

T.A.G. CRAWLER

The background of the cover is a photograph of a cave interior. Two people are rappelling down a dark, rocky wall. The person higher up is wearing a black shirt and dark pants, while the person lower down is wearing an orange shirt and blue pants. The cave is filled with lush green vegetation, including ferns and moss. Sunlight filters through the opening of the cave, creating a bright area on the left side. A large, dark tree branch is visible in the lower-left foreground.

Sewanee Mountain Grotto
Volume 5 Issue 2

TAG Caver ~ Volume 5 Issue 1

Summer 2014

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 or one of our editors for more information on the location of our next meeting. You may also visit our website at <http://www.caves.org/grotto/sewaneemountaingrotto/>

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Email articles and photos for submissions to one of our editors. Content may include articles/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.



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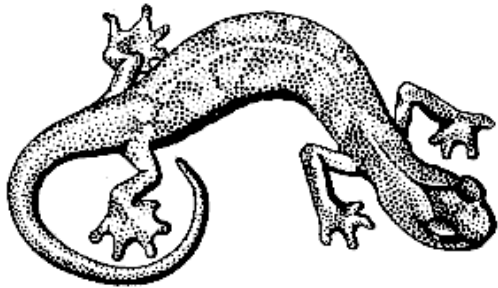
The front and back covers were taken during the Sewanee Mountain Grotto cave trip on June 14, 2014.

Pictures by Kelly Smallwood

Calendar of Upcoming Events

July 12, 2014 – **Sewanee Mountain Grotto Meeting**. Meeting starts at 6pm central with potluck dinner, followed by business at 7pm. The meeting will be at the NSS Headquarters.

July 14–18, 2014 – **NSS Convention**. The event will be at the new NSS Headquarters in Huntsville, Alabama. To preregister go to <http://nss2014.caves.org/>. Preregistration ends May 1, 2014.



July 19 – 25, 2014 – **Post Convention Camp**. Hosted by the Sewanee Mountain Grotto at Caver's Paradise. For more information go to:

https://www.facebook.com/events/1395808100683708/?ref_dashboard_filter=upcoming

August 15 – 17, 2014 – **Sinking Cove Campout**. Join us for a fun filled weekend of caving. We have invited the Chattanooga Grotto to also join us. If you are interested in joining, please contact Kelly Smallwood. There will be led trips to both the vertical boulder entrance and the horizontal Wolf entrance. https://www.facebook.com/events/543257045794861/?ref_dashboard_filter=upcoming.

August 29 – September 1, 2014 – **Sewanee Mountain Cave Fest**.

<https://www.facebook.com/groups/1421893758065353/>.

Connect with the Grotto

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



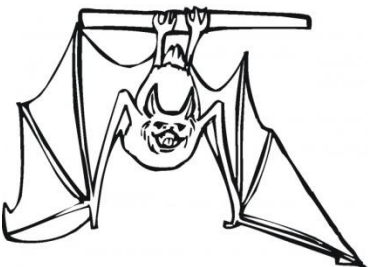
Join us on a Grotto Trip, Survey Trip or a Cleanup.



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: http://sports.groups.yahoo.com/group/sewanee_mountain_grotto 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. Support the Grotto ~ Grotto Merchandise The Grotto has Baseball Hats for \$10 & 3" patches for \$5. Both items have our grotto logo on them. Please contact Kelly Smallwood at rowland7840@bellsouth.net to purchase.





THE TAG SCOOP

Our current membership is at 81 members!!! Welcome new members:
Quincy Allen and Sue Milburn.

You can download an updated membership list from the Yahoo group.
Membership dues are \$10. You can pay Blaine at a meeting or send them via
snail mail. Send check payable to Sewanee Mountain Grotto, 669 Old
Sewanee Road, Sewanee, TN 37375. Make sure to include your contact
information (name, address, phone #, email address, & NSS #).



**At the June
Grotto meeting,
we voted to
donate \$250 to
the Chattanooga
Hamilton County
Rescue Service**

TWRA to recommend bear hunting season in Hamilton, Bradley counties

By Richard Simms

Published Friday, April 18th 2014 www.nooga.com

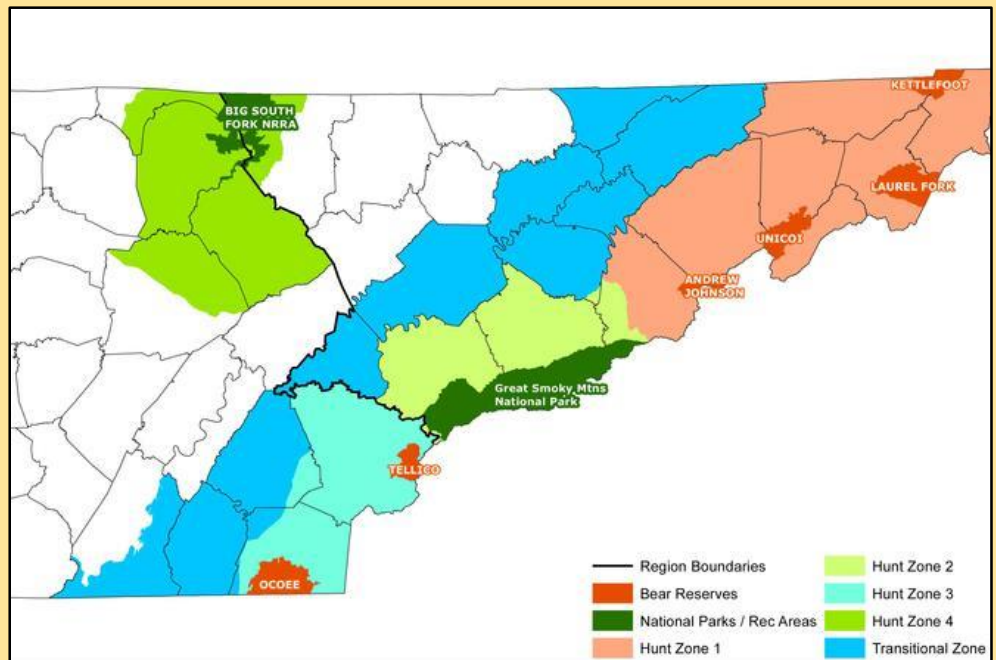
TWRA biologists will recommend new bear hunting seasons in 15 new counties, including parts of Hamilton, Bradley and McMinn counties. However, wildlife commissioners always have the option to accept the recommendations of biologists or make changes of their own before the final vote in May. (Graphic: Contributed)

The Tennessee Wildlife Resources Agency is recommending that bear hunting seasons be opened in all or parts of at least 15 new counties, including eastern Hamilton, Bradley and McMinn.

TWRA Chief of Wildlife Daryl Ratajczak said he will be making that recommendation to the [Tennessee Fish and Wildlife Commission](#) at next week's meeting.

Ratajczak said as bear populations expand, TWRA's new bear management plan has identified areas of the state that require different management strategies.

"In some areas, especially around the Smoky Mountains, we have oodles of bears, so we want to maximize [hunting] opportunities in those areas," Ratajczak said. "But on the Cumberland Plateau and other transitional areas, we have some bears—but we want to see those populations continue to expand."



Rhea County's Nick Brown captured this picture of a bear on his trail camera in Rhea County last August. No hunting season is recommended for Rhea County, however, because biologists say the population there is still growing and isn't yet large enough to allow hunting. (Image: Nick Brown)

Ratajczak said a statewide survey showed that people like the idea of having more bears. There have been numerous bear sightings in Southeast Tennessee in recent years in places where bears had rarely been seen before. However, not all those counties will have a hunting season yet.

Ratajczak said TWRA's legal mandate is to only allow the hunting of "surplus" wildlife populations, allowing overall numbers to increase or remain stable.

In addition to opening up new areas to hunting, TWRA will recommend moving the hunting dates in high-population counties forward. In the 1980s, bear hunting seasons were moved later in the year to protect female bears, which traditionally go to dens to hibernate earlier than males. But Ratajczak said now that populations in those counties have increased dramatically, they actually need to harvest more bears. He thinks moving season dates earlier in the year while still providing the same total number of hunting days will accomplish that.

Generally, there have been 500-600 bears killed by hunters in Tennessee in recent years. Ratajczak said they could actually almost double the number of bears taken in some areas while still keeping the overall population stable.

"We estimate in the Smoky Mountain area we have at least 5,000 bears, and we're only harvesting about 10 percent," he said.

