

THE TECH TROGLODYTE



SPRING 2016

The *Tech Troglodyte* is published each semester (assuming that people bother to submit articles, which they often don't) by the VPI Cave Club, a student grotto of the NSS. All submissions, subscriptions, inquiries, donations, and comments should be sent to: Trog Editor, VPI Cave Club, P.O. Box 558.



Photos courtesy of:

Nick Socky

Courtney Trost

Jim Washington

Tommy Cleckner

Amy Skowronski

Penelope Vorster

Deirdre Conroy

Zenah Orndorff

Eric Stanley

Jenn McGuire

Richard Cobb

Vanessa Mims

Dave Socky

Jonathan Roberts

Randolph Colby

Jeramie Clifford

THE TECH TROGLODYTE

A Journal of the Virginia Tech Grotto of the National Speleological Society



Fall 2015-Spring 2016 Officers

President Tommy Cleckner

Vice President Alex Booker

Secretary Amy Skowronski

Treasurer Kelly McCarthy

TABLE OF CONTENTS

Letter from the Editor	-----	6
Amy SKowronski		
Letter from the President	-----	7
Tommy Cleckner		
Introduction to the Cave Club		
Intro	-----	8
New Members	-----	9
Meet the Officers	-----	10
Deirdre Conroy		
Events		
Picnic	-----	12
Float Trip	-----	13
Halloween	-----	14
Banquet	-----	15
New River Cave Kiosk	-----	16
YTR	-----	17
VAR	-----	18
Speleorata	-----	19
Jim Washington		
How To: Get Lost in a Cave, Figure it Out, and Get Oriented ----- 20		
VPI Weekend at BCCS: To The Candle Room Via The Good Way ----- 21		
Nick Socky		
Geology Puns	-----	23
Megan Junod		
ELMT—A History—Sort Of	-----	24
Richard Cobb and Ed Loud		
A Haiku	-----	29
Nick Socky		
Doe Mountain Cave	-----	30
Jenn McGuire		
How To: Go Caving at Picnic	-----	33
VPI Cave Club Tee Shirts Through the Years ----- 34		
Jeramie Clifford		
How To: Know if You're on an All-Girls Trip	-----	38
Tooth In The Mud	-----	39
Diana Orndorff		

PSA: The Dangers of Frostbite to Cavers	-----	40
Jason Delafield		
The Romantic Lives of Cave Salamanders	-----	42
Skylar Hopkins		
Forgetting the Surveyed Past	-----	43
Eric Lee Hahn		
Cave Rescue Report	-----	46
Eric Stanley		
How To: Do Bikram Yoga on the Cheap	-----	47
Rocks Left by the Living	-----	48
Kellen Levinson		
Helictites and the Great White Way	-----	51
Randolph Colby		
Expectations vs. Reality of the Cable Ladder Belay	-----	53
Samantha McCarter		
Maxwelton: Beyond Thunderdome	-----	54
Nick Socky		
BCRG West Virginia Cave Rescue News Release	-----	59
Trog Article for VPI Cave Club 2016	-----	60
Autumn Parker		
Windy Mouth Trip Report	-----	62
Dianna Orndorff		
Why I Cave	-----	64
Deirdre Conroy		
The Ring of Canoe Cave	-----	68
Eric Stanley		
No Morinos	-----	70
Madeline Williams		
Friction's Role in Vertical Caving	-----	71
Tony Ratté		
It's a Long Way To The Top	-----	74
Beth Mutchler		
Horace The Great Horned Owl	-----	76
Amy Skowronski		
Grotto Grapevine	-----	78
Quotable Quotes	-----	80

LETTER FROM THE EDITOR



Good Afternoon, VPI Cave Club,

Thank you to everyone who contributed to this Trog, whether it was writing an article, taking pictures and letting me use them, instigating hijinks that served as fodder for great stories, or unwittingly uttering something quotable.

I would like to say that you, as a group, have made my job as editor blissfully time-consuming.

Respectfully Submitted,

Amy Skowronski

LETTER FROM THE PRESIDENT

This year has been another good year for the cave club. The caving is the best it has ever been in my brief time with the club. In the last year, we re-established access to Doe Mountain Cave, made new friends with the Butler Cave Conservation Society, expanded our involvement with the West Virginia Association for Cave Studies, and have done some sporting trips into some of the less traveled gems underneath our little slice of caving heaven. It's been really exciting to see more people getting excited about going on a survey or heading to West Virginia for a weekend. And let's not forget our good showings at Spring VAR, YTR, OTR, and our plethora of other regularly scheduled debauchery. There was a strong infusion of fresh blood into the club this year, and our previous additions are still keeping things lively. They're good cavers, and most importantly, knowhow to have a damn good party. Personally, I can't wait for more of them to get their member numbers (you know who you are!) so that I can continue to shirk more of my club obligations. On tat note, I'd like to thank everyone who has stepped up and made so many great memories possible. Here's to a good year and many more!

Belligerently yours,
Tommy Cleckner



INTRODUCTION

Come one, come all, to the VPI Cave Club. We'll welcome you like an old friend, the weirder you are, the better. Meet old farts and young 'uns alike, all of whom carry some bomb-awesome stories with them. We'll take you underground in a heartbeat, unless we get lost in the woods on the way.

We in VPI invite anyone with a sadistic spirit to partake in adventures ranging from across Southwest Virginia to the other side of the globe. Join us, and you'll see things you'd never see on the surface world, like remarkably large stalagmites or truly impressive gypsum flowers.



Thank you to everyone who has ever led a cave trip, hosted a speleo seminar, helped with training, or in some other way been a part of our club. You guys are what keep this group afloat (on a sketchy raft on Memorial Day weekend). I think our group can be summed up fairly well with a quote from an unsuspecting newbie: "You guys are a mix of incredibly lewd and strangely heartwarming."

We'll see you soon!

NEW MEMBERS



Tony Ratte #452



Deirdre Conroy #453



Samantha McCarter #454

MEET THE OFFICERS!

You see them at the meetings, but how well do you really know them? The wonderful Deirdre Conroy kindly took the time to imbibe some beverages and write up little snippets about each of our wonderful officers in case you haven't met them yet.



Our President,

Tommy Cleckner. An inebriated Tommy is a Tommy in rare form. You know he is drunk when there are no holds barred. For example, if a socializing neighbor says a mildly dumb or clueless statement, within the head of our President an evil, miniature (as it's condensed in miniature size) Tommy begins heating the brand in the derisive flames of the forge. There's a slight smile on his face- it's purely selfish amusement, for his very own enjoyment- and his eyes are far away. Finally, the scorn is ready for application. Tommy has the cool confidence of an apex predator as he slowly turns his head toward his poor, unassuming victim. His grin is wide, his chin raised, cheeks rosy from alcoholic ambrosia to his mockery, and his eyes are bright with the expectation of your humiliation. In the moment just before brandishing his weapon of choice- carefully articulated verbal abuse- he makes sure to look you in the eyes as he moves in to punch you squarely in the genitalia.

Our Vice President,

Alex Booker. Booker has all the charm, grace, and efficiency of a bulldozer. And that is meant in the best possible way. There is no social pretense he will not disregard, no interactional wall he will shy from throwing himself through at full force. He's 31, goddamnit, and he will announce it at loud volumes. He enjoys drinking, and he hosts parties at the Beaver, which he will also announce, maybe repeatedly, also at full volumes. Booker has all the honesty of a bulldozer as well - they have nothing to hide, and neither does he. Everything is on the table, and everything will be smashed.

