-66.4 → -60.0	-----
-72.9 → -66.5	-----

A Smyre Map

*Highest known and likely of  
Middle Triassic and Tertiary  
resemblances for paleontological  
reference material 1974  
—J.S. Sims, 2004*



# Cagle Chasm Complex

T MN 5

## VERTICAL PROFILE

Projection onto PLAN VIEW line C—C'

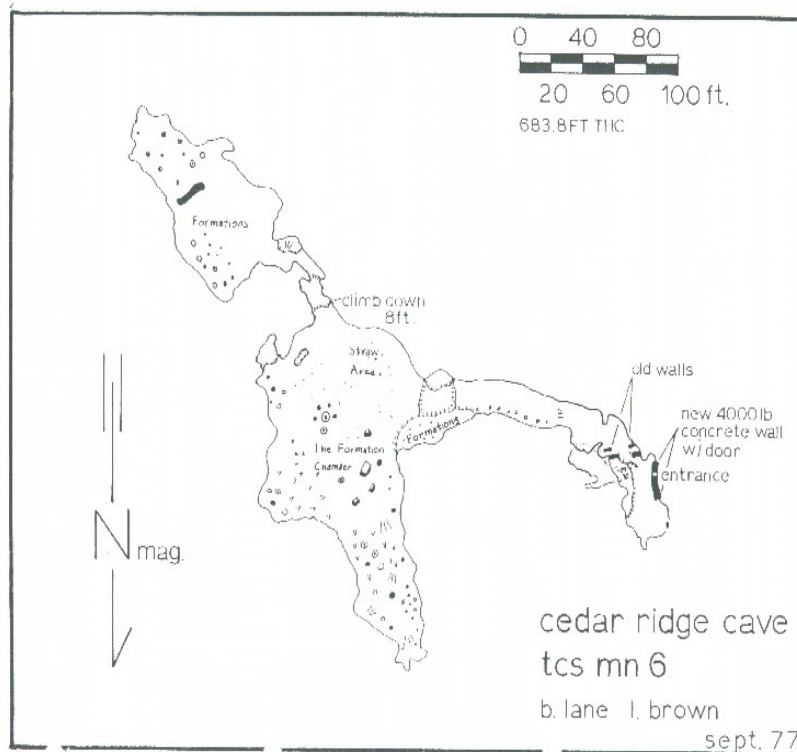
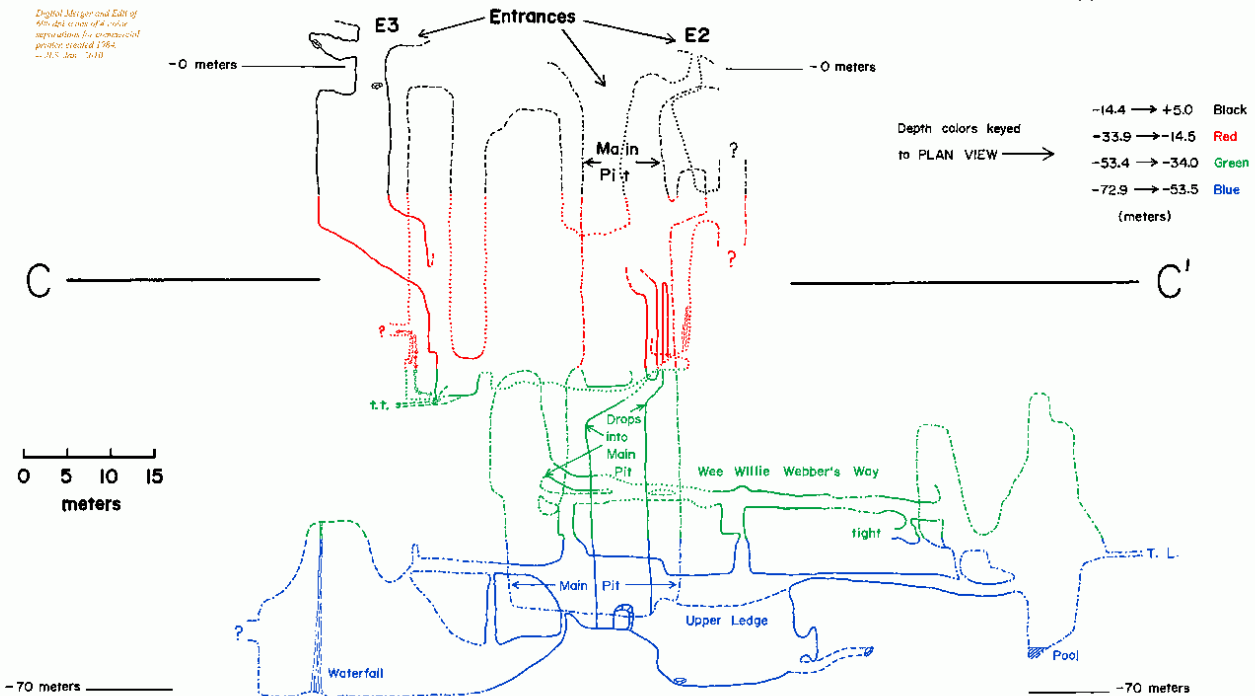
### Legend