Ratajczak hasn't said exactly what the new hunting season dates or regulations will be, waiting until it is presented to the TFWC, the governing body over wildlife regulations in the state.

Ratajczak said he'll also let wildlife commissioners know of next year's plan to manage turkey hunting by zones. Up until now, they have set regulations on a somewhat confusing, county-by-county basis. But their goal is to manage turkeys and bears as they have managed deer for many years—setting seasons and other regulations based on zones.

He said the state's turkey population has expanded in most areas where he wouldn't ever expect to see great increases in numbers. He said the turkey harvest during the current spring season is within about 5 percent of last year's harvest, even though "opening day was a washout due to heavy downpours across the state."

In recent days, Ratajczak and other TWRA personnel have been battling an apparent false rumor spread by social media about a reduction in the number of bucks hunters would be allowed to take this fall.

"The Wildlife Resources Agency staff will not be recommending a reduction in the statewide buck limits," Ratajczak said. "We factor in public comments we have received since January and annual statewide surveys, and for the past several years, there has been no overwhelming public support for a reduction of the three-buck bag limit."

Still, Ratajczak said he expects a significant turnout by deer hunters at next week's meeting because of concern about the measure.

Ratajczak added, however, that the formal vote by the commission will not take place until the May meeting.

The TFWC meeting will be held at the TWRA's Ray Bell Region II Building in Nashville. The TFWC committee meetings will begin at 1 p.m. April 24. The formal TFWC meeting starts at 9 a.m. April 25.

Richard Simms is a contributing writer, focusing on outdoor sports.



Scientist Names Blind Fish with Neck Anus after His Favorite Team

By [Elizabeth Preston](#) | June 3, 2014 www.discovermagazine.com

Photo by Matthew Niemiller



In what might be considered a mixed message outside of the ichthyology world, scientists have named a new species of cavefish after the Indiana University Hoosiers. It's blind, has its anus behind its head, and distinguishes itself from its nearest relative by being a little fatter. But its discovery might help keep the world's other ugly cave dwellers alive, even those not named for sports teams.

Cavefish in the family Amblyopsidae live in dark corners of the eastern United States. There are about eight species, though it can be hard to tell them apart just by looking. Features that would normally be helpful are missing: they often have no eyes and no color to their bodies.

The genes of these unforthcoming fish, though, may tell stories that their bodies can't. Recently, Louisiana State University biologist Matthew Niemiller found genetic differences between *Amblyopsis spelaea* cavefish living north and south of the

Ohio River. Their DNA hinted that the two populations of fish might not be the same species at all.

Working with colleagues Prosanta Chakrabarty and Jacques Prejean, Niemiller followed up on this hint. The scientists gathered 41 fish from Kentucky and Indiana and minutely examined their bodies. These populations have been separated by the barrier of the Ohio River for more than a million years. Over this time, the scientists saw, the cavefish have in fact [evolved into two separate species](#). It's the first time a new North American cavefish has been discovered in 40 years.

The authors named the fish on the northern side of the river *Amblyopsis hoosieri*. "The Hoosier name was to remind people that Indiana was really the birthplace of North American ichthyology," says Prosanta Chakrabarty. Famed ichthyologist David Starr Jordan was President of Indiana University at the end of the 19th century.

The Hoosier cavefish is two or three inches long and colorless all over its body, even inside its mouth. Compared to its relative *A. spelaea*, it's a little more plump, fleshy, and wrinkled (all actual adjectives used by fish scientists). Another difference can be found in the gene for rhodopsin, a pigment that's important for vision. The Kentucky fish have an error in their rhodopsin gene that renders it useless, Chakrabarty says. In the Indiana fish, the gene works fine—though the fish still have no eyes to use it with.

Both kinds of cavefish, like their relatives, have their anuses on the underside of the neck instead of at the back of the body. "Having an anus near your head is pretty weird," Chakrabarty acknowledges. "Most animals would agree that we would like our anus as far from our head as possible." The unusual setup may help the fish get fertilized eggs tucked into their gills for brooding, he says, though it's not clear.

Although the Hoosier cavefish was only just discovered, it's already considered endangered in Indiana, like *A. spelaea*. That's because it lives in small populations and is extremely vulnerable to groundwater pollution. They don't have natural predators, but cavefish populations can be damaged or destroyed by quarrying, disease, and even cave tours.

Chakrabarty says that discovering the Hoosier fish will help scientists conserve it and other species. "This species is only found in Indiana, in caves that are special and rare. There is added reason to protect this region now, thanks to *Amblyopsis hoosieri*."

The Hoosier cavefish joins a small club of uncharismatic animals named for university mascots. In Alabama, there's the trapdoor spider [named *Myrmekiaphila tigris*](#) in honor of Auburn University's mascot, the Tigers. There's also a new species of amoeba [dubbed *Ptolomeba bulliensis*](#). The genus is after Mississippi State University's first mascot, a bulldog named Ptolemy. The species is after Bully—the name shared by the school's 20 subsequent bulldog mascots.

Published in the journal *ZooKeys*, the paper on the new cavefish acknowledges its authors' biases in the Discussion section: "Notably, the senior author of the manuscript [Niemiller] is a fervent fan of Indiana Hoosier basketball while the first author is an alumni of the University of Michigan and is not."

"I thought I needed to add that line to explain to folks back at my alma mater that I had not switched allegiances," Chakrabarty says. He frequently travels to exotic places where he finds new species, but doesn't feel the need to identify them with school mascots. "I am a huge sports fan but I don't think I will be naming any new species after any other sports teams."

"Having said that," he adds, "Go Rangers!"



Could Marion County Be An Official Destination For Adventure Tourism?

Published on www.marioncountynews.net March 05, 2014 by Laura Candler

Brothers Steven and Jeff Perlaky own hundreds of acres on Aetna Mountain, an area that spans both Marion and Hamilton Counties. On the Hamilton County side, they run Raccoon Mountain Caverns and Campground. On the Marion County side, their five hundred acres lies as they purchased it, as untouched forest.

"It's raw, undeveloped land; we'd like to see it stay that way," says Jeff Perlaky. "Originally, we were motivated to buy it to protect the watershed for the [Raccoon Mountain] cave system."

But while Jeff doesn't want to see it altered, he says he and his brother would love to see people visit it. "It has some beautiful views of the Tennessee River Gorge," Jeff says. "We're envisioning anything from hiking activities to offroading."

Last week, Steven Perlaky asked the Marion County Commissioners to consider making all or part of Marion County an official destination for adventure tourism. The adventure tourism designation was created in 2011 when the state legislature passed the Tennessee Adventure Tourism and Rural Development Act, and it allows communities to apply to become certified as an official district for adventure tourism. The designation gives those operating adventure tourism enterprises certain tax breaks.

"This property that I have in Marion County is adjacent to the property that I have in Hamilton County," Steven Perlaky said at the meeting. "And in Hamilton County side, I have Raccoon Mountain Caverns and Campground, which is one of the major tourist destinations in Chattanooga." He said that the Marion County side, "could certainly be an add-on to the program...I think I've really got some momentum to bring jobs to the county."

Jeff says that he and Steven have talked of opening up their 500-acre Marion County property to the public for years, and now that there's an opportunity to receive some tax breaks, it seems like the right time to do it. "The main benefit I see is that it doesn't cost the county anything," Jeff says. He also believes that it would open up opportunities for other people to bring similar outdoor tourism businesses to the county.

County Attorney Billy Gouger explained at the County Commission meeting that the law allows governments to fill out an application with the state department of revenue and have all or part of the county certified as a district for adventure tourism.

"It doesn't appear to have any cost to the county," Gouger said at the meeting. "I don't really see a negative, it's just a matter of whether you want to give these tax credits and benefits to the businesses that are involved in this kind of activity."

Gouger explained that the designation would likely also financially benefit the Trials Training Center in Sequatchie and another business venture in Ellis Cove.

Ashley Jackson with the Trials Training Center said they were previously unaware of the certification, but are very interested in learning more about it.

"I certainly don't think you should vote on this tonight, but it might be something that you refer to the finance committee to look at," Gouger concluded at the meeting.

County Mayor John Graham said he was made aware of the issue and has requested information about other areas certified as adventure tourism districts. The commissioners made no comment or response to Perlaky's request. The application deadline for adventure tourism certification was April 15 of this year.

