

TAG Caver ~ Volume 4 Issue 2

Summer 2013

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/

2012 Sewanee Mtn Grotto Officers:

Chairperson: Kelly Smallwood

Vice Chair & Programs: Woody Woods

Treasurer: Blaine Grindle Secretary: Bambi Dunlap

Member at Large: Maureen Handler Conservation Chair: Maureen Handler

Survey Chair: Jason Hardy Webmaster: Tina O'Hailey

TAG Caver Editors:

Kelly Smallwood
Rowland7840@bellsouth.net
Jason Hardy
wmjhardy@yahoo.com

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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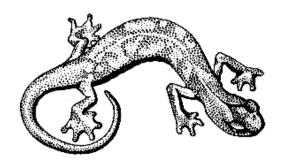
Dog Collar Cave, Jackson County, Alabama Photo by Kelly Smallwood

Back Cover:

Inside Dog Collar Cave, Jackson County, Alabama Photo by Kelly Smallwood

*Dog Collar Cave is 106' pit. This is where Jason Hardy Proposed to Kelly Smallwood

Calendar of Upcoming Events



June 13-16, 2013 – SERA Summer Cave Carnival, hosted by Central Alabama Grotto at Cumberland Caverns in McMinnville, TN. The theme is Hawaiian Luau.

June 28–30, 2013 – 60th Annual Indiana Cave Capers, hosted by the Central Indiana Grotto, and returning to the Crawford Co. Fairgrounds (site of the 2007 Convention and EZ–Up Memorial). Led cave trips, cookout, vendors, door prizes, and the speaker is Bill Steele, on 50 years of caving.

July 12-14, 2013 - Karst-O-Rama, hosted by the Greater Cincinnati Grotto for the 21st year will be "Simply Caving!" at the Great Saltpetre Cave Preserve in Mt. Vernon, KY. To learn more, visit <u>karstorama.com</u>.

July 13, 2013 - Sewanee Mountain Grotto meeting & campout in Payne Cove. Trips into May Apple & Red Trillium will be available. Meeting starts at 6pm central with a potluck dinner, followed by the business at 7pm.

August 5-9, 2013 - NSS Convention in Shippensburg, PA. For more information, see the convention website at http://nss2013.com/.

August 10, 2013 - Sewanee Mountain Grotto meeting (possibly at Jack Lynch's property on Battle Creek). Meeting starts at 6pm central with a potluck dinner, followed by the business at 7pm.

August 30-September 2 - Sewanee Mountain Cave Fest.

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.

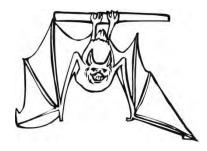


Sewanee Mountain Remailer

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 \$15 & 3' patches for \$5. Both items have our grotto logo on them. Please contact Kelly Smallwood at rowland7840@bellsouth.net to purchase.





THETAGSCOOP

Our current membership is at 84 members.

The grotto summer campout will be July 13 & 14 in Payne Cove.

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 #.

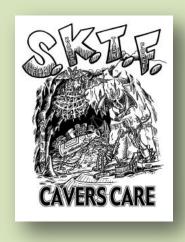


Cumberland Gap Quarry Cleanup by Cheryl Pratt

The second SKTF cleanup at the quarry in Cumberland Gap took place on March 16, 2013. 21 volunteers from Tennessee, Virginia, Kentucky and North Carolina worked hard to fill the dumpster with 2.34 tons of garbage. This area drains into Gap Creek, which flows through several caves and empties into the Powell River. The trash included tires, car parts, children's toys, household garbage and house parts discarded from remodeling jobs.

Photo by Maureen Handler





On April 20, 2013, thirteen volunteers, both cavers and members from the Rocket City Rock Crawlers, came out to help the SERA Karst Task Force for the second cleanup at Bingham Mountain in Trenton, Alabama. The cleanup was scheduled for Earth Day weekend and they were able to clean up all the trash that was in the stream that enters Devil's Den Cave. They were also able to collect 1,100 pounds of scrap steel that netted \$133.65 for the SKTF.











Are you afraid of the dark?

British Columbia brewery dives into Absolute Darkness to launch new beer!

Vancouver Island Brewery is set to release a new beer, **Absolute Darkness India Dark Ale**, in its Vancouver Island Series of 650ml bomber bottles. The Victoria based brewery has teamed up with Horne Lake Caves to create a beer that captures the essence of caving; dark, mysterious and exhilarating.

To be safe, the Absolute Darkness beer label has a safety feature built right in. Should the lights go out, or you find yourself in a dimly lit room the beer label *glows in the dark*. No need for headlamps while enjoying this beer!

"Vancouver Island has the highest density of caves in Canada and some of the longest and deepest caves in the country. We have always had a strong connection with our Island environment and it tends to influence our brewers and our beers." Said Rob Ringma, General Manager at Vancouver Island Brewery. "We love brewing unique, flavourful beers and this India Dark Ale is a fine example of combining the best of both malt and hops to create a truly distinctive taste. Regardless of whether you are willing to enter a

ABSOLUTE DARKNESS

INDIA DARK ALE

SANGER BERNESS

INDIA DARK

cave or not, this beer is sure to give you a great reason to not be afraid of the dark."

The brewery hosted an open house cask-tasting event for Absolute Darkness India Dark Ale on Saturday, March 9th. Beer enthusiasts were able to come down for a sample of Absolute Darkness India Dark Ale and go on a free craft brewery tour. They were also able to have fresh Absolute Darkness India Dark Ale available in unique 1.9L glass Growlers at the brewery. To top it all off representatives from Horne Lake Caves were on-site to answer any questions during the open house and Vancouver Island Brewery offered an opportunity for the public to enter to win an extreme caving adventure with Horne Lakes Caves. Crafted in small batches there is a limited supply of bottles available only in British Columbia.

About Vancouver Island Brewery

In 1984 Vancouver Island Brewery started with the mission of crafting local, all natural craft beers for Islanders to enjoy. Beginning with the careful selection of the finest quality ingredients, we use skill and patience to handcraft our family of ales and lagers in small batches. Our goal is to bring our passion for craft beer to the brewery each day and brew unique, flavourful beer for you to enjoy.