Our Secretary,

Amy Skowronski. The Amy-est characteristic, the one I almost don't want to share for then others would know it and openly acknowledge it too, thus ruining the effect is this: Amy's (external) inner monologue. It's external because she vocalizes it, but in a tone so unassuming that the untrained ear would easily miss. Their perfection is in their oiliness - they slide past the conversational ignorants into the realm of cleverly genius material with the slickness of a stick of butter. The hilarity is in their cruelty - they are the epitome of pure sarcasm, often bitterly mocking. The most glorious moment of the entire scene is in the assumption that the butt of the comment that Amy was muttering was something friendly and conversational, rather than some brutal observation about the ignorance of the statement. This is easy to assume, considering her tone is one of friendly intellectual banter. Beware! This is a facade. The genius (or the devil?) is in the details

Our Treasurer,

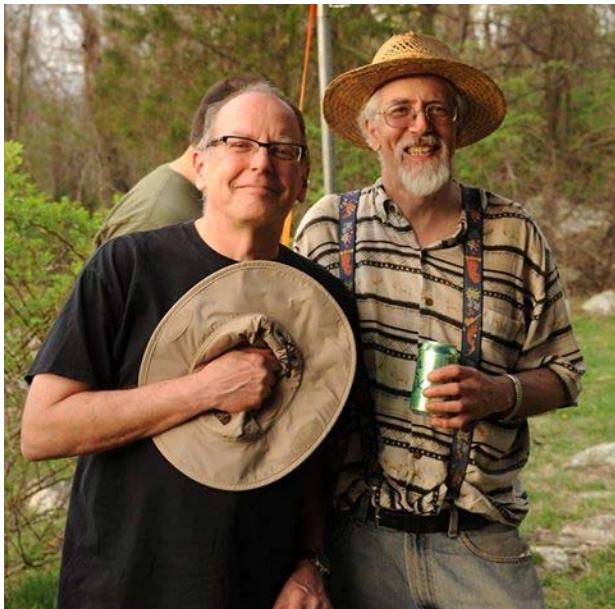
Kelly McCarthy. Her comical power derives from her unwavering refusal to indulge in pity-laughter. An attempt to persuade Kelly into indulging into this kind of thing is like trying to push a piece of breakdown up a gloopy, muddy slope. There is no budging. In fact, the most likely scenario results in a crushing return to reality; you are not going to move the boulder, so please, for your own sake, shut up and stop trying. She will only accept emissions of the finest caliber. Should a sentence of idiocy be emitted from a conversational neighbor, even if it is with the best intentions from the source, Kelly will not refrain from wearing a look that extends to you both her utmost concern for your intelligence, as well as extreme confusion. It is a look that earnestly questions whatever mess of a word concoction just escaped the confines of your mouth, and whether she ought to contact the authorities. You see, Kelly is this way out of concern for you - or rather, maybe just your brain cells. She's thinking of what could possibly be going wrong in your noggin. Kelly operates under the knowledge that the more stupid things come out of your mouth, the more brain cells die, and the stupider you get, thus more stupidity is emitted. Kelly's art is in the halting of this cycle. Once you understand the mechanism, your odds of conversational success with this fine bit of humanity veer into the realm of positive. Good luck. Think of your brain cells.

PICNIC



It was a beautiful weekend for Picnic. The weather cooperated, the food was delicious, the libations flowed liberally, and the fire was huge.

On Saturday, a few people went caving! I'm sure it was a blast despite sweating out the alcohol from the night before and making the cave smell like a bar.



The golf was—of course—in full swing.

And if you looked closely, you could see that there was a PBR in the cup holder of that Jeep dragging a bramble bush behind it while four-wheeling through the hills.



FLOAT TRIP



A huge group showed up to celebrate Memorial Day by lashing together plywood and tubes and floating down the river, flags rippling in the breeze.



HALLOWEEN



BANQUET



The pre-banquet party was hosted by Sandy Knapp and Philip Balister, who graciously let us string a piñata up in the tree outside and beat the snot out of it. This year's Banquet was held at 135 Jackson St, where there were multiple Large Cans of adult beverages, delicious food provided by Calvin Long with The Cellar, and a great presentation about Culverson Creek Cave from Bill Balfour.



NEW RIVER CAVE KIOSK



After months of planning and organizing, the New River Cave kiosk is up and complete! Thanks to the efforts of many hard-working individuals, the final result is impressive and professional.

Thank you to the Cave Conservancy of the Virginias as well as volunteers from the Blue Ridge Grotto, New River Grotto, WVACS, and those of VPI who came out. A special thanks to Jason Delafield, Joe Zokaites, and Ray Sira.



YTR



This year's Young Timers' Reunion was held at the RASS field station. Folks came from all over to go caving in some of the Richmond area's finest caves.

At least one of these caves was used as a saltpeter mine during the Civil War, which means that 150 years ago, it was—floor to ceiling—filled with dirt.



VAR



Spring VAR was held at Endless Caverns. VPI had a good showing, what with the gargling of Wild Turkey, dancing ecstatically, befriending the band, wearing helmets into the commercial cave, and general rambunctiousness.



Five minutes prior to its commencing, our club's president was reminded that he had to put his pants on all the way if he wanted to attend the formal meeting of the Virginia Area Region.

SPELEORATA

Written by Jim Washington, 1983

Cave softly amid the pretties & nasties & remember what peace there may be in rappelling. Circumvent ugly stream crawls unless you are truly masochistic. Carry first aid. Encourage membership in the NSS, & write for the publications though cave politics be for turkeys. If a person appears to be in doubt of who he is, he may be a speleopolitician. Beware. Consider that if two rights & a wrong go to a dead end, a right & two lefts may not get you back where you remember. Whenever possible, use Suuntos instruments. Be comforted in the face of rising streams & sudden rockfalls; someone will come to get you out in four to six hours. Strive not to eat cave creatures, dead or alive. Remember

Roppel, & keep it holy. Exercise reasonable caution, especially when in virgin territory. Know not no knot, & know what knot to use when. Be assured that pushing wet sumps by carbide light often leaves you in the dark. Therefore, attempt not naked the "Grim Crawlway of Death."

Surrender gracefully the things of youth: solvency, sobriety, Moral Majority, & keep not your gorp in plastic bags. Be heartened amid impending starvation that the stuff at the bottom of your pack is edible, if you scrape it first, & reflect that, however miserable you may feel, it would only be worse on a photo trip.

You, caver, push the limits of your endurance, but please call it guano when it sticks to your overalls. You are privileged to go to Hell, provided you embrace agreeable politics & have landowner permission. Therefore, learn to abide grotto functions, pay your dues, party (not to excess), leave gates as you found them, & remember to carry three sources of light. Keep always in mind that caving is an activity peculiar to the living. Be safety conscious, & enjoy.

HOW TO: GET COMPLETELY LOST UNDERGROUND, FIGURE IT OUT, AND GET ORIENTED.

Step 1: Bring a map. Look at it for a minute. Seriously, just check that shit out for more than five seconds.

Step 2: Put the map in your pack before you go underground.

Step 3: Enter the cave and start doing your thang, babe.

Step 4: Look at the map to guesstimate where you are in the passage and what direction you should be moving.

Step 5: Find a survey station or a major landmark near you and locate it on the map. Is it there where it should be? Cool. Keep caving.

Step 6: Come to a turn in the passage that you didn't notice earlier and take the map out again.

Step 7: Find another survey station and match it to the one on the map.

Step 8: There isn't supposed to be a turn here. A wall is supposed to be in front of you right now.

Step 9: Congratulations, you're lost.

Step 10: Continue on in this fashion for two hours, periodically staring at the map and scratching your head (swearing is encouraged) because nothing makes sense anymore.

Step 11: See that the survey stations were old and the paint had chipped – that one over on that wall actually says G16, not C16. Eventually come to the realization that you didn't come in the entrance at the bottom of the map, you actually used the entrance at the top. You've been looking at the wrong part of the map for a very long time.

Step 12: Rotate the map 180 degrees.

Step 13: Find out where you actually are and cave away.

Step 14: Take a picture with a drowned rabbit.



VPI Weekend at BCCS: To the Candle Room Via the Good Way!

November 14th, 2015.