Virginia's New River Cave Becomes 14th NSS Cave Preserve

In March 2014, at the NSS Board of Governors in Richmond, Virginia, it was voted to add a 14th preserve to the NSS Cave Preserve system—the five-mile-long New River Cave, longest cave in Giles County, Virginia. It is the first cave preserve for the society in the commonwealth.



*The Entrance to Virginia's New River Cave.
Photo via NSS*

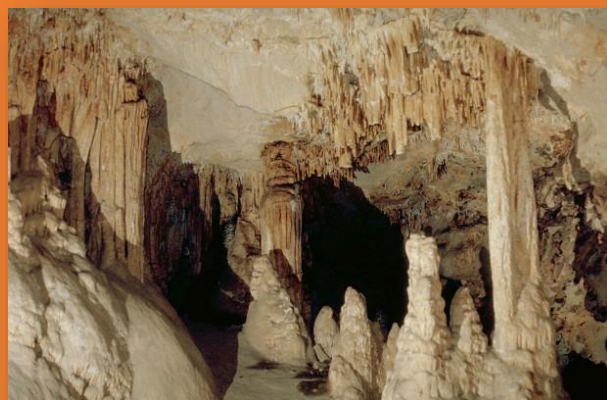
It was nearly a year ago that Virginia caver Tim Kilby, owner of New River Cave, approached the Cave and Karst Acquisition Committee with a desire to sell the cave to the society. Tim had owned and managed this frequently visited wild cave for 25 years and wanted to see it preserved for future generations. He has permitted recreational, educational and scientific access to NSS members and to recreational cavers. It is the desire of the BOG that this continues. A management plan has been developed and will be finalized once a management team is in place. Anyone interested in serving on the management committee should contact Gary Moss.

The acquisition includes two tracts of land—13.6 acres and 0.38 acres. The \$40,000 sale will be paid out over a three-year period for both tax purposes for Tim and fund raising purposes for the NSS.

First surveyed in 1976, and updated in recent years, the 8.5 kilometers (5.3 miles) of passages makes New River Cave the longest known cave in Giles County and the immediate area. While the vertical extent is 109 meters (359 feet), virtually all areas of the cave are accessible to the horizontal caver. A variety of trips may be tailored to the experience level and interests of cavers. The cave was among those featured during the 1995 NSS convention in Blacksburg.

New River Cave contains one large waterfall, several small waterfalls, stream passages, many rooms, breakdown and alcoves. A trip to the back of the cave takes experienced cavers around 18 hours. The cave, while mostly linear, has some maze sections. The cave is formed along the Saltville Fault and has a wide variety of speleothems, although some damage to formations in the front part of the cave has occurred. The cave is in the process of being remapped by Dave West and a new map should be completed in the near future. It has been open to recreational caving for more than 70 years.

Those interested in supporting this acquisition and keep cavers and the NSS owning caves, please send your donation to the NSS, c/o Cave and Karst Acquisition Fund, 2813 Cave Avenue, Huntsville, AL 35810-4431.



*New River Cave's Winter
Forest Room. Photo via NSS*



Trip to Mores Branch Cave, Taney County

Ben Miller

Mores Branch Cave is a wilderness cave located in Taney County, Missouri on USFS land. We had originally stumbled onto the report of this cave in the MSS cave files while doing work for the Taney County Cave Snail Project for CRF. The report caught our attention by the fact that the cave was said to be 100 feet deep and have a 30-meter pit located inside the cave. A 30-meter pit inside a cave in Missouri is a pretty unusual thing as we had recently seen in Brock Cave in Barry County where a supposed 39-meter pit turned out to be much closer to 39 feet deep. But it was in a scenic area so we decided to attempt the cave, as any chance to do vertical caving in Missouri is rare and almost always interesting.

The first time we attempted to map the cave was during the first week of January 2005. When we woke the morning of the trip it was downpour conditions outside. However we persevered and decided to still give it a shot banking on the fact that the cave should be high up on a ridge and relatively dry (or so we thought). We arrived at the trailhead with packs amply loaded down with vertical gear and ropes. We succeeded in making the 3-mile trek to the area where the cave was supposed to be located and with some moderate amount of searching found the pit entrance. The pit was indeed up higher on the hill but the with 4.5 inches of rain we were receiving the pit had several strong rivulets of water running directly into the pit. We were prepared for polypro and jeans caving and this clearly was going to need more than we had. It was decided amongst everyone that the conditions were such that there was no conceivable way to stay warm and survey the cave. So we took our entrance photos along with GPS locations and turned around and started back in frustrated defeat. The cave gods were not smiling on us that day and before they relented we hiked an additional 1.5-2 miles out of our way on the return hike.

It was with this dubious defeat that caused Andy Lerch and I to return a month later to once again try and attempt this cave. Once again loaded down with vertical gear in much heavier packs, as we had lost a member of our original crew and thus lost a sherpa. The hike only took an hour this time as we hiked directly to the cave entrance. The weather also cooperated this time allowing for amazing views on both sides of the trail. At the cave conditions were quite different too, the cave entrance this time was bone-dry and very negotiable. It was decided earlier that the cave should be rigged first and then the survey completed so that all potential hazards were known, and protected, from the start. We dropped down the first small 13 foot drop and then slid under a small ledge and entered and elongated room about 40 feet long 15 feet wide and varying from 3-9 feet in height. Just inside the cave was a small slumped-in spot where a very narrow crack led down into blackness, this was not humanly enterable. Just past this climbing over a flowstone dome and a much more dramatic and deep depression was reached. If we looked down this at the correct angle it was possible to see that indeed this was a very deep hole. Though since the pit looked so tight we decided to check the rest of the cave for any other possibilities. By crawling through a small hole on the left underneath some flowstone another medium sized room was reached which had some nice large stalagmites. These appeared to be untouched but like the first room any draperies or stalactites available had been vandalized, supposedly removed many years before for a local's fireplace. No pit was found in the last room so we started to rig the tight drop in the first room. Unlike most Missouri pits this one was a surprisingly easy rig off of some large dry columns located off the side of the pit.

Andy thought that he might take the first try at the pit. As Andy started down he noted that the pit was deeper than we had originally thought as more of the drop came into view. He also reached a heinous squeeze about 15-20 feet down. This squeeze was vertical and only about 10-11 inches. Normally if this had been horizontal it would pose no real big problem but when bulky vertical gear is added to the equation it makes the squeeze

nearly impassable. There were two possible holes that would allow access; Andy had been attempting to go through the hole on the right side of the pit to no avail. He came back up stating that it was a little unnerving down there and wanted me to try it, yippee.... So, I got on rope and started down to the super-squeeze. My first try was futile, getting me wedged almost immediately. I got myself out of this and decided to attempt the hole to the left, which actually appeared smaller. I was able to get much further down this time but was still getting wedged in by my chest ascender and rappel device. I decided to take the chest ascender off for the time being and then attached my Stop to my short cows tail, thereby extending the rappel device up to my shoulders and giving my hips much needed space. This time I was able to slowly make it through the squeeze and into a highly decorated chamber just below the squeeze. This “chamber” was created by a very large column, 3 feet thick and 12 feet tall, which had formed along with several other stalagmites to make a false floor with 2 dark menacing holes leading through to the main body of the pit.

As I dropped through the false floor the passage immediately opened into a large domed pit close 70 feet tall, forty feet lengthwise and about 15-18 feet wide. Waterfalls could be heard splattering onto each of the four very large spattermites on the floor. As I slowly rappelled into this great pit pristine grayish-white flowstones began to appear on the walls of the dome, one of these being nearly 45 feet from top to bottom. The further I rappelled down the pit the nicer the view became. I passed what appeared to be a side passage came in about 25 feet off the base level of the pit. As I reached the bottom I shouted up to Andy to let him know I was still alive and that I was going to look around a little. As I got off rope I dropped down a ledge and skirting another beautiful spattermite made my way down to what appeared to be a passage. A small rivulet of water combined from all of the waterfalls and made a tiny stream that flowed down slope and into this apparent passage. With dreams of another pit, with this stream cascading over the lip, I made my way into the side only to discover that it entered a joint much too small for any human entry, a bitter reality check that we were indeed in Missouri. One unique thing about the alcove was the fact that the walls were entirely coated in upturned directional popcorn pointing up the dome. So maybe there is more cave somewhere that is just inaccessible to us. Discovering that the dome did not seem to go I went back to the rope and yelled up to Andy that I was going to come partway back up the drop to get survey gear to try and somehow solo-survey this magnificent dome. Luckily a 20-foot piece of webbing was just long enough for Andy to lower the survey gear and tape. Getting the gear I changed over and headed back to the base of the pit.