VANCOUVER ISLAND BREWERY

ABSOLUTE DARKNESS



INDIA DARK ALE

VANCOUVER INCASO

- 100 650mL
- Development





Noteworthy Hike in TAG Chimneys State Natural Area, Marion County, Tennessee Activities: Hiking, Photography, Nature Appreciation Rating: Moderate

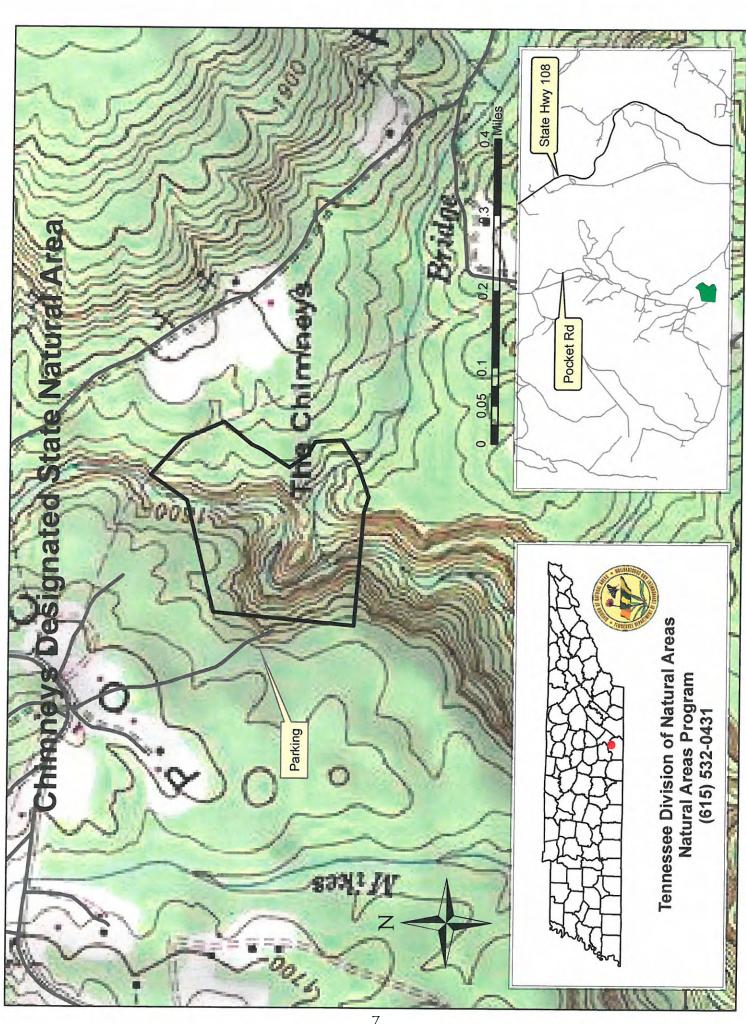
The Chimneys is a 33-acre natural area located in Marion County, Tennessee. It is located in what is commonly referred to as the Pocket Wilderness where Pocket Creek cuts through Cumberland Plateau sandstone forming Pocket Gorge. Pocket Creek has sculpted the impressive features known as the Chimneys over vast geological time. The Chimneys are two isolated, 200-feet high, towering pinnacles of Pennsylvanian Warren Point sandstone connected to a central base where a natural window forms. The pinnacles and natural bridge rise from the gorge floor and are nearly as high as the surrounding bluff. The natural area is adjacent to the Chimneys Scenic Park. It was designated as a state natural area in 1999, the same year it was donated to the state by U.S. Steel Corporation, a subsidiary of Marathon Ashland Petroleum, LLC.

A dry, oak-pine woodland surrounds the Chimneys on the surrounding bluffs. Chestnut oak and Virginia pine are common to this area. Maple-leaf viburnum and sweet-shrub are also often found in areas like this. Small pockets of glade and barrens vegetation can be found in a few areas with shallow soil on dry upper bluffs. There is an old growth hemlock forest in the gorge comprised of densely forested hemlock, chestnut oak, magnolia or cucumber tree, and striped maple. A thicket of rosebay rhododendron grows along the creek, making passage to the base of the Chimneys challenging. There are numerous ferns and mosses covering sandstone talus boulders at the base the steep slopes. Some of the steepest slopes are wet seep cliffs that support a diversity of mosses, liverworts, and other plants not found elsewhere on the site.

Access: Public access allowed but is limited. The Chimneys Scenic Park, maintained by the Chimneys Scenic Park Association provides parking, an overlook of the gorge, and a short hiking trail are available. There are no developed trails on the natural area.

Directions: The Chimneys Scenic Park is accessible via Highway 108 between Whitwell and Palmer. Turn on Pocket Road and proceed for about six miles. The entrance to the park is on the left just before a church. Follow the road until you reach the park at the end. You can access the gorge below from the left side of the bluff. To access the waterfalls, there is an access road to your right as you come in the park.





El Speleo 2000 Cave Light By Jeff Cody

El Speleo cave lights have been around for a few years now. I suspect many of you have seen their ad in The NSS News. They are located in Croatia. This nation is home to some of the worlds deepest caves. These lights have been tested in many deep explorations of 1000 meters deep. They currently offer two light packages, The 1600 and The 2000 . The 1600 is 228 grams for the headpiece and 282 grams for the battery. The 2000 model is slightly lighter on the head at 193 grams with the same 282 for battery. By comparison the entire light weighs as much as a Petzl Duo loaded with 4 AA batteries plus an extra 3 AA batteries. Both lights are 3.7 volt and on the highest setting is 3000mAh. This light like many premium lights have two LEDs , one for a spot and one for a flood . The main difference most cavers will notice between the 1600 and The 2000 model is the 1600 has 6 output settings for



flood and one for spot. The 2000 has 6 output setting for flood and 6 for spot. Also The 1600 has a max output of 1000 lumens on flood and 600 lumens with the spot, hence the 1600 name. The 2000 is more advanced with a max output of 1000 for both spot and flood. Unlike similar premium cave lights like The Rude Nora and Scurion the 1600 or the 2000 will not allow the use use of both spot and flood at one time, just one or the other similar to The Princeton Tec Apex in that respect. The El Speleo is less expensive than The Rude Nora (600 US Dollars before selling out) and up to 1300 US Dollars for the top Scurion of similar output. The 1600 is 400 US Dollars for the package with the 78000 mAH battery and head and charger. The 2000 model is 480 US Dollars for the same package. They also offer an optional 9300 mAh battery but the standard package comes with the 7800 mAh battery. Run times for the 7800 mAh battery are listed at 3,7,13,35,60 and 120 plus hours depending on the output setting. The 2000 model uses the XM-L Cree Led chip. The light and battery is listed to be waterproof to several meters and the connector between the light and battery is listed at waterproof to 1 meter. El Speleo claims that with some creativity the connector can be modified for deeper immersion.