By: Nick Socky

As part of the VPI weekend at Butler Cave, a large number of students journeyed to the Burnsville Cove for a plethora of sport trips, projects, and digging. Even though I am no longer a student, I would never pass up the opportunity for a fun cave trip with friends! So I left for the weekend straight from work showing up in my fancy work clothes, and jumped right into the party! This included singing around the camp fire, consuming of vital beverages, and of course the playing of Toto on the Bluetooth speakers that were brought. Anticipating a long cave trip the next day though, I slipped out early and attempted to get some shut eye, but for some reason the melodic voices of Salt and Pepper kept playing in the back ground on repeat. I angrily went down stairs and shut off the speakers around 3 am.

Surprisingly, I awoke ready to rock and roll! All my cave gear was ready and then we hit the all too well known "hurry up and wait" that occurs when you have a large group of VPI around trying to figure out what to do in the hung-over stupor. Eventually the survey team for Butler had been organized and we were on our way! The team included Beth Mutchler, Jason Delafield, Andrew Lycas, Jenn McGuire, Tony Canike, Nick Socky (me), and Tommy Cleckner. Our goal was to find our way to "The Good Way", an alternate route to the Candle Room that did not involve Neptune's Throw drop and the slimy Crisco Way canyon. The Good Way does however include a technical free climb, and we brought rope in with the intention of rigging a permanent climbing rope in the cave for safety reasons. Once rigged, we would continue modern survey from the top of the drop until we connected to a known station in the Candle Room, which would close a very large survey loop over 5000 feet.

We believed that the Good Way hasn't been dropped for at least 20 years and that, with the exception of a trip to the Candle Room exactly one week ago, the Candle Room also hadn't been visited for 20 years.



We entered the cave at 11:00am and made our way quickly down to Sand Canyon and to the trunk passage! We reached the Soda Straw Break by the Dry Sumps around 11:40am and the French Passage at noon. Before making our way up to the Pants Off Crawl from the Pool Room, we ran into one of the other groups, where I was surprisingly able to fool Madeline Williams into staying to the right instead of the left. She was not very amused with going for a quick swim, and we quickly departed before we could get smacked. The Pants Off Crawl was fairly "pleasant", only being slightly wet and if you were small enough you could easily avoid the water by squeezing to the right. The next fun challenge though was the Frothing Slop! Because we had 7 people on our trip, passing packs and squeezing up through the muddy wet stream canyons took quite a miserable while but it was none the less enjoyable! Why else would we do caving like this if we didn't enjoy it?



After changing out of some wet clothes into warmer ones, getting a bite to eat, as well as deciding our survey designation of ICP (Individually Containerized Pickle), we got to the top of "The Good Way" at 4pm! Of our vertical gear, everyone either made a webbing harness or brought a small one in. We would share rappelling and climbing gear on the way out. Andrew, Beth, and Tommy rigged the pit while Tony, Jenn, Jason, and I started the survey. We tied into BPA9, and surveyed from the upper part of the drop and down into the lower canyon section. Once everyone was down the drop, I was sketching, Andrew shadowed me, Jason Delafield, Tony, and Tommy played the rolls of front sight, back sight, and point. Jenn and Beth scouted the route to the Candle Room. The survey was fairly slow

because of the long tall narrow canyons with breakdown that needed to be surveyed and with the number of people, it was also not very comfortable. Because Beth and Jenn were getting cold, they decided to explore ahead and find the Candle Room. The rest of us eventually encounter flagging laid out on the path leading down to the Candle Room. Because we were also cold we decided that this was an old survey and we tied into some of the old flagging. Andrew and I were left behind to finish sketching and eventually we decided to join everyone else in the Candle Room. We had surveyed 15 stations and 181.02 ft. So yes full of short shots and it was a bit slow. It was later determined that the flagging was not the survey we were trying to tie into, but apparently route flagging left behind by previous visitors. So a return trip is needed to complete the survey.

For those who have not been to the Candle Room, it is a very large room! It is probably about 50 to 60 feet tall and over 100ft wide in places. You



can also tell where during high water a large stream flows through the middle of the room. Most of the Candle Room was covered with a thin coating of fine dry silt, which extended well up the breakdown piles 30 or 40 feet above the stream channel, evidence of occasional significant flooding. At 6 pm we all explored around the room, took some pictures, and had a bite to eat. We then turned around and headed out. Because the climb wasn't "true" vertical, a single top ascender worked really great, but still took time for all climb. We got back through the Frothing Slop at around 8pm. It was much more enjoyable heading out. The amount of caring how slimed we got decreased due to the fact we were on the way out. I recall "penguin" through the passage several times! At the exit of the Frothing Slop, due to Beth's emphatic use of very adult vocabulary, we all decided

to take the long way out via the "Downstream Loop" to see some more the cave, including Dave's Lake.

We started our way down Slippery Creek and we started sliding everywhere! It was especially amusing listening to all of the noises that Jenn was making as she was moving through the passage. They were an entertaining mix of grunting and straining and hysterical laughing. We hit the joint controlled stream canyons while following the water and then the passage started getting lower and lower. Tony had made a wrong turn and we were headed down Last Hope Siphon! Tony maintained he purposely extended the trip to ensure we met the 12 hour minimum. We didn't believe him. Grumpily, everyone turned around and we found the proper turn to get to Dave's Lake. At the approach we all took a running start and went for a quick swim! It was cold deep water, but thankfully short lived. Very slowly and exhausted like, we headed up Sneaky Creek, made it back to the Pool Room, the Lake Room and all the way back to Sand Canyon at about 12:00am. We spent some time taking a much needed group photo at the old sand canyon camp and then moseyed our way out of the cave. We exited the cave right around 12:30am for a 13.5 hour trip, to encounter woops and cheers from those around the fire, happily greeting us because they did not have to rescue us. Several of us then proceeded to the cozy hot tube, where we relished in the warmth and happiness of such a great cave trip.



GEOLOGY PUNS

Submitted By: Megan Junod

Since I couldn't really think of any trip to write about, I decided to just list a bunch of geology puns. Why do you ask? Because geology is awesome and so are puns! So, here is the wonderful list of geology puns:

Don't take me for granite!

GNEISS CHERT!

Geologists can make your bedrock ;)

Why weren't the geologists hungry? They lost their apatite.

My sediments exactly!

Geologists are down to earth people.

Baby why don't we converge? I'll subduct beneath you.

Why shouldn't you lend a geologist money? They consider a million years ago to be recent.

Don't expect perfection from geologists; they all have their faults.

SCHIST HAPPENS!

Want to go behind that outcrop and get a little boulder?

Geologists will date anything.

Geologists don't wrinkle, they show lineation!

One tectonic plate bumped into another and said... "Sorry, my fault."

Studying volcanoes can be tuff.

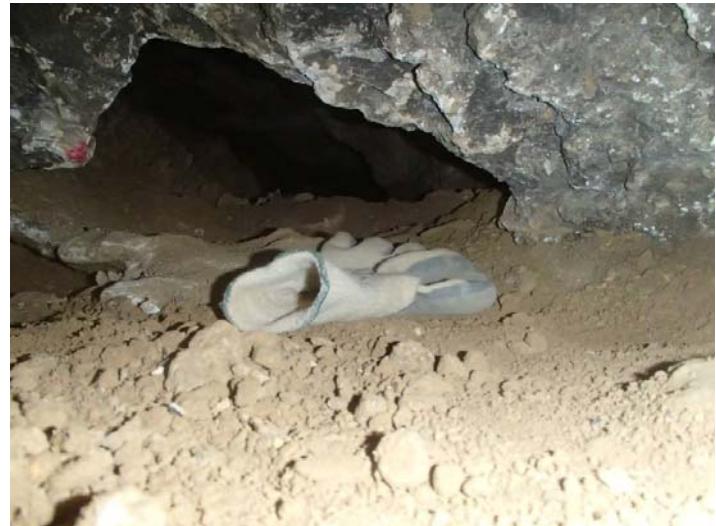
Geologists are very gneiss people.

Of Quartz, I love geology!

Plateaus — the highest form of flattery.

How do geologists like their drinks? ON THE ROCKS!

GEOLOGY ROCKS!



That's the list, fantastic caver folks! I hope you all enjoyed it! Now, go get some caving done!