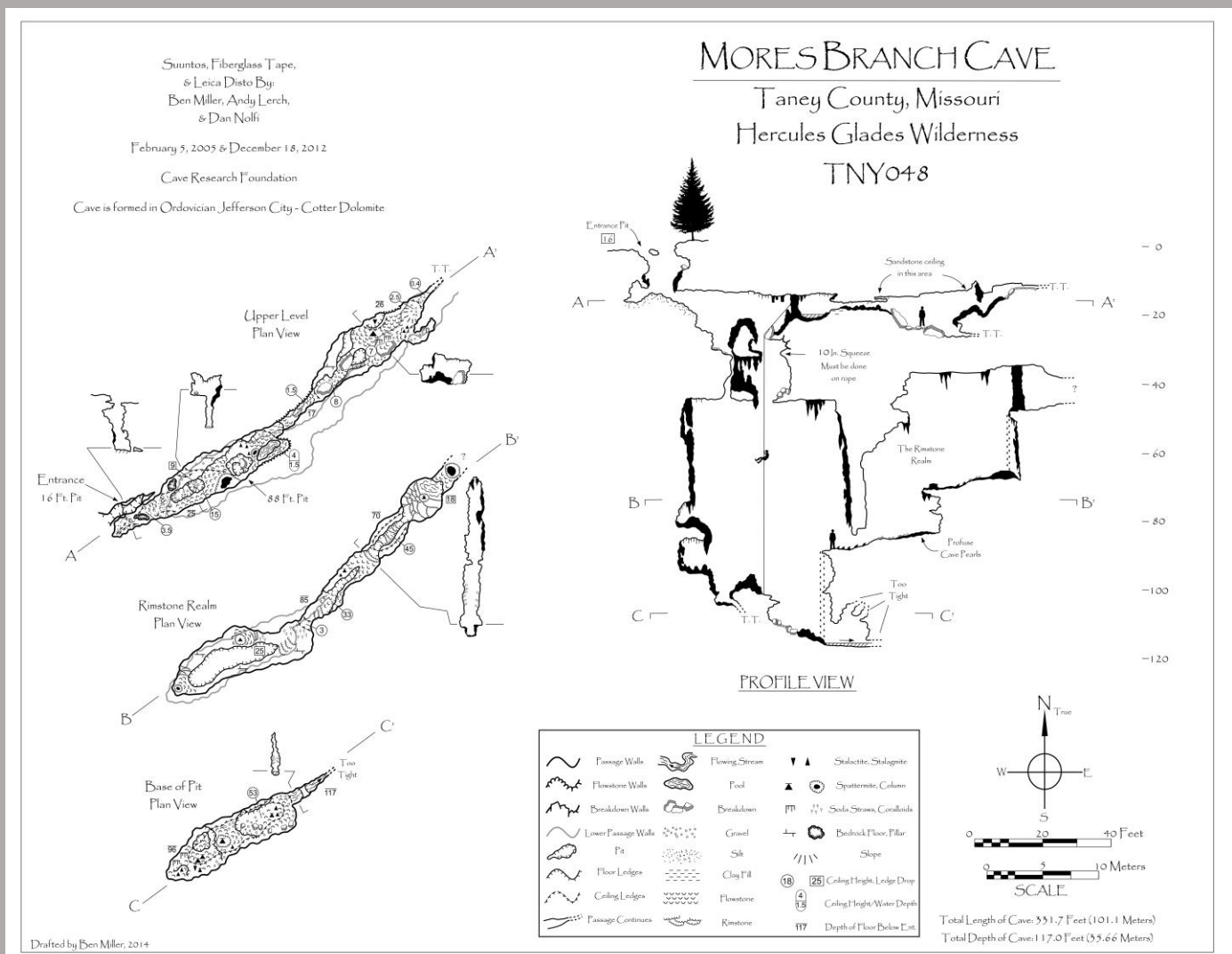
After completing the one shot Andy could help with from the top I began to survey the base of the drop and complete the now complex profile. Andy who up to this point had been hearing all the “oohs and aahs” coming from the pit decided to give the super squeeze another shot. With much grunting and cursing Andy finally announced that he had indeed gotten through. He gradually made his way to the base of the pit and we rejoiced in the magnificent cave we were in. Now that Andy was down we could complete a true accurate survey of the pit and get the depth of the cave. Shooting a couple of splays we quickly finished up the lower portions of the pit. One of the more

interesting features was that the flowstone, gravel, and clay fill all had hundreds of tiny bones scattered about as well. One rimstone pool on a big spattermite contained a pile of very small bones nearly 3 inches deep collected in the center. As I finished up sketching Andy climbed up to the large ledge 25 feet off the floor to check out the possible side passage. Surprisingly it went, so I finished up drawing and headed on up to survey this new side.

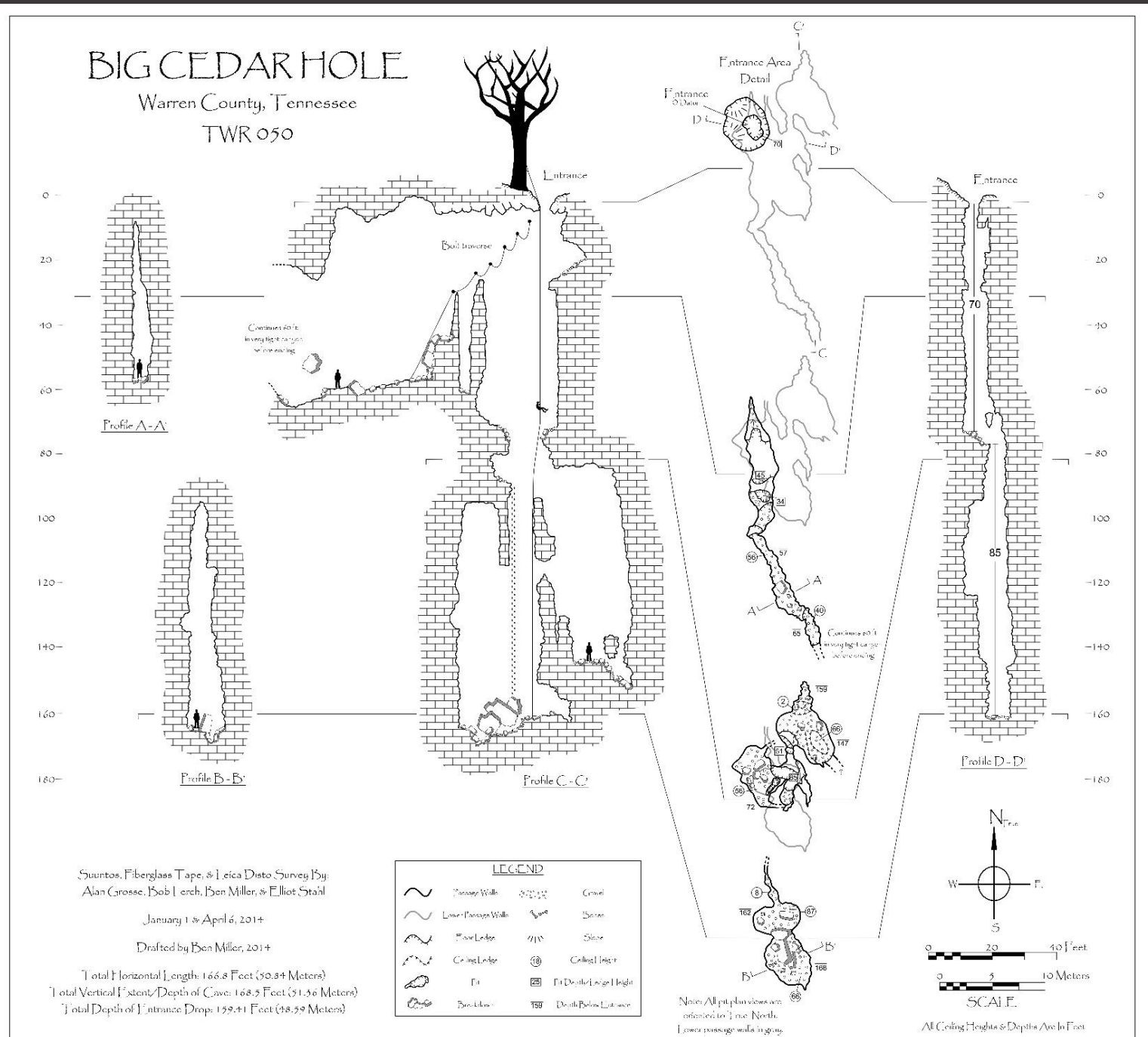
To reach this side passage it was necessary to get off rope at a large ledge and then skirt around the edge of a big orange spattermite. This movement had to be even more careful after noticing a snake skeleton exposed and partially encased in flowstone. After shooting into the passage I had a chance to get my bearings and was astounded by the beauty I was completely surrounded by. Pure white flowstone coated nearly everything in