I received my El Speleo 2000 model in February of 2013. The 2000 model had only been out a short time in February. The first thing I noticed was the light and battery appears to have a solid build. The light is controlled by a toggle type switch on the back of the head. Click the switch one direction one to six times for output settings on the flood and the opposite direction one to six times for output settings on the spot. I mounted it to a Petzl Ecrin Roc. I ran the cord inside the Ecrin and you will notice there is more cord than needed by several inches. I bunched the excess cord up inside the Ecrin. I also purchased the optional 3AA adapter and attached that with industrial velcro inside the Ecrin. I carry the AA adapter in my pack in The Otter box I normally carry and can easily mount it inside The Ecrin if needed. There is a heavy duty connector between the head and battery pack. The head mounts via an included U shaped mounting bracket using two thumb screws to mount the head to the bracket. This arrangement allows for some tilt. The outer battery case mounts via two threads that stick out and two included thumb screws. Two holes need to be drilled for both the battery case and head. The charger is attached via the connector between the head and battery. The charger has a small light that is red or green to let you know when charging is complete. The mounted light has a balanced feel and the slight extra weight compared to a 4 AA light was not really noticeable to me. One advantage this light has over a Sten is that the battery has a protective case. The Sten has a more compact look and I suspect may be lighter. I feel the 100 dollar price difference between this light and the Sten is worth it. I have been told that this light has many of the internal head parts resin ed in and may render it not as serviceable as the more expensive Rude Nora or Scurion. I know LED tech changes rapidly and you likely can just replace the head when updates become available. After mounting I took it outside in the dark and turned it on and was amazed at the flood and the way it lit up everything all around you. The spot had a wide angle compared to my Fenix LD 41 520 lumen hand held. The Fennix LD 41 appeared to be a brighter white hot but a narrow beam compared to the spot on The El Speleo. One could tell when looking out at a distance the spot was a wider angle than The Fenix.

I took the light in a cave soon after mounting. I was with one caver who had a Sten premium , another with a Fenix HP 11 and another with a Custom Duo. Once again, I was very impressed with the flood and its beam spread. You do not have to point the light down at your feet to see them. This is a real plus when moving over breakdown. When we got to a large room , the spot lit it all up quite nice. I did notice though that when looking close up into a pool of water the Fenix HP 11 had what appeared to be a brighter white spot at close range but looking out into a large room the El did a much better job lighting the whole room up. With Sten and Fenix , you only have one beam option. El Speleo gives you a choice. Also I found the switch easy to find with gloves on. After caving for years with a Petzl Duo that also had a switch easy to find with a gloved hand , I noticed the PT Apex and Fenix with the recessed switch was hard to find with gloves on. This was not an issue with The El Speleo. The light was very impressive. My neck was not at all sore after a 5 hour trip so I did not think the slight extra weight over The Duo will be an issue for me. One thing I did do when I first got the light was replace the stock screws that on the head with stainless marine grade 4 mm Allen head screws, this also gave the light a more rugged look compared to the standard screws it came with. I do understand a light like this may be out of some peoples price range but it is very impressive. Personally ,I would prefer a tighter white hot spot like you see on many Fenix lights but I would highly recommend this light if one can afford it. In The USA , El Speleo is sold by either their US based website of www.elspeleo.com or by Inner Mountain Outfitters.



Vertical Section

National Speleological Society http://www.caves.org/section/vertical/

The Vertical Section is an Internal Organization (I/O) of the National Speleological Society. Most vertical caves require rope work, and the Vertical Section convenes cavers with an interest in vertical caving. The purpose of the Section is to educate and train cavers in safe, efficient vertical caving techniques. Specific Vertical Section goals are to:

- Educate NSS members about vertical caving theory and practice.
- Promote interest in the study of vertical caving techniques.
- Encourage development of safe vertical caving techniques and their application in cave exploration.

The Vertical Section is one of the largest I/Os of the NSS, and the **Nylon Highway** is the section's publication. The Section also develops training programs to help grottos conduct vertical classes involving consistent and current techniques.

Vertical cavers use techniques similar to those of mountaineers, but those techniques are adapted to the cave environment. Rope work can be hazardous and even deadly when rules are violated. The Vertical Section teaches those rules and helps cavers avoid disasters. Safe rope work cannot be learned by self-study or from a book alone. Only practice under the supervision of a competent, experienced instructor offers adequate training for the novice climber. Be safe and get proper training before attempting rope work. Contact the Vertical Section's Education Coordinator (http://www.caves.org/section/vertical/train.html#trngprgm) for more information about training seminars, demonstrations, and practice sessions.

Additional information and/or Discussions can be found on the Vertical Section's forum on the NSS website forums at: http://forums.caves.org/. The name of the forum is "On Rope!".

Membership in the Vertical Section is open & free to all NSS members demonstrating an interest in the objectives of the organization and agreeing to abide by its tenets. Membership shall not be denied due to race, sex, religious affiliation, or national origin.

Full Membership in the Vertical Section is open to all NSS members in good standing. Members can vote, hold office, and participate in all Section activities. They also receive access to the on-line *Nylon Highway*, plus any other publications, as authorized by the Executive Board of the Section. The Membership consists of those who attend an annual General Meeting and/or the Vertical Session at the annual NSS Convention and who sign the roster with their name and email (or regular) address. Membership can also be obtained by mail or by registering on the Vertical Section on-line Yahoo group. The duration of membership shall be 5 years from the last meeting attended or last on-line group registration. Membership Annual Dues were set to zero by the Section Board at the 2008 General Meeting. Suspension of dues was approved by the membership at the meeting.

To join the Vertical Section please send or e-mail the following information to Bill Boehle, 1284 Lower Ferry Road, Ewing, NJ 08618-1408, Phone: (609) 771-6969, E-mail: wfboehle2@comcast.net

- Type: Membership or Subscriber
- Full Name
- NSS Number (required only for Membership)
- Mailing Address
- City, State, and Zip+4
- Country (if not USA)
- Phone Number
- E-mail Address



The *Nylon Highway* is the official publication of the Vertical Section. Anyone can view the on-line issues by going to http://www.caves.org/section/vertical/nylhi.html and clicking on the links.

Dedicated to those individuals whose unting efforts in an area of large tavens and deep shafts have synthesized America's finest region for underground adventure and speleological friendship.

The Liberty Caver Logbook

Dave W. Hughes originally got the idea to place a caver log book at the Liberty Restaurant in Scottsboro, Alabama from the very famous series of caver's logs in The Court Restaurant in Lewisburg, West Virginia. The Court is now gone, and was located where the fountain is now in Lewisburg.

Dave felt that the same concept would be fun to replicate in TAG. So in May of 1976 he purchased a composition type notebook at the Georgia Tech bookstore and got permission to place it in the Liberty. At that time, the Scottsboro bypass (Hwy 72) did not exist, so EVERYBODY seemed to frequent the Liberty on their way to and from caving trips.

Dave printed the words "Caver's Register" on the cover of the original logbook and thus a new tradition began. The original volume filled while Dave was living in Arizona, so Marion O. Smith kindly replaced it with a new, blank logbook and returned the original to him. Marion has since replaced each one as they fill up and they now reside in his own collection.



Some of the first entries in the Caver Logbook at the Liberty Restaurant, Scottsboro. Alabama.