ELMT – A History – Sort of

A collaboration of Ed Loud (owner, ELMT®) and Richard Cobb

A long time ago, in a land far far away...

OK, time out. What's that you say? Pritchard Hall is not far far away? No, trust me on this, you have no idea. If you were not yet born when this story takes place, then it is far far away from anything you know. To begin with, it was all male – Animal House had nothing on Pritchard. During a school year the "Pit" (the center courtyard) would fill up with junk, furniture, and even, at least once, an upper floor coke machine (it is still a mystery how they got it through a window). Janitorial staff were (justifiably) afraid to enter when residents were in residence, so nothing was removed except on breaks. One night (in 1979) I was walking between DieQuick (aka Dietrich) and Pritchard, when there was a tremendous explosion, and the ground literally shook. Residents who had windows facing the Pit said that night became day in the Pit in a bright orange glow. I don't recall a single police car showing up to investigate. That's how far away that time and place were.



So, ... far far away – there lived a caver, little Ed Loud. Little Ed Loud loved the 25 cent pitchers (32 oz) at Pizza Hut's Happy Hour. Perhaps you can see where this is going. Maybe the story is best told by not-now-so-little Ed Loud himself:

"I am pretty sure the first ELMT had to be winter quarter '70 or Spring quarter '70. ... I was rooming with Guy Turrenne on 3rd floor Pritchard. I think it may have been 3044... in any event the hallway straight in from the entrance facing AJ. It was a room facing the airwell [the Pit]. The nearest restroom was up the hall towards the entrance then left and right into the bathroom. One night I flew off the upper bunk and pinballed to that restroom...I think I hit the stall 3 or 4 from the left. Apparently it was rather epic. Someone after that vandalized the stall to read Ed Loud Memorial Toilet on the stall door. That was it. There are other sordid details but that is enough."

Normally, that would have been the end of a familiar-enough story. Except it wasn't the end. Ed continues:

"ELMTs got put all around Tech. I dropped out and returned in late 1972. By then someone had spray paint stenciled "Another Ed Loud Memorial Toilet" on the outside wooden door of a 3rd floor Pritchard john (not the original one). I always thought the cool part was "Another". I got back into Pritchard with a non-caver roommate who had lived there a while. Imagine how he felt when his new roommate was [the] Ed Loud whose name had been on the hall john for a while. The janitors did not remove the graffiti... must have thought it was official."

From a single night of hugging a porcelain throne, the ELMT Franchise was born and continued to grow. By the time of Ed's return in late 72, ELMT's had already spread far and wide. The first mention in the historical record was the Spring 72 Trog issue, Grotto Grapevine column:

"New ELMT's have been sighted all over the country, one has been seen in Oklahoma, another at Mammoth Cave, Kentucky, and there is even a road side one in Campbell County, Tennessee."

In the Winter/Spring 1972 (V2 #3) issue of the VAR Region Record there is an "interview" with the owner of the ELMT Franchise. From the introduction to the interview:

"The Edward I. Loud Memorial Toilet franchise was started about three years ago by none other than the infamous Ed Loud himself. As he trotted about the U.S., he spent quite a bit of time on the rim. This gave him a unique opportunity to conduct close, first-hand inspections of a good many Roadside America toilets. He gradually developed a taste for high quality facilities, and began to indicate his preferences with a seal of approval." (See the accompanying figure for the complete interview).

In the Fall 1972 issue there is the Grotto Grapevine announcement of an Ed Loud Memorial Toilet in Bangkok, Thailand.

In the Winter 74 Trog is an entry under "And Now a Word From Our Sponsors" - "Little Ed Loud Will Go To Bed Sober Tonight ... unless YOU HELP! ... So give so that others may drink..."

Then in the Spring 74 Trog there is a piece titled "elmt tours?":

"In a recent(?) issue of Descent magazine ... it was suggested that anyone traveling through our area should stop by and ask the VPI Cave Club about Ed Loud Memorial Toilets... and be sure to be shown one!" [Ed Note: Descent is a UK publication, first published in 1969 – ELMT's had become known internationally. But so far, none of the Old Farts has been able to produce a copy of said magazine].

ELMT's had become a phenomenon. There were so many placed around the world that they will never all be known. A query of Old Farts got a partial list though:

Ed Loud - "I know I put ELMTs (though for a while I prided myself on never having made one myself) in TX and CA and a few bars in D.C. I found one in Burress Hall and

FRANCHISE TOILETS? Why not! The Edward I. Loud Memorial Toilet franchise was started about three years ago by none other than the infamous Ed Loud himself. As he

trotted about the U.S., he spent quite a bit of time on the rim. This gave him a unique opportunity to conduct close, first-hand inspections of a good many Roadside America toilets. He gradually developed a taste for high-quality facilities, and began to indicate his preferences with a seal of approval. The following is excerpted from an interview with Mr. Loud:

EDITOR: About how many Memorial Toilets are there now, Ed?

LOUD: I would say roughly about a thousand.

EDITOR: Sounds! I had no idea business was that good!

LOUD: Well, really it isn't. A better indicator of how much business we're getting is the number of new franchises per year. So far this year we are 47 franchises behind last year. But the ones we've gotten are good ones.

EDITOR: How do you account for the dropoff in business?

LOUD: Probably because many of my best customers just don't give a shit anymore. For example, Jim Dawson gave the Convention toilet franchise to a Roanoke outfit last summer. There were five units at the campground that held 55 gallons each. They were filled and emptied once daily for ten days, for a total of 2750 gallons.

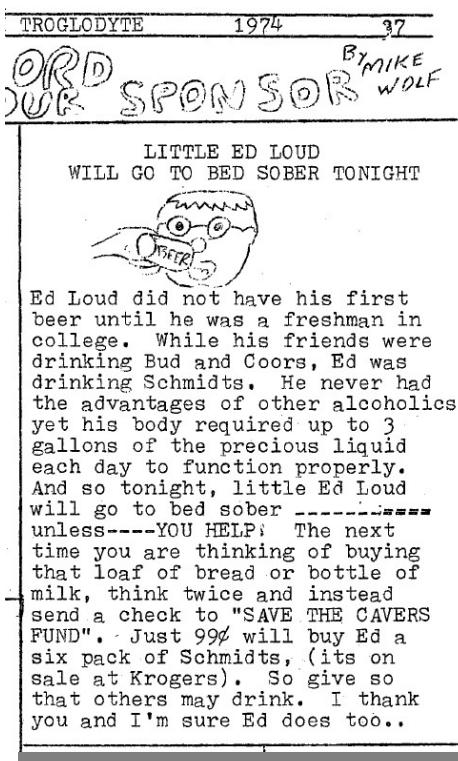
EDITOR: Wow! 2750 gallons! That's a lot of shit!

LOUD: It may be shit to you, but it's bread and butter to me.



several in Derring."

Walt Pirie - "I placed an ELMT in the men's room in the airport at San Jose, Costa Rica, in Dec., 1988."



Skip Whitehurst - "Gary Moss and I made sure there was an ELMT in the "USARP Hotel", the men's dormitory at McMurdo Station, Antarctica, in October, 1976. ... We were going to designate one at Amundsen-Scott South Pole Station, but the C-130 we were on developed engine trouble so we couldn't land at the pole."

Robyn Koerschner - "C3 Drapers Ghetto"

Dale Parrott - "I remember a time long, long ago while driving from VA to Seattle stopping somewhere I think in South Dakota. It was a wooden outhouse probably in a tourist area - and there it was ... ELMT scratched on an interior wall."