sight, small drip pools on the floor contained cave pearls in abundance, and the passage height had gone from 5 feet to 45 feet as well. Climbing up a few rock ledges we reached an even more pristine area where we were forced to never touch the floor due to the delicate nature of the passage. By chimneying a few feet up we passed more pale gray spattermites and entered what we would call the Rimstone Realm. Throughout this area the floor is covered by white rimstone dams that appear fuzzy from the large amount of pool spar coating them. Cave pearl 2 inches in diameter were also noted in this area. This all led up to a dome 45 feet tall which had a white rimstone covered spattermite roughly 6 feet across which had rimstone terraces out to the walls. The passage for us ended here but a possible passage was noticed another 20 feet up where the largest column in the cave, 4 feet thick and 15 feet tall, resides. We did not attempt to climb up to this, as we were worried for any possible damage we might create by accidentally knocking down rocks or materials/mud falling off our boots and onto the flowstone floor.

Finishing up the survey we headed back out of the passage and each made our way up to the top of the pit. Surprisingly the squeeze in the pit was much easier going up and turned out for us to be trivial. Arriving at the top of the pit we finally had time to sit back and absorb what all we had just seen and done. The cave had definitely challenged us but at least rewarded our efforts. Overall Mores Branch ended up being 118 feet deep with the pit being 85-90 feet. There is a small amount of survey in the upper portion left but the cave is expected to be around 400 feet long. Hopefully this cave will remain in this pristine state with its remote location and good “nerd gate” at the squeeze.



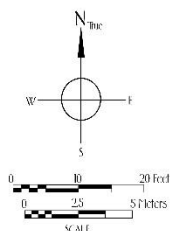
Five new maps from Ben Miller's project to map the deep unmapped pits in TAG.



AUSMUS WELL

Union County, Tennessee
TUN 14

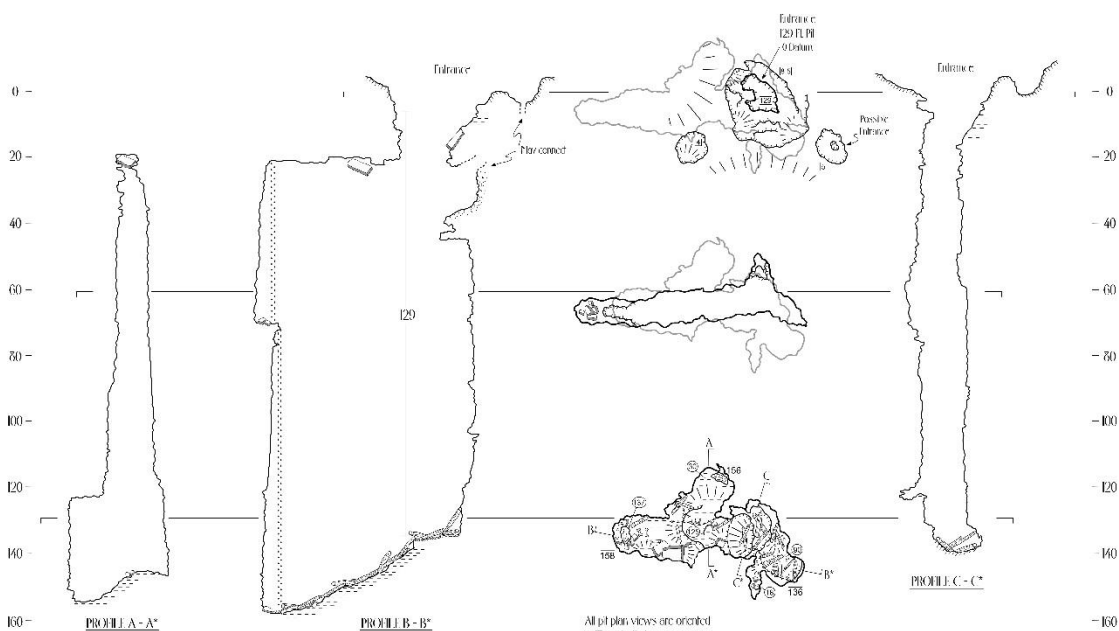
Suuntos & Fiberglass Tape
Survey By:
Katie Ingram
Ben Miller
March 23, 2014



All ceiling heights and depths are in feet.

Notes

1. Total Horizontal Length: 280.5 Feet (86.7 Meters)
2. Total Depth/Vertical Extent: 157.5 Feet (48.0 Meters)
3. Cave appears to be formed in Carboniferous Knoxville Limestone, with the cave extending through the Chancey Branch Dolomite Member and into the Low Hollow Limestone Member.
4. Unfortunately the entire floor of the pit is covered in trash and refuse. This was not drawn on the map in the hopes that the pit will eventually be cleaned up.



All pit plan views are oriented to True North. Lower passage walls in gray.

Drafted by Ben Miller, 2014

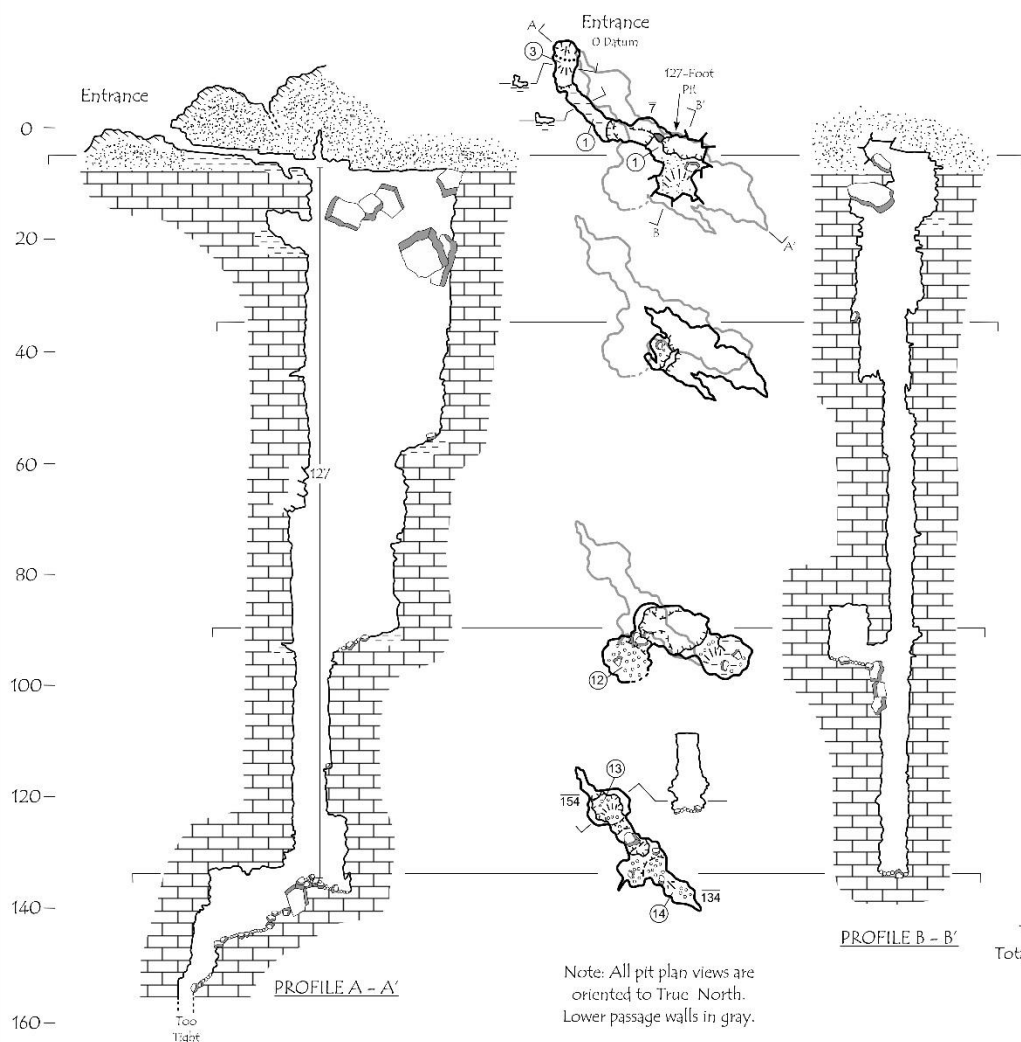
TOURMALET

Marion County, TN
TMN 612

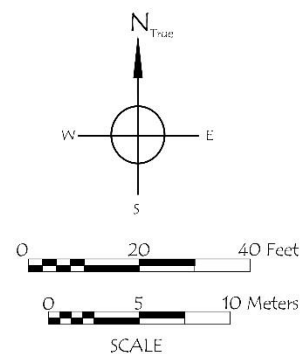
Suuntos & Fiberglass
Tape Survey By:
Mike Green
Ben Miller