Horiz. distance (meters)  
from projection line C—C'

-3.9 → +9.0    - - - - -  
-16.9 → -4.0    - - - - -  
-29.9 → -17.0    - - - - -

### A Smyre Map

*Digitized, merged and edited  
from the original survey  
separations for construction  
profile created 1984  
— J.E.S. Jan. '94*





## Hang 'em High TMN350

This multi-drop cave is located on the east side of Collins Cove, within the Franklin-Marion State Forest, 6,200 feet south-southwest of Red Hill. E1 is in the middle gully of three gullies shown on the topo map, and E2 is northwest of E1 in the next major gully. The main entrance (E1) is a 28-foot pit within a major gully. However, the best rig is the high side of the pit, which is 70 feet deep. A 40-foot deep slope leads to a 36-foot pit, which can be bypassed by climbing down a slot to the right of the pit. The second entrance has two 10-foot climbdowns, two 5-foot climbdowns, then 200 feet of passage to an 18-foot pit which comes in at the breakdown slope below the entrance pit at E1.

At the bottom of the 36-foot drop, a crawlway to the right and a climbdown bypasses a 36-foot climbdown in the main stream passage. A 100-foot-long crawl leads to a 25-foot-wide, 20-foot-high breakdown meandering passage. Then there is a 25-foot vertical slope to a 66-foot pit through a "Valhalla Rock Jam". Within 300 feet are 3 more pits (25, 60, 36 feet deep). The 25-foot pit can be free climbed. At the top of the second to last pit (60 feet), there is a squeeze through breakdown along the right wall that goes to a short crawl (10 feet) over chert that is suspended above the canyon. The floor is punctuated with holes to the canyon below. A squeeze down to the right leads to another 10 feet of hands and knees crawl to walking-sized passage. Fifteen feet led to an offset pit of unknown depth. An extremely scary mud and shale traverse along the right wall over the pit for 10 feet led to another 15 feet of walking passage to a 97-foot pit (taped). A natural rig on the left wall to a boulder pinch was used. A rebelay bolt was set 15' below the lip. Nice drop and mostly free. The bottom connects into the passage below the last pit (36 feet) near an incoming waterfall dome and breakdown pile.

From the bottom of the 36-foot pit the passage goes 300 feet as a multilevel canyon passage. The stream sinks into a too-tight crawl. The best route is to climb up, then go through 100 feet of breakdown to the first fault room. From this room a sloping breakdown leads to a 400-foot crawl which ends at the main trunk passage, 3500 feet long. Upstream, the passage goes 1500 feet through some large rooms. A major stream was noted in one section. The passage ends in a complex area of passages, rooms and domes. Some airflow. Downstream from the junction, the walking passage goes 2000 feet, through some large rooms. The first room, 400 feet from the junction, has a dry overflow crawlway entering from the left side. This passage probably carries water from the entrance in wet weather. At the end of the main passage, a lower level leads to the drain for the system. Several hundred feet of crawl has been pushed in this section. Near the end of the main passage, an upper tight climbup leads to the second fault room. About 2000 feet of side passages lead off from this area.

The lower levels of the cave have since been pushed extensively by Robert Coney and friends, bringing the cave to over 19,000 feet in length and 528 feet in depth. Beyond the second fault chamber, the Free Form Horror Crawl leads to several thousand feet more cave, including a 20-foot upclimb (on MN-61 rope). The completed map shows average passage dimensions in the far reaches of the cave to be 3 to 18 feet high and 1 to 10 feet wide. The cave ends in a sump.

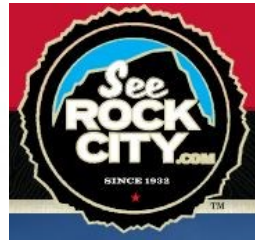
Stygobitic blind crayfish (*Cambarus hamulatus*) and the Tennessee cave salamanders (*Gyrinophilus pal-leucus pal-leucus*) live in the cave stream. The pit depths are 70, (slot & climbdown bypassing 36-foot pit), 66, 25, 60, and 36 feet. The ropes needed are 90, 85, 50, 95, and 40 feet. There are 5 bolts.



**HIGH LINE**  
ROPES AND ACCESSORIES



**BIRKENSTOCK**



**HIKE INN**



**Disney Parks**



**RUBY FALLS**

**LONG JOHN SILVER'S**