Rich Geisler - "The roof of the warehouse in Tamapatz Mexico where we setup base, and on the ridge of the high Guadalupe mountains of new Mexico"

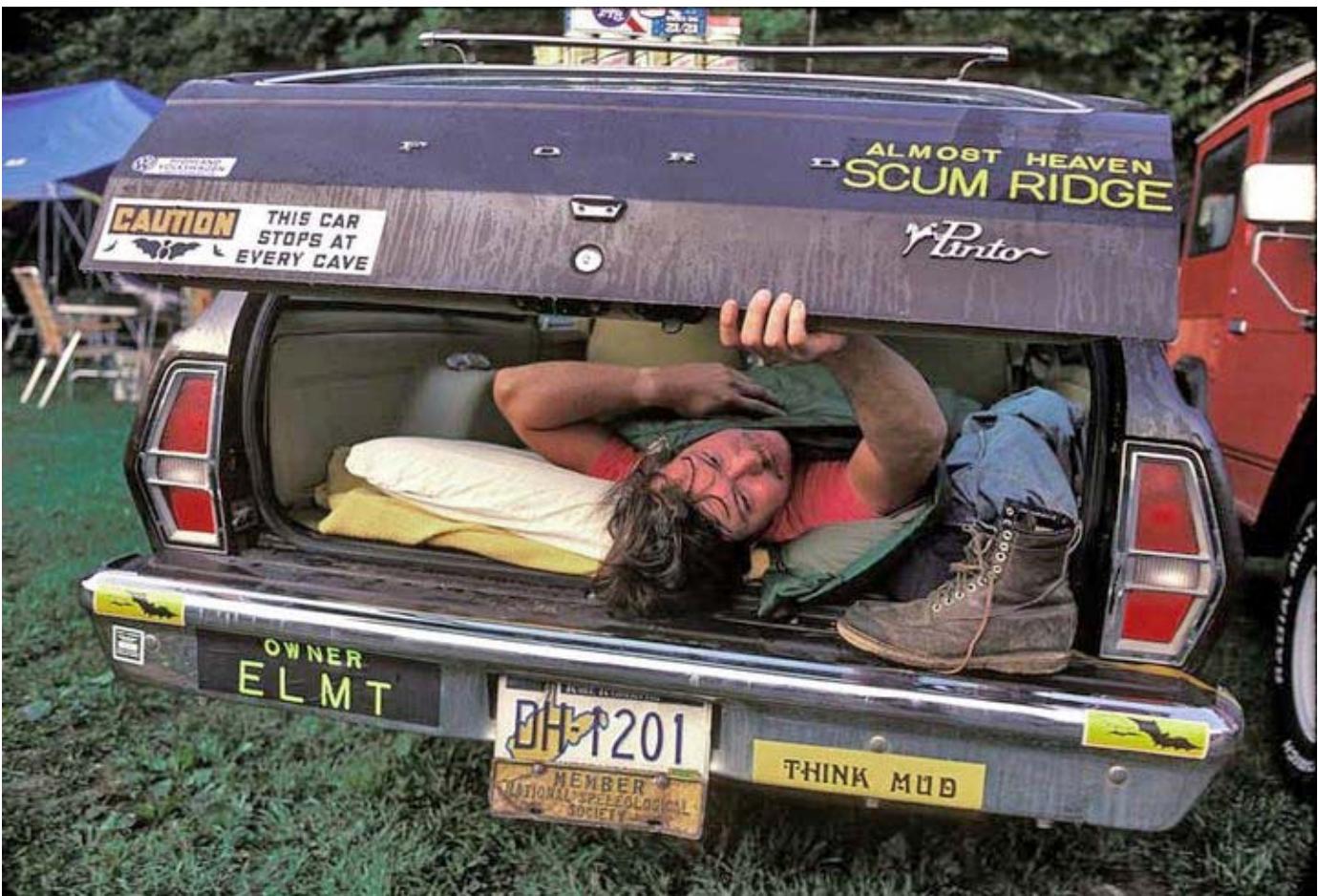
Ed Loud - "Not sure where I have seen the pic of the vandalized billboard out on the 460 bypass. I know it was [redacted] for one standing in front of it. They changed "Fighting Hokies" to "Friggin Chickens" but also put ELMT which I wished they had not as that might connect it back to the cave club via vandalized toilets around campus. I guess the statute of limitations has expired as they say."

Jean Cobb - "On every Greyhound bus that I rode between VPI and Connecticut"

Richard Cobb - "The location of the preferred rig point on the cat walk of the New River Gorge Bridge was marked in white paint by Pete Sauvigne (1979) with a prominent ELMT. It made it easy to find on even a very dark night"

Dave Shantz - "I can confirm spotting or placing: Executive Office wing, Winchester GE Lamp Plant, Winchester VA; Wayside Inn, Middletown, VA; GE Lighting Business Group HQ in Nela Park, OH;





forgotten Irish Pub in/near Parma, OH; forgotten independent gas station, Capon Bridge, WV; Hardee's, Elkins, WV (waiting on Cinsavich to get stitched up); Kennedy Airport, NYC; Froggy Dog, Avon, NC; gas station next to old BMW motobike dealer, Greensboro, NC; poorly remembered Esso station in/near Hamilton, Ontario, CA, and really nasty BP outside of Grimsby, Ontario, CA (apropos ?); Shell(?) station near Tonowonda, NY; Galeria Mall (?), York, PA; Greyhound bus station, Washington DC & Chicago, IL; Someplace in Edmonton, AL, CA; Howling Dog Saloon, Fox, AK; Midnight Miner, Fairbanks, AK; Denali (McKinley?) Visitor's Center somewhere in AK; gas station in North Pole, AK; Paxson Lodge gas station, Paxson, AK; and the win for most effort - carved on a tree beside Harding Lake, AK.”

The most recent known semi-permanent ELMT was set in wet concrete at a residence near downtown Blacksburg, in August 2015.

Will the ELMT tradition live on for future generations?

(Footnote: in corresponding with Chris Howe of Wild Things Publishing (Descent Magazine) – I received this bit of information which seems somehow relevant: “British slang for toilet is ‘bog’. That means something else in the NSS: Board of Governors. The number of times I’ve been told by someone, proudly, that they have been elected to sit on the bog for the coming year. ”)

Photos/figures:

ELMTsign.jpg – carved ELMT in an appropriate location

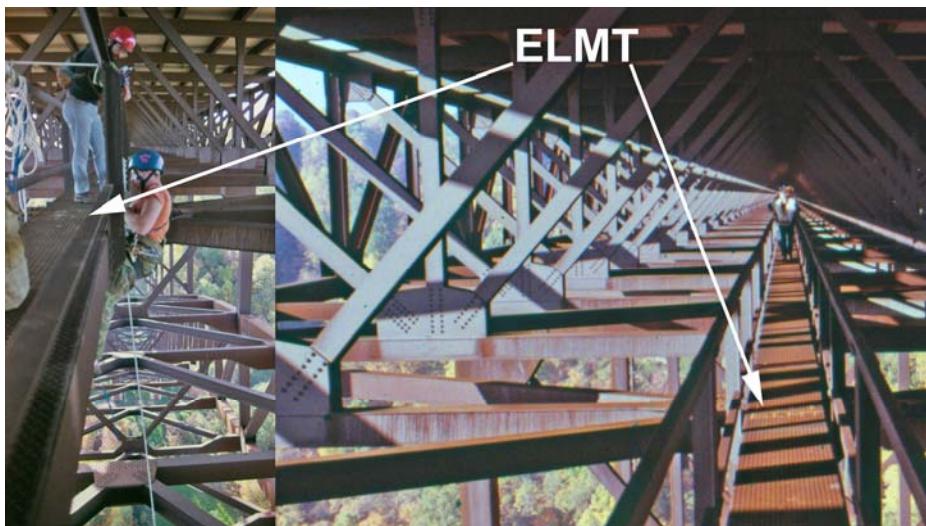
VAR_ELMT_Interview_V2N3_mod.png – Region Record “Interview” - Winter/Spring Issue (Vol 2 #3)