S/8/26 - Jack Clislett work to Vallacle? and map! I maya Done in apte Soully granted the above in a north of one of the same who have the lit one are to be for and and a subject the stand of the subject to the s Jail the above in a shifted are of the in getter in the will are are a win to the same of Searce, and milk derived with the search of any off and of the search of any off the search of any off the search of the search an early model & sel rack. Call Pane Angles (NSS-14550) @ (404) - 894-6210 (Axelogy) A former caver had a dynamite trys to talkalla and The Regense pat A good Jack Chiefelt took of first time (Turky) to method the Hororable Love Maybe (Pry) S/28/36

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Jan Bollon Coal

Tip from Atlate to Fally Cane; Del Engle Core and David Ruger. E joyalle antig in spite of nin and great halle of lighting!

Dan Hyler (NSS - 14550).

Some as above. Turkey taken along this time. Clined like a wish man. Will he ever o again? C.B. will NOW BE ED Jack Chilett

26 June 1976 - Same as above. Travel where four man have been before, it was beautiful Great teacher and a great years.

Jeff Borker.

THEFE OME WAS A CAVER NAMED TACK WHO WAS EMBRACING A GIFL IN HIS SHACK DEMPLE- You'LL Excust Z'M SUBE I THINK YOU'RE STALL WEARING

7/17/76 Ded Surgrice . Cert wheele 7/17/76 Del Surgrice lots of from Super pet Cerol team. Jack Chalett (agen) FCC 1

7/17/76 Surprise.

He came today to Jern in the most round-about way to four Utionta: Up to Chattanooga, down to Fort Payme, then up to Scotto borb and across to tant Rock.

However, this wasn't the idea of our illustrious leader: David W. Hughes Cthat is, C.D., Part, etc.)

If was our hiver Jack Chislett ("cheese") who made the wrong turn South on I-59 motered of going to 5 Pittsburg (C.D.'s ide)

We the into two groups on the way up the mountaind; loth from the DCG. Consequently we had to wait about four thanks to get our rope rigged at the 404.

Surprise.

hen though we had a few problems we were all surprised. All difficulties however were Cart's doing: Anybody who would take fantastic putules of me and have no film has got to be a real goof-ball s

Even though be had a 100' head start on me when we climbed -

Other logbooks
were once
located at
restaurants in
nearby
Stevenson and
South Pittsburg
but those
restaurants are
now long gone.

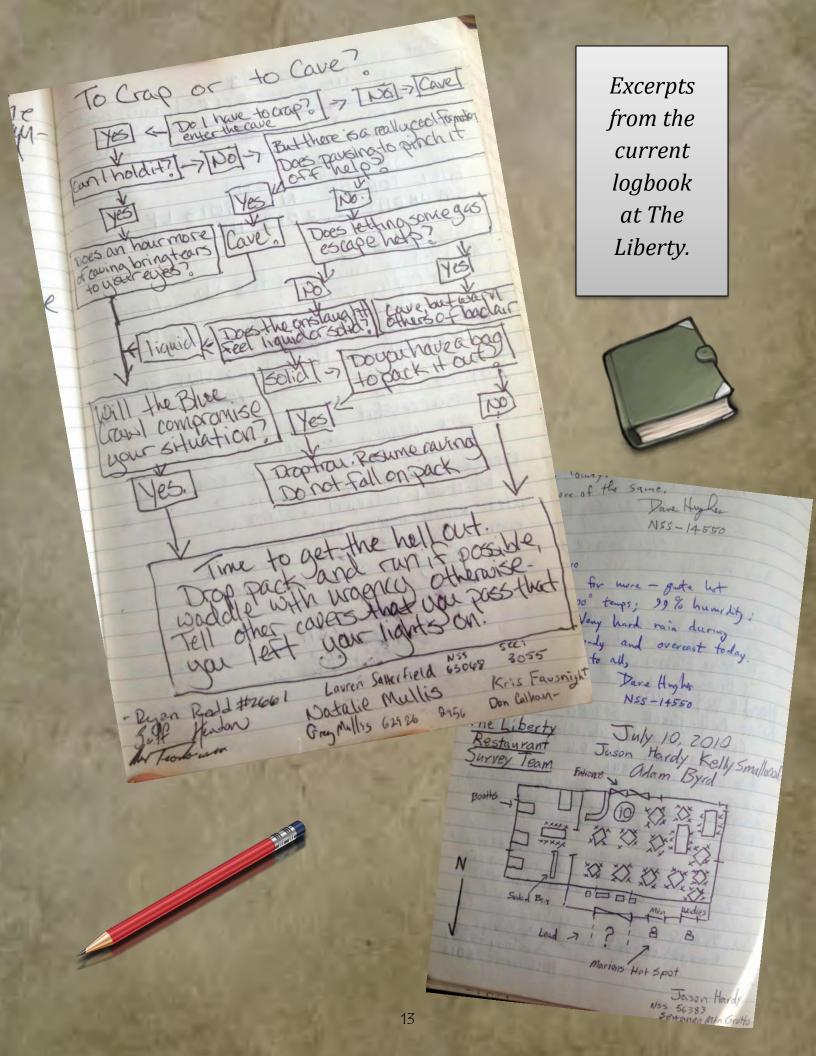
tanden
his feet We kept temping into
lip of the 404' in ade of the the
about 6 on 10 rest stops (curis). We chimbed
on the Mitchel system knows. We chimbed
us change total stopped to watch
carring the real forp our today;

Captain Kaust

Me chill

The caibide caves was unable to attend this sister with his swither, grand mother and little will king him back.





APRIL 20, 2012

Caving for me has lately had its moments. On the down side, I had to be "dug out" of a 15 ft. pit by Gerald Moni, & on April 3 I had my closest call ever in a cave I had just dug open. A boulder the size of at least 70 cubic feet NARHOUNG & I mean NARROWLY, missed squashing me like a bug! On the other hand, the up side, that incident caused me to name the discovery Almost Got Killed Cave. In it on subsequent trips Sharon Jones, Alfred Crabtree, Kristen Bobo, Chinter Elmon 4 I did virgin parallel 66 & 60 ft pite + explored a few 100 ft. of virgin grassage. Acros the field from this cave, in another cade Jason Hardy, Itelly Smallwood, & Indides virgin 96% ft pit with 300 ft. of passage at the bottom This was on March 27, 2012.

Been doing historical research this week at Wallace State College, Ala.

Tomorrow, I'll attend the ACS meeting & veturn to Tennessee & resume "nerd hole" caving there (which are actually sometimes very dangers, as the April 3rd incident showed me).

Marion O. Smith USS 9164



The Liberty is
located in
downtown
Scottsboro on E.
Willow Street.
Make sure to ask
your waitress
for the "Caver
Log" when
visiting.

OCTOBER 31, 2012

This has been a very good old man's caving year - 274 caves of which 194 were new-to-me giver - 274 caves of which 194 were new-to-me giver - 274 caves of which 194 were new-to-me giver a mile since Aug. 25). I've been of virgin passage (over a mile since Aug. 25). I've been of virgin passage (over a mile since Aug. 25). I've been of virgin passage (over a mile since Aug. 25). I've been on 13 mapping trips since mid-July, mistly with John of 14. Smyre. We are currently surveying a cave less than I have from my house I dug open 10-18-12. It won't be long or deep, but we have 600ft with a 59 ft pit so far. One more trip will finish it.