March 9, 2014

Drafted by Ben Miller, 2014



Note: All pit plan views are oriented to True North. Lower passage walls in gray.



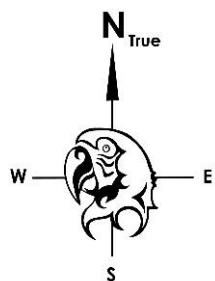
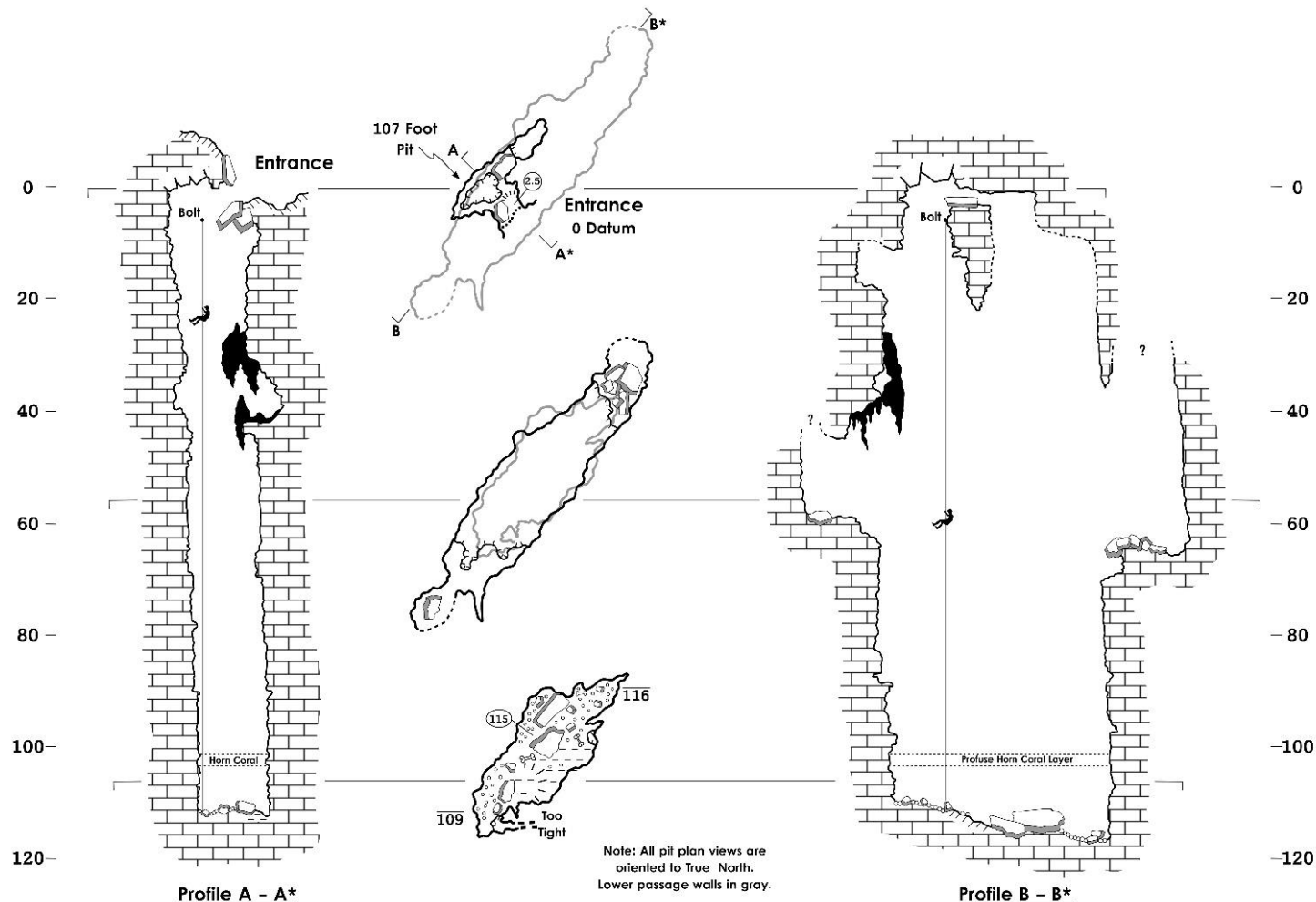
All Ceiling Heights & Depths Are In Feet

Total Length of Cave: 75.2 Feet (22.92 Meters)
Total Depth/Vertical Extent: 154.3 Feet (46.11 Meters)

PARROTHEAD WELL

Van Buren County, Tennessee

GUB687



0 20 40 Feet

0 5 10 Meters

SCALE

All Ceiling Heights & Depths Are In Feet

Grade 5, Suuntos & Fiberglass Tape Survey By:
Jason Hardy, Katie Ingram, & Ben Miller