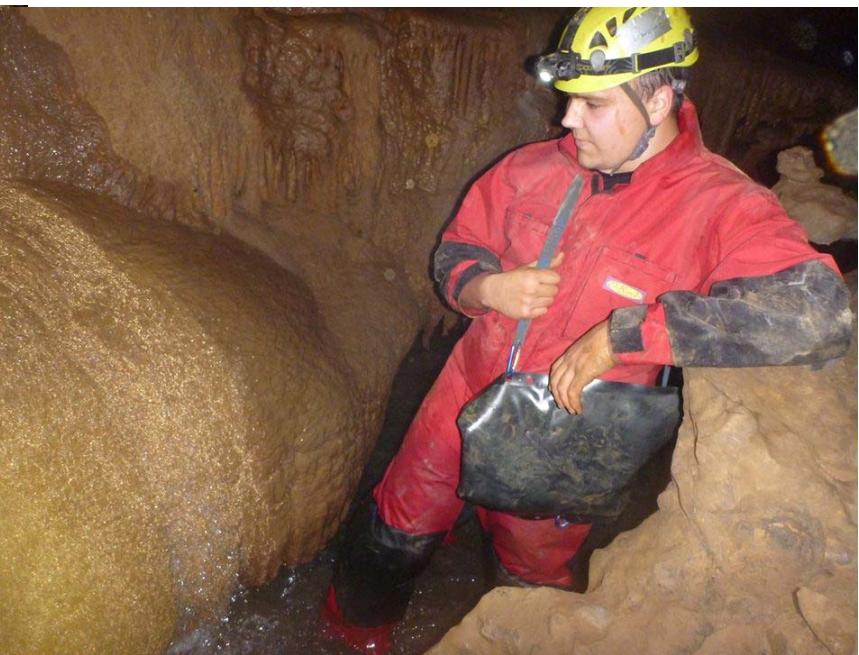
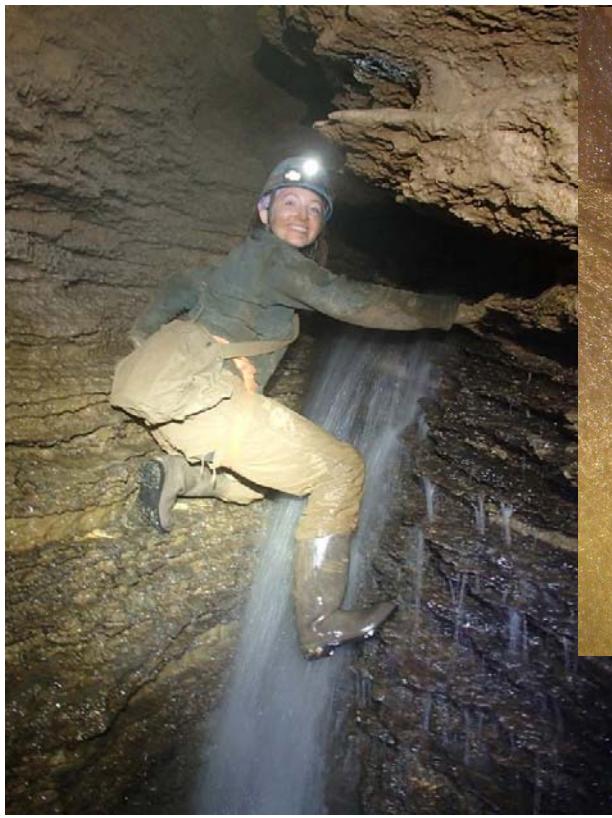
LittleEdLoudTrogAdWinter74.jpg - “From our sponsor” - Help Little Ed Loud – Winter 74 Trog.

EdLoud_OTR79.jpg – Ed Loud – note “Owner ELMT” bumper sticker

NRBridgeCatwalkELMT.jpg – ELMT on the NR Bridge Catwalk

ELMT2015.jpg – Most recent known ELMT placement – in concrete at a residence close to downtown Blacksburg





A Haiku by Nick Socky

Joseph Calderone
Inspirational caver
“Hey guys, watch this! Suut!”



Doe Mountain Cave

(or Probably Why I Received Both the Vertical Techniques and Badass Trainee Awards)

By: Jenn McGuire

Since our President, Tommy Cleckner, did such a good job explaining why I won the awards I did, I ought to shed some light on it. Also, there are some lessons about experience, knowing your gear, and other important tidbits to be gleaned from this tale. With that, onward....

Sometime last summer I replied to our President's email soliciting volunteers to dig debris that was blocking passage in Doe Mountain Cave. I, being ignorant about how difficult digging in the cave would be, volunteered eagerly. The stream that had been dumping debris into the cave was redirected during an earlier weekend, so Andrew Lycas and I headed into the cave armed with buckets, hand shovels, and a cable ladder. We get down the cable ladder, down a corkscrew climb, and take stock of the situation at hand. After poking our heads into some holes and some examining of the map that was moderately useless so close to the entrance, we settle our limbs and bellies in the stream and on chunks of uncomfortable rocks and get to it. The debris that had washed included rocks, dirt, rotting leaves, sticks, and log that was quite well wedged diagonally across the passage that we determined was the most likely correct way. A few hours of work digging and dragging a bucket heavy with dirt and rocks yielded a passage that looked almost promising.

It also looked tight.

I stuck my head down the passage and took a few pictures to see if we could (unsuccessfully) jog the memory of anyone who'd been in the cave years prior. At this point, unsure of whether I, let alone Andrew, would fit down the passage, exhausted from the digging, and thoroughly soaked from

lying in the stream, we decided we'd reached a good stopping point for the day. The corkscrew climb proved difficult with my 5'2" reach and worn out arms, but the real fun was the cable ladder. My first experiences with a cable ladder included an indecent amount of cursing. But at last we were out into the warm summer day.

A couple weeks later, Andrew and I returned with Tommy Cleckner, the perfect person to send down a passage to get stuck in! While Andrew and I waited with our buckets and shovels, Tommy struggled through the passage for several minutes. Much cursing of the cave and our names was had. Finally, he made it to the room on the other side of the passage, but clearly neither Andrew nor I would fit, and neither did Tommy wish to return through the passage. We had dug out the wrong hole.

After some examination on Tommy's part, we found a voice connection... in a spot where we had dumped dirt and rocks during the last trip. So once again Andrew and I settle into the chilly stream and fill buckets of debris to open up the cave. After another couple of hours of work, we break through and are able to join Tommy in an area that we can finally stand upright. We meander down the cave to the first nuisance drop. As we didn't bring our vertical gear, we turn back, triumphant to have opened up the cave. Once again, the cable ladder produced much cursing.

The following week I returned to Doe Mountain Cave, along



with Andrew Lycas, Tommy Cleckner, Dianna Orndorff, and Jeramie Clifford. We were determined to see the rest of the cave, having put in so much work reopening its passages. Hauling our packs with our vertical gear and rope, we proceeded inward and downward. We went down the ten foot nuisance drop where the rope was still suitable for our use, and immediately after encountered the 30' to 40' nuisance drop with the rope that had been there for years still hanging over the edge. It had so much calcite buildup that it made a very satisfying crunching sound when we bent sections of it. Needless to say, we weren't using that rope. After we all made it down, we still had much crawling and climbing to do until we reached our next drop. When we finally reached Knipling Pit, a 160' drop, we were three or four hours into a cave trip which we had decided was a grand idea on a Tuesday night. Andrew, Jeramie, and Dianna rappel the drop, and then it's my turn.