Today, I'm enrente to meet David Cavelle for a short trip into Bryant Mt. Cave, Blownt Co., Ala. Then I'm heading of for the Southern Historical Assoc. meeting in Mabile. After that I hope to meet Alan Cressler, Jim Selby, + maybe of there to, for the novelty of it, town a few South Alabama caves in Clarke & Monroe Counties.

Alabama caves in Clarke & Monroe Counties.

Dave Hughes, When are you comins up for a visit?

Marion O. Smith NSS 9164

9150 /A Breakfast while an vante to Hutsulle. Warm regards to all. Dane Hyphen NSS-14550 APRIL 13, 2013 I went to Quintana Ros, Mexico to get warm ربهر but instead of managed to get sich for the car ax better part of a month! Sharon Jones & & last Monday managed to your clinton churces "now" 80' pit in White Go., Jenn. - Bang Bang Blowhole. Sknow on to the ala. Come Survey meeting today. Emily, please all! I'm sur I can find a 16 howith crawl for you smewhere! Marin O. Smith USS 2164 esc Heading over to the Hes meeting this morning. Dave Highes, NSS 14550 13APR13 T. Whitehost NSS 12919 On my way to acs meeting then bluff River cave thing tousight Sevance Mith Grotto meetings Jasen Hol



Bolts, Slings, and Natural Anchors: A Tale of Life Underground

Originally published on TAG-Net, August 26, 2009 in response to all the flaming over the new bolts in McBride Cave

By: Bill Putnam

republished with permission

This is certainly not a new topic. It just hasn't come up in a while. People were arguing about this in 1980 when I started caving with real gear, and I'm sure they were arguing about it long before I came along. In the UK it has been a big issue for more than 30 years, as "bolt farms" developed at the tops of pits in popular caves, resulting in "bolt wars" with a great deal of associated controversy and drama. The same thing has happened repeatedly in the climbing community regarding bolts on rock routes.

Here's how it happens:

Caver Alan finds a cave with a pit and wants to explore it. Realizing that bolts require periodic inspection and maintenance, and that their condition and safety cannot be reliably determined by most cavers, and desiring to minimize his impact on the cave environment, he prefers to use a natural anchor if possible. After some searching, he finds a place above the pit where he can tie his rope around a bedrock pillar to create an anchor. He descends the pit and explores the cave. Deciding that the cave is a nice one that others would like to see, he leaves a loop of webbing around the anchor so that others will find it easily and not be forced to hunt for it or set bolts. He sleeps well, knowing that he has done a service to the cave and to the caving community. People visit the cave and use the sling for an anchor, or rig their rope directly to the pillar. When the sling gets worn, cavers replace it with a new one. Everyone is happy.

Caver Bob hears about the cave and decides to visit. He finds the sling, but feels that it is not safe to rappel from a single anchor, even if it is a good one, or feels that the rig could be improved to be "safer" and/or more free by placing a bolt out over the lip, so he sets one. He feels the rigging is now much better. He attaches his rope to both the bolt and the sling anchor and descends the pit. He leaves the cave a happy camper and sleeps well that night, feeling that he has done a service to the caving community.

Caver Chuck comes to visit the cave and finds the bolt and the sling anchor. Not knowing the age or condition of the sling, he distrusts it. He doesn't have any webbing to replace it, so he sets a second bolt and uses the two bolts for his anchor. He descends the pit. On the way out, thinking that he has made the cave "safer" and is protecting his fellow cavers, he removes the sling. He sleeps well that night, having done a service to his fellow cavers. People visit the cave using the two bolts and/or the natural anchor to rig the pit, and it appears that all is well.

Caver Don comes to visit the cave and finds the two bolts. He is unaware of the natural anchor. He wants to use the two bolts, but doesn't like one, because the hanger is loose or it is in what he considers to be poor rock or a bad location, or he doesn't like the brand of bolt or hanger, or he thinks they are too old or improperly set, or he's a bit paranoid, or whatever. He sets a third bolt, uses that one and the one of the others that he likes best, and maybe the third one as well. He descends the pit, happy in the knowledge that his anchor is "safe". He doesn't give a rat's ass about impacting the cave or protecting his fellow cavers - he just wants to be "safe". (Caver Don lives in the moment.) He sleeps poorly

that night, not because he feels he has done anything wrong, but because he drank too much beer at the campfire and keeps waking up to pee.

People visit the cave and use two or three of the bolts, and/or the natural anchor, and descend the pit. Some notice the loose hanger and mention it to others around the campfire or at grotto meetings, but no one worries too much about it. A few wonder who keeps setting all these bolts, and why any bolts are necessary when you can just rig to the pillar.

Caver Ed hears about the loose bolt and decides to fix it as a service to the caving community. He goes to the cave and uses a wrench to tighten or replace the hanger on the loose bolt, adds caulk around all three bolts to seal the holes, and uses all three to construct a self-equalizing load-distributing anchor that any engineer would be proud of. (Caver Ed is a Hell of an Engineer, and also a bit OCD). He does the pit, and sleeps well that night, feeling that he has done a Good Thing. People visit the cave and use two or three of the bolts, and/or the natural anchor, and descend the pit. Everyone is happy.

Caver Alan comes back to "his" cave and is surprised and appalled to see all these bolts. He decides to remove them and replace the sling in the name of aesthetics and conservation because he feels the bolts are unsightly, cause unnecessary environmental impact, will deteriorate over time, cannot easily be inspected, and weren't installed with his blessing. He removes the bolts, fills the holes with caulk, and covers them with epoxy mixed with rock dust. He leaves behind a nice new sling around the bedrock pillar and passes word to the caving community via his grotto, TAG-Net, and CaveChat, that the cave can be done safely and cleanly without setting any bolts, thank you very much. He sleeps well, knowing that he has done a service to the cave and to the caving community.

Caver Fred, who belongs to a different grotto and does not read TAG-Net or CaveChat, visits the cave. Seeing the sling and being uncertain of its age, he decides to set a bolt. The cycle begins anew. And so it goes, until the rock at the top of the pit is honeycombed with drill holes and/or littered with questionable bolts of indeterminate age and condition.

Moral of this story: Everything we place in a cave changes it, and changes the caving experience. Nothing we place in a cave is permanent. Even the cave is not permanent. Respect the cave, and your fellow cavers, and remember that the caves do not belong to us. We belong to the caves.