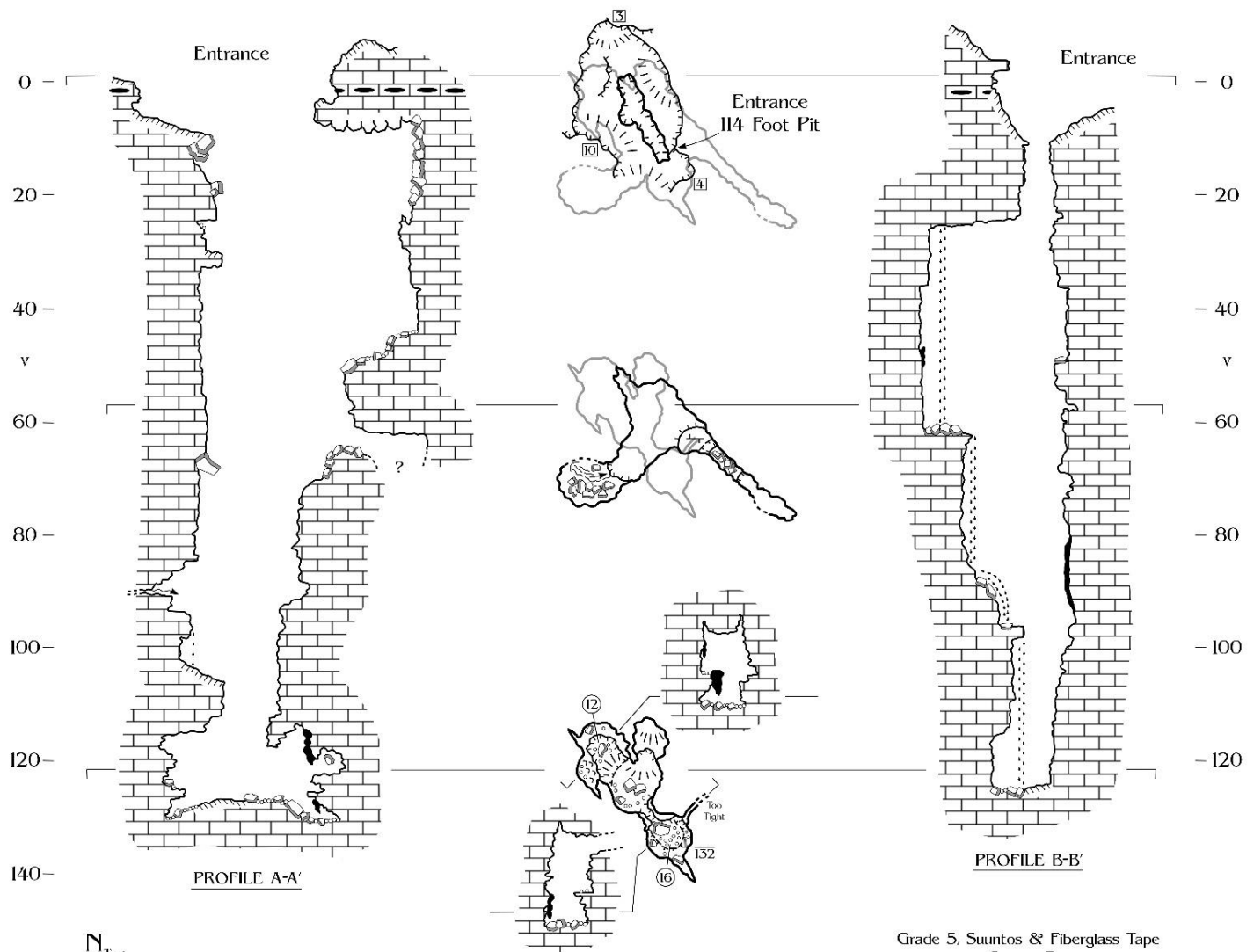
March 15, 2014

Drafted by Ben Miller, 2014

Total Horizontal Length: 46.4 Feet (14.14 Meters)
Total Depth of Cave: 116.1 Feet (35.39 Meters)

CAN'T EXIST PIT

Jackson County, Alabama
AJK2295



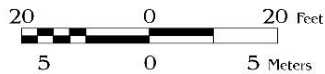
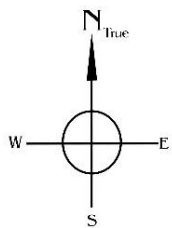
Grade 5, Suuntos & Fiberglass Tape
Survey By:

Ben Miller & Katie Ingram

March 16, 2014

Drafted by Ben Miller, 2014

Total Horizontal Length: 29.65 Feet (9.04 Meters)
Total Depth/Vertical Relief: 132 Feet (40.21 Meters)



SCALE

All ceiling heights & depths in feet

Note: All pit plan views are oriented to True North.
Lower passage walls in gray.

Ancient art unearthed at Devilstep Hollow Cave

By Jenni Frankenberg Veal

Originally published Sunday, October 6th 2013 on www.nooga.com



The history of ancient cultures that once inhabited the southeastern United States continues to emerge within the natural landscape. Amateur relic hunters discover artifacts washed up along the shores of the Tennessee River and TVA's lakes; mapping experts trace ancient pathways that still define travel today; and artwork is unearthed deep within caves. Remnants from the past continue to bubble to the surface, shedding new light on the region's past and confirming that we are not the first to pass through this magnificent landscape.

Devilstep Hollow Cave, located in the Sequatchie Valley near Crossville, Tenn., has been identified as one of the most archeologically significant caves in Tennessee. (Photo: Alan Cressler)

Some of the oldest and most widespread collections of prehistoric cave and rock art in

the U.S. have been found in Tennessee, according to a recent paper about Cumberland Plateau cave and rock art published in the June edition of the British archeological journal *Antiquity*.

Nearly 100 rock and cave art images carbon-dated between 500 and 6,000 years old are being cataloged and researched by the paper's co-authors, Jan Simek of the University of Tennessee, Knoxville, and president emeritus of the UT System; Sarah Sherwood of Sewanee: The University of the South; Alan Cressler of the U.S. Geological Survey; and Nick Herrmann of Mississippi State University.

Devilstep Hollow Cave, located near Crossville, Tenn., has been identified as one of the state's most archeologically significant caves. Twenty-two charcoal pictographs, engraved petroglyphs, and a small panel of mud glyphs have been found within the depths of the cave, which is located on 400 acres of the Cumberland Trail State Park.



Images there include a bird effigy with human arms, weeping eyes, dog effigies, and a six-foot long fish-like monster with a forked tail and long sharp teeth.

“Devilstep Hollow Cave is very important archeologically - not just in Tennessee, but all over the region,” says Jim Brannon, a park ranger and interpretive specialist with Cumberland Trail State Park. “What makes it unique is that all three art forms are found in one cave: petroglyphs, pictographs and mud glyphs.”

Most of the cave art within the region has been dated to the Mississippian culture, which dominated much of the Southeast and Midwest between 800 and 1600. Simek's team has identified a cave near Knoxville that contains much older images - a charcoal image of a hunter and a small animal - dating to around 4000 B.C.

This Falcon Warrior petroglyph inside Devilstep Hollow Cave dates to the Mississippian culture. (Photo: Cumberland Trail State Park)

All of the images seem to have religious connotations, according to Simek. Birds - the most common animal depicted in the caves – and turtles seemingly portray the Mississippian culture's emphasis on "transformational" creatures.

Nearly all of the art caves and rock shelters Simek has found occur along the western escarpment of the Cumberland Plateau, which stretches across eastern Kentucky, Tennessee, Georgia and Alabama. While the mouths of the caves face in all directions, virtually all of the known art caves have south-facing mouths.

"The discoveries tell us that prehistoric peoples in the Cumberland Plateau used this rather distinctive upland environment for a variety of purposes and that religion was part of that broader sense of place," Simek recently told Discovery News.

The mouth of Devilstep Hollow is 125 feet across and 150 feet deep, with a blue-green pool of water at the entrance sink. The fountainhead that forms the Sequatchie River – called the Head of the Sequatchie – is located near the cave.

Land records indicate that the land surrounding Devilstep Hollow Cave and the Head of the Sequatchie was settled in the early 1800s by Adam Sherrill, a Revolutionary War veteran who served under John Sevier. Sherrill's son, Craven Sherill, became the first sheriff for Cumberland County and is buried on the land.

Several early editions of the "Crossville Chronicle" offer fanciful descriptions of explorations at Devilstep Hollow Cave at the turn of the 20th century.



Because of its archeological significance, Devilstep Hollow Cave is gated and remains off-limits to the public. However, Cumberland Trail State Park and the Friends of the Cumberland Trail host an Open Day once a month, offering guided tours and information at the site. (Photo: Alan Cressler)

Devilstep Hollow Cave and the Head of the Sequatchie are located off U.S. Highway 127 near Crossville, Tenn., and Cumberland Mountain State Park. Because of its archeological significance, Devilstep Hollow Cave is gated and remains off-limits to the public. However, Cumberland Trail State Park staff and the Friends of the Cumberland Trail volunteers host an Open Day on park grounds once a month, offering guided tours and information at the site. Upcoming 2014 Open Days at the cave are: July 26, August 9, September 6, October 4, November 8 and December 13. Hours are 8 a.m. to 4 p.m. CST.

Visit the <http://www.friendsofthecumberlandtrail.org> or <http://tnstateparks.com/parks/about/cumberland-trail> for more information.

Jenni Frankenberg Veal is a freelance writer and naturalist living on Walden's Ridge whose writing interests include conservation, outdoor adventures and history in the Southeast. Visit her blog at www.youroutdoorfamily.com.

Hiking Trails - Head of Sequatchie RMA



Update: Johnson's Crook Developers sentence to Jail time

Thursday, May 29, 2014 Published by The Chattanooga.com

Federal Judge Curtis Collier on Thursday sentenced Josh Dobson to 10 years and six months in federal prison and Paul Gott to six years and three months in connection with a Dade County, Ga., land fraud.

The judge denied a request that both men be allowed to stay out of prison during appeal. He directed them to self-report to prison by July 28. Judge Collier said he did not find an issue that was likely to result in a reversal of the jury convictions.

Prosecutors said banks and individuals were defrauded of some \$44 million in connection with The Preserve at Johnson's Crook.

The sentencing range for the 36-year-old Dobson was initially 151-178 months, but Judge Collier granted a reduction based on issues surrounding the actual loss amount. That cut it to 108-135 months.

Attorney Jerry Summers requested that the sentence be kept under 10 years and one month, saying Dobson would likely not be able to qualify for a federal minimum-security "camp" with that high a sentence.

Attorney John McDougal also requested that Gott, 40, be sent to a "camp" rather than prison with hardened criminals.