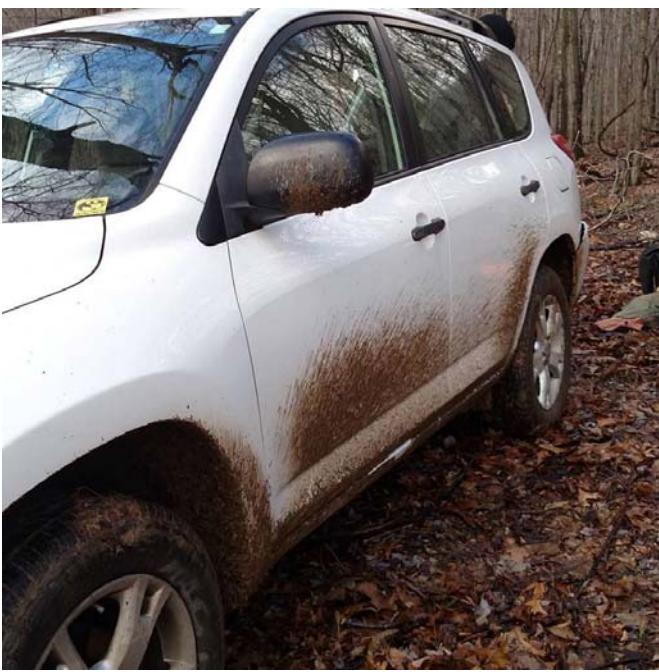
I had rappelled pits of similar length before, and perhaps I was inexperienced enough to be cocky. I ran the rope through the scarab, my rappel device, and started downward. The rope we had brought in was stiff, and I had to feed my scarab. At some point, perhaps 30' down the drop, feeding the rope and bouncing on my scarab, I took my left hand off the scarab, allowing the rope to come off of the horn. I then have a three bar device and began falling with speed. At this point, I couldn't put enough tension to brake with my right hand, and I felt fear and panic rising. I began yelling, "Help!" with increasing urgency to my comrades above and below as I searched for ways to slow my fall. I wrapped my foot and leg around the rope and finally managed to brake, about half-way down Knipling Pit. Simultaneously, Jeramie had been taking slack out of the rope below to effectively belay.

At this point, I found that I couldn't take the tension out of the rope to put it back over the horn without resuming my fall. A few minutes of conferring with Tommy and he talks me through a changeover onto my (borrowed) ascending gear. Once I'm secure on the ascending gear, I attempted to change back over to the scarab but found that since the gear is adjusted for someone much taller than me I cannot switch back. And so, I proceeded back up the rope. It's slow going as the adrenaline had run its course through my body and I was shaking in the aftermath. I get to the top and off rope and let the realization that I had a non-zero probability of death just a few moments before flow over me. We decided to call the trip and head out of the cave. Once I'm ready to start moving again, Tommy and I began retracing our way back, with the rest to follow once they've made it up Knipling Pit. We got lost a few times on our way out, adding to my exhaustion, but we make it out, again cursing the cable ladder. It's 3am, I had a close encounter with death, and I had to work the next morning.

Months later, I had the opportunity to return to the cave, and like an idiot I took it. I had months more experience with vertical caving, and this time I was armed with the knowledge of what I had done to precipitate my fall. And so I returned to Doe Mountain Cave with Tommy Cleckner, Chris Garguilo, Jeramie Clifford, Eliot Eding, Andrew Lycas, Tommy Polson, and Kyle Mills. This time, we don't even enter the cave before the trouble starts: On the trails to the cave, my car slides off the muddy track and into a stump. After much effort, my car is freed using some webbing and pushing. We en-



tered the cave in teams, with goals of hauling new rope to the various pits and hauling out the rope previously left in the cave. We again reached Knipling pit after a few hours of caving, having rigged the two prior drops with new rope. Rigging Knipling Pit took enough time that I started shivering.



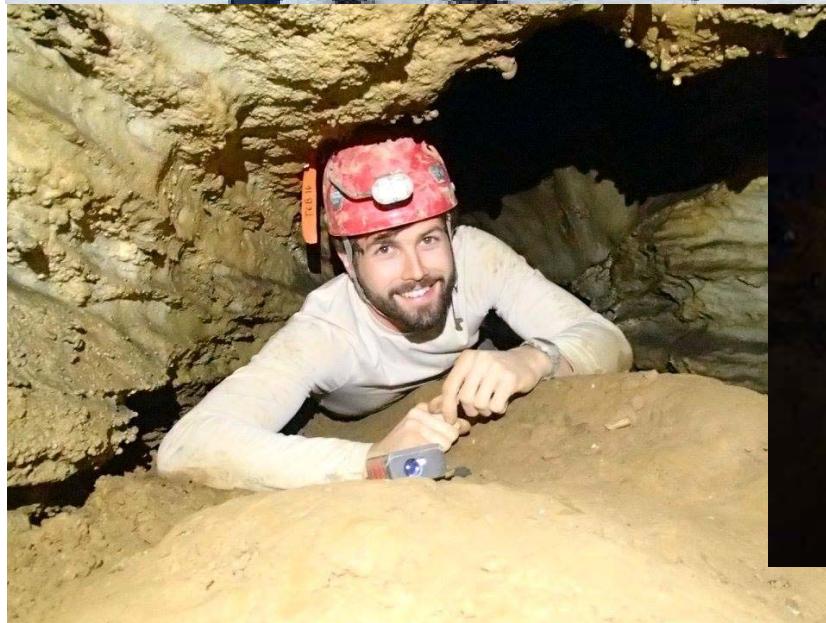
After my last encounter, this pit scares me. When it's my turn to rappel, I cautiously get on the rope with yet more cursing. I took my time rappelling, probably making it down in record slowness. Thoughts questioning why I'm once again in this cave were ever present. Once I reached the bottom, relief floods my mind, and I moved to the next drop.

The Weathermaker, a 170' drop, proved troublesome to rig, as we did not have quite enough rope left over of our portion. An hour of rigging and re-rigging passed. I begin getting cold and pull out a mylar blanket and a candle. Warmth still proves elusive. Finally, we proceeded down the drop. This drop runs near a waterfall, and the bottom of the pit is fairly cold. Tommy Cleckner and Chris returned from Megadome farther into the cave and lent us a hand with the re-rigging. Some moved to a warmer area and huddled together while we wait. At this point, I'd been shivering at three separate instances and was ready

to leave the cave. Others were eager to leave as well, and once the Weathermaker is re-rigged for the umpteenth time we headed up. We slogged up and out of the cave, and once again I was cursing the cable ladder as I climbed it with too tired muscles and a heavy pack full of vertical gear. I made it out, after 13 hours of cold and crawling.

Now, as this tale illustrates, fully knowing your gear is essential if you don't want to have terrifying, death-defying experiences. In this case, I gained that knowledge the hard way, but there are easier ways to do so. Additionally, one shouldn't let overconfidence at having done something successfully a few times get in the way of caution and a healthy respect for the hazards that exist. While I do and enjoy trips that push me and humble me, I'm beyond the rookie mistake of thinking I know and am ready for everything.

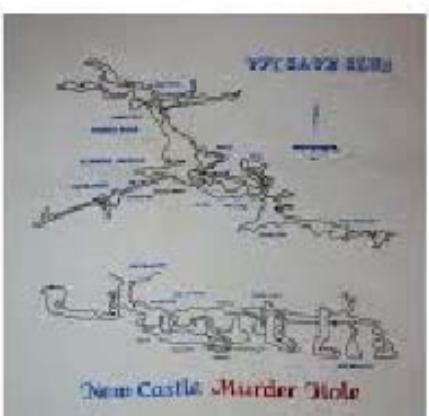
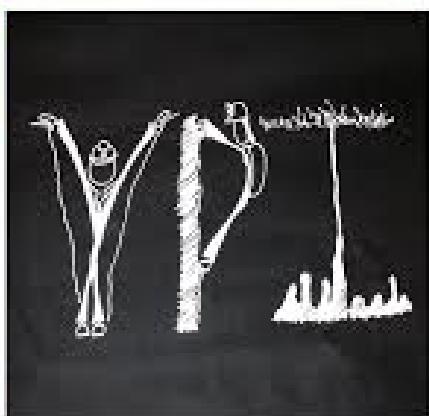
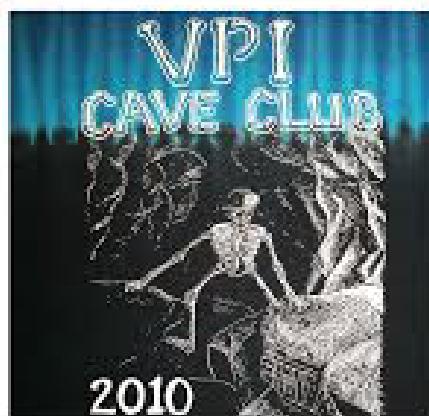
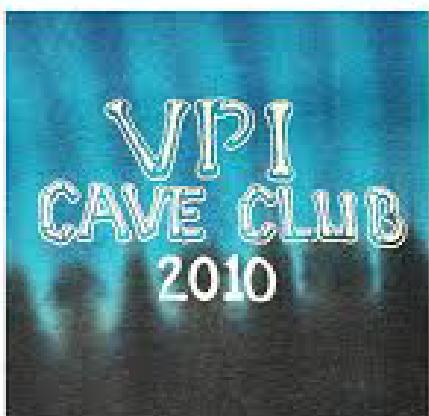
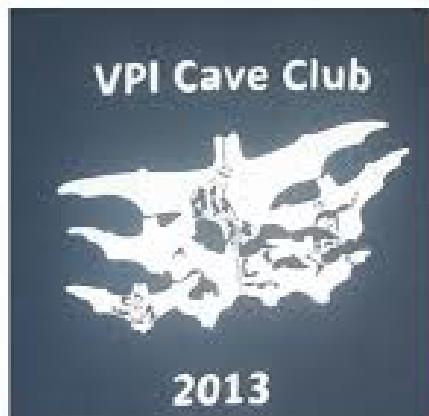
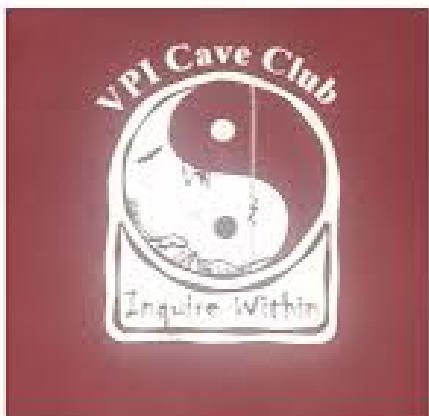