Epilogue: Caver Alan, Caver Don, and Caver Ed run into one another at a caving event. Caver Don takes issue with caver Alan's actions, and states that he intends to replace the bolts. Caver Alan urges him not to do so. Caver Ed says Caver Don doesn't use the right kind of bolts and doesn't place them properly. A spirited debate ensues until Caver Don offers to whip Caver Alan's ass. Caver Ed tries to intervene and gets punched in the mouth. All three cavers are summarily ejected from the event by security. Meanwhile, some visiting European cavers have gone to the cave and placed enough bolts to rig the entire cave according to European-style free-hang rigging principles, so that the rope never touches the rock. Local cavers who use the Frog system are overjoyed to find the new playground, but old-school ropewalker and Mitchell system users are royally pissed, and blame the French for starting this madness.



Life goes on.

Dream Vacation
By Bailey Painter

When you say a dream vacation,
You may think of a warm beach shore,
But when I think of a dream vacation
Sunsets and shoreline is not what I adore.

When you say a dream vacation,
You make think sunny, Florida shoreline,
But when I think of summer sun,
I recall cool, cavern times.

My dream vacation is the same every year, You may run to your crowded beaches, But my dream vacation is already near, Hosted by the home of the Peaches.

The windy roads of the mountains,
Spotted like Swiss cheese,
Into the 'TAG' region,
Many caves I see.

When one cavern catches my eye,
A turn I will make,
The beauty of it makes me sigh,
This chance I will take.

Helmets, kneepads, boots, and gloves,
Put them on, then I'll go,
In the cave the wind blows slow,
Trickling water nips my toe.

Misty caverns, muddy walls, Teeth that hang high and low, Silently thundering waterfalls, And a warm breeze gently blows.

Down to the final room,
A spear reaches to the sky,
And rests in its silent tomb,
And as I leave, it whispers, "Goodbye".

My dream vacation is the same every year,
You may run to your crowded beaches,
But my dream vacation is already near,
Hosted by the home of the Peaches



Bizarre insect like creatures discovered in Spanish cave

Hairy, tiny bodies of three new 'springtail' species resemble Lilliputian monsters

Three bizarre-looking springtails, tiny insectlike creatures, have been discovered in a Spanish cave.

Springtails are among the most ancient and widespread animals on the planet. Like insects, they have six legs, but are small, more

primitive and lack wings. They usually have a furca, or a tail used to spring away from danger, hence the name "springtails." Many cannot be seen with the naked eye; the largest species is about 0.24 inches long (6 millimeters).

The three species — dubbed Pygmarrhopalites maestrazgoensis, P. cantavetulae and Oncopodura fadriquei — are very different from one another. But each of the new species has the requisite springy tails and hairy, tiny bodies, resembling Lilliputian monsters. One of them, O. fadriquei, lacks eyes.

They were found by researchers from Spain's University of Navarra in the isolated Maestrazgo caves in the Teruel region of Spain, at elevations up to 6,560 feet (2,000 meters). Outside the isolated caves, winter temperatures drop to minus 40 degrees Fahrenheit (minus 40 degrees Celsius). Inside, however, temperatures stay between 41 and 54 F (5 to 11 C). The scientists plan to study how these creatures adapt to the cold, wet and lightless conditions in the cave, according to a release from the Spanish Foundation for Science and Technology..

"Like other cave-adapted animals, the (springtails) require greater chemical sensitivity as they cannot use their sight in the absence of light," said University of Navarra researcher Enrique Baquero in the statement.

"Studying fauna in the caves allows us to expand on our knowledge of biodiversity," Baquero said.

"In the case of the three new species that we have found in Teruel, they are organisms that have survived totally isolated for thousands of years. Having 'relatives' on the surface means they act like relics from the past that have survived the climate change (that has) taken place on the outside of the caves."

The new species are described in a study published in October in the journal Zootaxa. http://www.mapress.com/zootaxa/2012/f/zt03502p071.pdf



WNS and Fungus Confirmed in Four Southeastern Cave Conservancy Caves



April 8, 2013, Chattanooga, TN - The Southeastern Cave Conservancy, Inc. (SCCi) today reported that signs of the bat disease known as White Nose Syndrome (WNS) have been detected on hibernating bats in SCCi caves in four states. The SCCi-owned caves affected this winter include Wolf River Cave in Fentress County, Tennessee; Frenchman Knob Cave in Hart County, Kentucky; Fricks Cave in Walker County, Georgia; and Fern Cave in Jackson County, Alabama.

WNS is a disease of hibernating bats that has killed millions of the animals in the eastern U.S. and Canada since its discovery in 2006. The condition is named for a distinctive white fungus that grows on the noses and bodies of affected bats. While WNS is not directly harmful to humans, the loss of so many bats may have significant and far ranging impacts. Bats play a major role in many ecosystems, and benefit agriculture by crop pollination and insect control.

On January 15, the volunteer manager of the SCCi Wolf River Cave Preserve led a team of scientists with the U.S. Geological Survey, the Nature Conservancy, the Tennessee Wildlife Resources Agency, and the U.S. Fish and Wildlife Service to Wolf River Cave to survey the bats hibernating in the cave. Of the 2,421 bats observed, which primarily included little brown bats and endangered Indiana bats as well as smaller numbers of tri-colored, northern myotis, and endangered gray bats, the team observed one little brown bat (*Myotis lucifugus*) with white fungus on its body. The bat was humanely euthanized and submitted to the Southeastern Cooperative Wildlife Disease Study (SCWDS) laboratory in Athens, Georgia for analysis. The laboratory confirmed that the bat was affected by WNS. The team also noted changes in the roosting pattern of bats inside the cave, but did not observe any dead bats or bats flying near the entrance.

On February 2, a volunteer manager of the SCCi Frenchman Knob Cave Preserve led biologists from Mammoth Cave National Park and a Kentucky Department of Fish and Wildlife Resources contractor to Frenchman Knob Cave to survey the bats hibernating in the cave. Of the 2,048 bats observed hibernating in Frenchman Knob, which primarily included little brown bats and endangered Indiana bats as well as smaller numbers of big brown, tricolored, northern myotis, and silver-haired bats, the group discovered one northern bat (*Myotis septentrionalis*) and four little brown bats with obvious signs of WNS. Biologists used a sticky tape strip to collect some of the white fungus from one little brown bat, and submitted it to SCWDS for laboratory analysis. The laboratory report confirmed the presence of numerous *Geomyces destructans* spores and hyphae. The survey team did not observe any dead bats or bats flying near the entrance.

On March 9th, an SCCi member observed signs of the WNS fungus on five of about 60 tricolored bats (*Perimyotis subflavus*) in Fricks Cave in Walker County, Georgia. Following discussions with the SCCi board of directors and officials from Georgia Department of Natural Resources, one of the bats was collected, humanely euthanized, and submitted to SCWDS for analysis. The laboratory confirmed that the bat was affected by WNS. An important summer habitat for a "bachelor colony" of endangered gray bats (*Myotis griscesens*), Fricks Cave had been closed to public visitation since early 2008.