Dobson and Gott, who have maintained their innocence, did not make statements to the judge at the sentencing. They earlier sent letters.

Prosecutor Perry Piper asked for "a serious sentence," saying, "Many people suffered tremendous financial hardship as a result of the actions here."

He said the Southern Land Company made down payments and initial mortgages for individuals who agreed to sign up for lots that were greatly overpriced. He said the sales were mainly to individuals in far-off states "because people here knew what those lots were worth."

Dobson and Gott were ordered to pay almost \$3.1 million in restitution to affected banks.

At the sentencing were the other two officers of Southern Land Company - Tommy Dobson, father of Josh Dobson, and Travis Shields, brother-in-law of Josh Dobson. They have not been charged in the fraud.

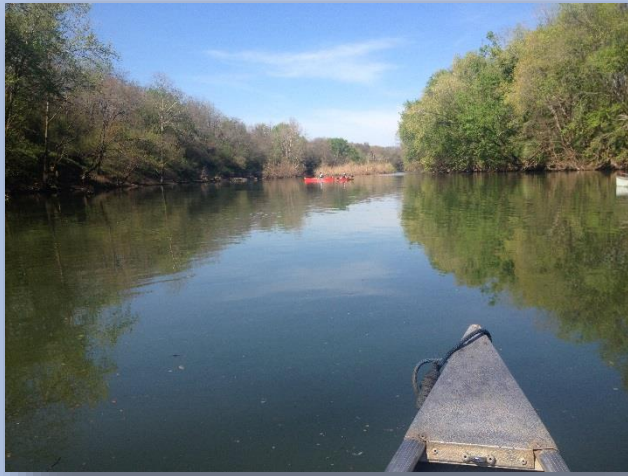
Gott handled loans for the land company as an independent contractor, but prosecutors said he was aware of the deception involved in the deals.

It was argued that both men had no prior criminal record, but Judge Collier said that is often the case with white-collar crime.

Dobson's attorney said he has children ages 10 and eight and his wife is a school teacher.

The Georgia Land Trust has wound up with 1,800 acres at the former Preserve property. Trust officials indicated they are considering selling it to a developer who would place a conservation easement on part of the scenic and historic property at the side and base of Lookout Mountain at Rising Fawn, Ga.

The ruling came on the sixth day of the sentencing over a period of several weeks.



Noteworthy Float in T.A.G.
Duck River, Tennessee
Activities: Paddling, Wildlife viewing,
Caves, Camping, Photography

About: The **Duck River**, 284 miles (457 km) long, is the longest river located entirely within the U.S. state of Tennessee. Free flowing for most of its length, the Duck River is home to over 50 species of freshwater mussels and 151 species of fish, making it one of the most biologically diverse rivers in North America.

The Duck River drains a significant portion of Middle Tennessee. It rises in hills near an area of Middle Tennessee known as the "Barrens", an area with enough rainfall to support a woodland but which white settlers found already deforested upon their arrival. (Several theories have been advanced to explain this phenomenon.) It enters the city of Manchester and meets its confluence with a major tributary, the Little Duck River, at Old Stone Fort State Park, named after an ancient Native American structure between the two rivers believed to be nearly 2,000 years old.

Other major towns along the Duck include Shelbyville, Columbia, and Centerville. Above Shelbyville, the Duck is impounded by Normandy Dam, a Tennessee Valley Authority project of the early 1970s which was built for flood control and recreation. Normandy was not equipped for power generation as were previous TVA dams built in Middle Tennessee. The structure was named for the hamlet of Normandy, which is nearby. The resultant reservoir occupies over 5,000 acres (2,000 ha) of what was previously prime land for agriculture. Further downstream, Shelbyville is protected from potential Duck River flooding by levees and floodgates. A dam constructed by the Tennessee Electric Power Company across the river adjacent to downtown Shelbyville is a relic of the early electrical development of the area prior to the establishment of the Tennessee Valley Authority.

Downstream in Maury County is the Yanahli Wildlife Preserve, occupying land which was meant to be another TVA reservoir. The Columbia Dam was never completed, however, when an endangered species of mussel was found in this section of the Duck and studies showed the project costs would far exceed benefits. After years of litigation, the dam, which was largely completed, was dismantled at a loss approaching \$80,000,000 of public funds. Another old Tennessee Electric Power Company dam, somewhat similar to the one in downtown Shelbyville, is located downstream of the uncompleted dam site. Private funds have been spent on this dam to rehabilitate it to resume electrical power production; however, this has not proven to be successful. The Duck River frequently floods parts of Columbia, particularly the poorer neighborhoods near downtown. Columbia, with a population approaching 40,000, is by far the largest town along the Duck.

Between Columbia and Centerville, the Duck cuts through the Western Highland Rim and is joined by several major tributaries, notably the Piney River. Downtown Centerville is located high above the Duck River bottoms. Below Centerville, the Duck again enters a fairly rural, somewhat remote area. Its largest single tributary, the Buffalo River, reaches its confluence with the Duck in southern Humphreys County, just a few miles from the mouth of the Duck into the Tennessee River. The area of the mouth of the Duck is part of the Tennessee National Wildlife Refuge. The total length of the Duck River is over 240 miles (390 km).

Each year on Easter weekend a group of us gather to float a river. This year we chose the Duck and it did not disappoint. It is about an hour and half drive from Sewanee, so it makes for a perfect weekend trip. This year, there were 11 of us. We had 5 canoes and three kayaks. We chose to put in at the Carpenter Bridge and take out at the Howard Bridge. This gave us a 14.3 mile float and we camped along river just after the Leftwich Bridge. Along this section, not only do you see wildlife, but you also see several small caves. For more information about the Duck River and its access points go to www.duckriverwatershed.org.



wisdom tooth sheds light on early Native American origins

BY [Jenny Marder](#) May 15, 2014 at 5:17 PM EDT

Divers Alberto Nava and Susan Bird transport the Hoyo Negro skull to an underwater turntable so that it can be photographed in order to create a 3-D model. Image courtesy of Paul Nicklen/National Geographic

The skeletal remains of a 13,000-year-old teenage girl pulled from an underwater cave below Mexico's Yucatan Peninsula provides fossil evidence for a persistent, but mostly resolved question on the descendants of early Americans.



Native Americans and the earliest American skeletons, known as paleoamericans, have markedly different faces, skulls and teeth, which has raised questions about their origins, and whether their ancestors traveled along separate migration routes. But most geneticists agree that Native Americans descended from Siberians who traveled to America via a land bridge over the Bering Strait toward the end of the last glacial period. [This study supports that](#). An alternative theory suggests they had different ancestral origins, possibly in southeast Asia, Europe or Australia.



Cave diver Alberto Nava inspects the forelimb of an extinct Shasta ground sloth, one of two sloth species found in the Mexican cave. Photo by Roberto Chavez Arce

By studying the mitochondrial DNA from the girl's wisdom tooth — that's genetic material inherited from the mother — they've determined that she derives from the same genetic lineage as

early Native Americans, and likely descended from those who crossed the Bering Strait.

The girl, along with at least 26 animals, many of them now extinct, including Saber Tooth tigers, giant ground sloths and cave bears, were found in the cave, after possibly plunging down the 100-foot trap to their death. It's like a tar pit without the tar, said Jim Chatters, an archaeologist and paleontologist and lead author of the paper. Researchers believe her broken pelvis is a result of that the fall.

"This young woman's misfortune, so long ago, provides us with new insights regarding the early people who populated the Americas," said Laura Zahn, senior editor at the Science, during a press conference on Wednesday. Chatters described the teenage girl as "small and slight." They are calling her "Naia," after naiads, the water nymphs of Greek mythology.

Cave divers discovered the site in 2007, after traveling through a 3,000-foot water tunnel. Alberto Nava, lead diver from the Bay Area Underwater Explorers, describes the first time his team entered the cave. They saw animal bones, a three foot femur leaning against a boulder. The human skull rested on a ledge.

"It was a small cranium laying upside down with a perfect set of teeth and dark eye sockets looking back at us. This skull was resting on its humerus and we could see the rest of the upper torso was spread to the left and down on the ledge," Nava said.

Still unclear is why the skulls of modern Native Americans are shaped so differently. This latest research indicates that they likely evolved on American soil, possibly as a result of different food or environmental conditions.

You have
to step
off the
edge...
to see
what is
below
the
surface

GO YOU!!!

KBS 2019
M02 G04