On February 28, four SCCi members led a US Fish and Wildlife Service biologist to the Morgue Pit entrance of Fern Cave in Jackson County, Alabama to survey a large gray bat hibernaculum. The group did not notice any signs of WNS, but swabbed the muzzles and wings of several bats that had unusual white skin pigmentation. On March 9, another group of four SCCi members entered the Johnston Entrance to Fern Cave and discovered several tricolored bats with obvious white fungus on their muzzles and wings. The following week, several cavers returned to Fern with a biologist and humanely euthanized three tricolored bats for analysis. The lab confirmed that the tricolored bats were affected by WNS, and also detected *Geomyces destructans* spores on the swabs from the gray bats. The SCCi owns the Fern Sink (aka Surprise Pit) entrance of Fern Cave, and several miles of the cave system itself. Although no bats affected by WNS have yet been found on SCCi property, it is likely that bats affected by WNS are roosting in sections of the cave the SCCi owns, due to the interconnected nature of the 16-mile-long cave system.

"We are disappointed, but not surprised, that WNS has been confirmed in four of our caves," said SCCi chair Ron Miller. "WNS is unfortunately becoming increasingly well-established throughout the region in caves that contain hibernating bats, continuing a pattern of spread that is consistent with bat migratory routes. The SCCi, working together with our volunteer managers and our conservation partners, continues to make every effort to ensure that the bats that depend on our caves for critical habitat are well protected. Unfortunately, no cave management strategy, including complete closure to human visitation, has had any demonstrable effect at slowing the spread of WNS; WNS affected bats are readily transmitting the disease to uninfected bats."

Miller also reported that administrative cave closures have in some cases had the unintended effect of keeping responsible cavers away, allowing a few irresponsible individuals to inflict serious damage to caves while no one is watching over them. "We have learned the hard way that abandonment is not management, and as a result the SCCi board will continue to use adaptive management techniques to ensure that bat populations and fragile cave environments are well protected while still allowing for reasonable public access."

SCCi-owned caves that provide habitat for endangered bats are closed while the bats are present, and visitors are required to follow the organization's easy-to-follow, common-sense Clean Caving Procedures in order to reduce the risk of inadvertently transferring microscopic hitchhikers from one cave to another.

According to Miller, the SCCi's impressive record of protecting over 120 caves on 26 preserves in six southeastern states is a testament to the loyal and ongoing support of their donors, who are primarily cavers themselves. SCCi members have supported bat and cave conservation efforts across the southeastern U.S. for over two decades, and its members have been engaged in the response to WNS for several years. Many of its members participate in both state and federal response planning for WNS.

For more information about the SCCi, visit http://www.scci.org or contact Ron Miller at ron.miller@scci.org.



Marion County Springs Host Endangered Species By Bob Butters

On March 12th Daniel Carter, Director of Environmental Studies at Sewanee, invited me to join him and Kirk Zigler, an entomologist and Associate Professor of Biology at Sewanee; TWRA's Chief of Biodiversity, Bill Reeves; and TDEC Natural Heritage Division zoologist, David Withers on an outing to Sequatchie Cave to look for and identify a couple of endangered species. We were met at the cave by local resident Raymond Epperson.

Sequatchie Cave is the source of Owen Spring Branch, which according to a report (http://nickajack-

naturalist.typepad.com/files/royal

naturalist.typepad.com/files/royal -snail-2000-report-final-3.pdf) from the TN Division of



Natural Heritage is one of only two locations where the endangered Royal snail (*Pyrgulopsis ogmorphaphe*) is known to exist. The other site is the Blue Hole Spring and Town Creek in Jasper.

Sequatchie Cave is located in the Town of Sequatchie on ten acres designated as the Sequatchie Cave State Natural Area. Owen Spring Branch is also home to the rare Sequatchie caddisfly (*Glyphopsyche sequatchie*).

The little horizontal thing near the center top of the photo is a Sequatchie caddisfly larva. It has encased itself in tiny sticks, etc. The others that look like tiny corn cobs with legs on one end are another species of caddisfly larvae. Their cases are made of tiny pebbles. The little black dot slightly left of center that looks like a large grain of black sand is the Royal snail.



According to a joint University of Tennessee/U.S. Fish and Wildlife Service report

(http://nickajack-naturalist.typepad.com/files/sequatchie-caddisfly-status-survey_final-2013-4.pdf), the Sequatchie caddisfly was discovered in the Owen Spring Branch at Sequatchie Cave in 1994. In addition to this site, it has only been confirmed at two other springs in Marion County. They may possibly exist in a few other locations.

What looks like black pebbles on the bottom of Owen Spring Branch is actually the much more common periwinkle snail.

The Sequatchie Cave State Natural Area is also home to a number of other species, such as several different crayfish, millipeds, bats, and more. While there, I witnessed a lone bat fly out of the cave and then return.

Over the course of the day, the group discussed a conservation strategy for the Sequatchie caddisfly, the recovery plan for the Royal snail, and a plan to control the beaver population on Town Creek in Jasper in order to benefit the snails.



On this last point, I'll admit I personally have mixed feelings, as beavers are one of my favorite animals and I believe their work benefits other wildlife. But I suppose there may be cases, such as this, where controlling them is best for a particular ecosystem.



http://www.tn.gov/environment/na/natareas/sequatch/

Sequatchie Cave is a 10-acre natural area located in Marion County. It is biologically significant area located where Owen Spring Branch flows from the mouth of the cave at Sequatchie Cave Park in Marion County. The cave and its cold spring water support three federally and state listed species, three species of state concern, and many other aquatic and cave species. This is one of two sites where the federally endangered royal snail (Pyrgulopsis ogmorphaphe) is known in the world. Both are in Marion County. This is also the site where the rare caddisfly (Glyphopsyche sequatchie) was first described, making it the type locality for this species from which the official description derives.

The site is a former Tennessee Department of Transportation roadside park. It was renamed "Sequatchie Cave Park" in 1999 and is managed by the Marion County Highway Department on behalf of the Marion County Conservation Committee. The water supply at Owen Spring is in part, why the town of Sequatchie was first settled. The mix of ecological, cultural, and historical values makes Sequatchie Cave a unique area.

Because of the occurrence of bats with white nose syndrome (WNS) in Tennessee, caves on state owned lands are closed to the public until further notice. The natural area is operated by Marion County Government. Parking and a picnic area are available.



Iranian Cavers Discover World's Fourth Largest Cave Room

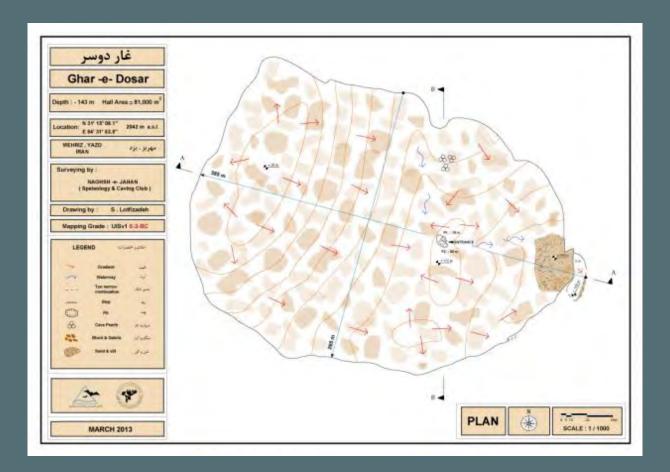
Iranian Cavers exploring a new cave have discovered one of the largest rooms in the world.

The limestone cave which contains it is known as Ghar-e-Dosar and is located near Mehriz, Yazd in central Iran. The image below is Ghar-e-Dosar's outline overlaid on Google Earth Satellite imagery. *Photo via Iran Speleo*

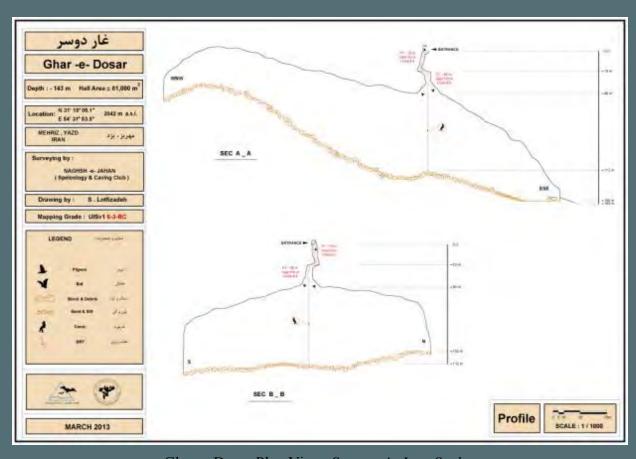
Explored by cavers from Yazd and Isfahan, the explorers descended a winding vertical entrance for about 40 meters (130 feet) before

entering a massive chamber. On a return visit on February 29th, 2012, a team of eight cavers surveyed the cave. The results of their work has now finally been computed, with the dimensions of the sloping oval-shaped room found to be 385 meters (1263 feet) long by 265 meters (869 feet) wide with a height of about 70 meters (330 feet). At the deepest end of the chamber, the total depth of the cave is -143 meters (469 feet). Using AutoCAD, the team was also able to calculate that the size of the room is some 81,000 square meters (20 acres), making it, according to caverbob.com's list of the world's largest rooms, the fourth largest in the world.





Ghar-e-Dosar's Profile View. Survey via Iran Speleo



Ghar-e-Dosar Plan View. Survey via Iran Speleo



Secret caves in Cape York reveal fossilized snake skeleton skeletons and link to Dreamtime

Model of a giant snake known as madstsoild

Giant fossilized snake skeletons found on Cape York have unearthed new links to the Dreamtime myth of the Rainbow Serpent. Fragments of the giant prehistoric snakes, known by the scientific term madtsoiids, that once stalked the Earth have been found by cavers and scientists in the secret "fossil gold mines" of the state's deep north. Dated back to the Pleistocene epoch, between 2 million and 11,700 years ago, the fossils are believed to be akin to a constricting python, a predator that grew up to 7m long and as thick as a telegraph pole. Experts question if the giant snakes intersected with the arrival of the earliest humans and if the extinct creature is the latest clue into the mystery of the popular Dreaming story of Australian Aborigines. The Rainbow Serpent is a story of creation, where a creature of immense proportions molded the barren earth into mountains, rivers and gorges as it moved across the featureless land. Dr Gilbert Price, a paleontologist at the University of Queensland, is working with a team of 10 fellow scientists dedicated to solving the prehistoric puzzle of north Queensland. "There is so much cool stuff out there that can inform us about past life and climate change," Dr Price said.

"It is only a matter of time before we identify entirely new creatures." Dr Price has obtained specimens of the quinkana, an extinct land-based crocodile; a giant carnivorous kangaroo, propleopus Chillagoensis; the 3000kg rhinoceros wombat, diprotodon; giant flightless birds; and carnivorous marsupials such as a Tasmanian tiger once the size of a female African lion. Some are preserved in stunning detail, including a fossilized crocodile skull in Tea-Tree cave, the best of its type in Australia, and skeletons of giant Pleistocene snakes that may be the precursor to the Rainbow Serpent myth. "It is a bit of a tenuous link between the fossil record, Rainbow Serpent and earliest humans," Dr Price said. He said previous finds of a giant snake, wonambi, were extinct at least 20,000 years before the first humans turned up in Australia, with no evidence of an overlap "either in time or space with the big guy".



Dr Gilbert Price with fossils recovered from a remote cave site in far north Queensland, west of Townsville



Dr John Scanlon, who found two prehistoric snakes, including Yurlunggur at Riversleigh in the Gulf Country and described them in Nature in 2006, said it was tantalising to think of more snake fossil records turning up. "Serpent myths are universal, but whatever way you look at it, the world was a far more interesting place with giant snakes in it." More than 600 cave systems have been "tagged" in the Chillagoe area, west of Cairns. The longest surveyed cave is 14km long and the deepest is 100m underground, but there are thousands more north and south. It is a series of sink holes and chasms extending more than 600km on what is reputedly a 350 million-year-old fault line from Laura on Cape York to south of Greenvale, west of Townsville.

Sometimes the caves open up into daylight sections, where a hole has broken open on the ceiling and collapsed, and shards of light spark rainbows off stalagmites and stalactites as if in a colored Cathedral. It is a Lost World: An awesome subterranean wonderland. Jagged chunks of limestone jut out of the ancient sea-bed plains and extend deep underground in a three-dimensional maze of passages, tunnels and shafts.

Under these daylight holes, are often "bone sinks", where creatures have fallen in and died and are found in layers in the sediment, dating back at least 100,000 years. These are the secret fossil "gold mines" of outback north Queensland. To a tight-knit clan of scientists, cavers and indigenous elders it is obvious why exact locations of some sites must be kept secret. Winfried Weiss, of the Chillagoe Caving Club, said: "Fossils are big business. Imagine how much a fossilized crocodile skull would be worth?" "It is kept a secret because a lot of these fossil sites are extremely delicate." If the location gets publicized, they might be disturbed by amateurs or treasure hunters looking for commercial gain. There are also sacred aboriginal sites to be respected. "We've known about the sites of the giant wombats, giant kangaroos and crocodile skull for about 60 years but have kept it a secret. "We don't want to disturb the scientific potential this place has to tell us about the past."

In the jungles of South America, about 58 million years ago, a giant snake, weighing more than a ton and 14-m long stalked the Earth, Named Titanoboa, the colossal reptile found in Columbia in 2002 could swallow a crocodile whole without showing a bulge. After the extinction of the dinosaurs, it was the largest apex predator on the surface of the planet for about 10 million years.