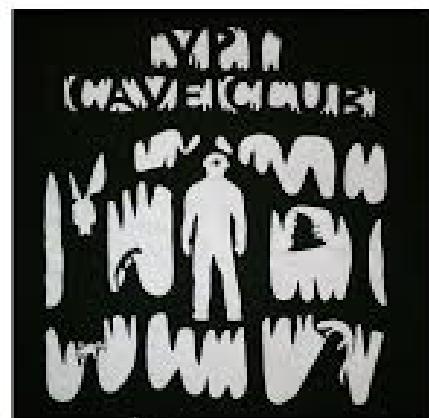
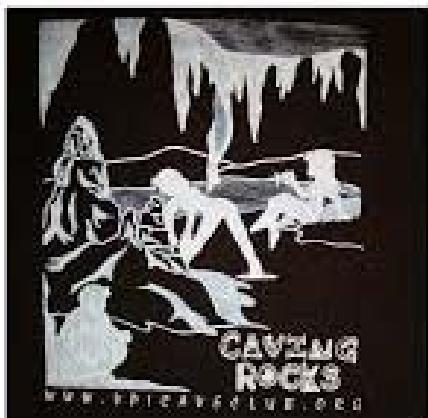
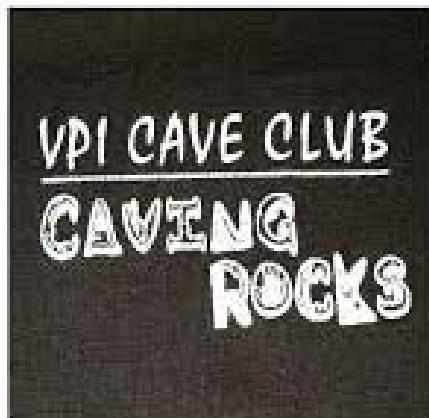
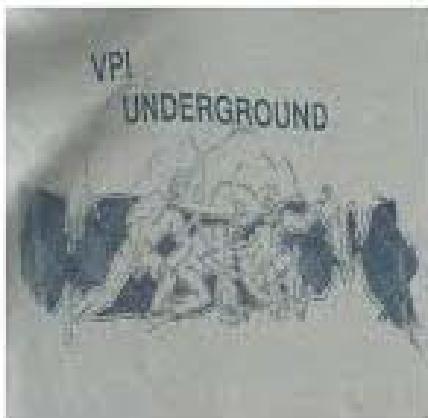
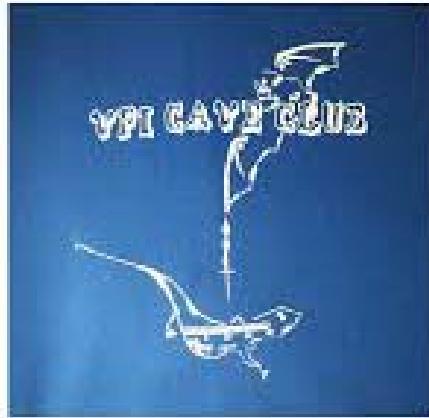


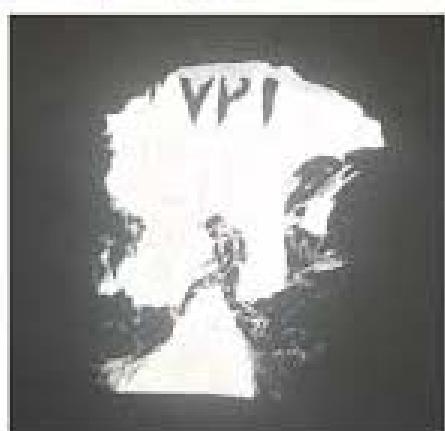
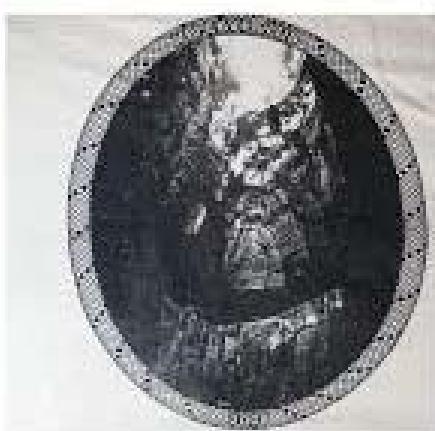
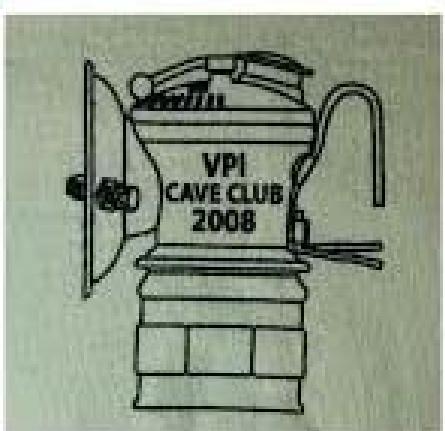
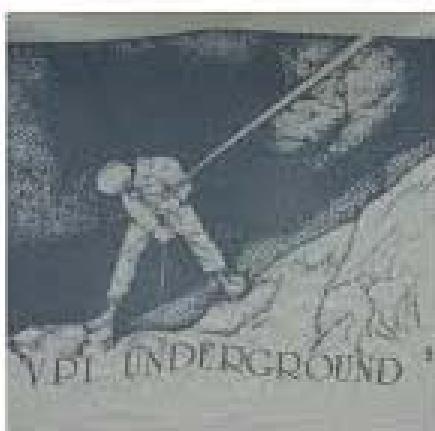
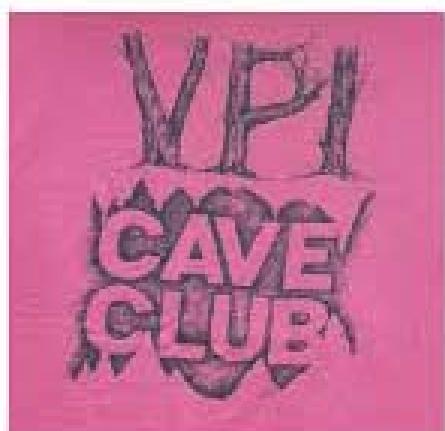
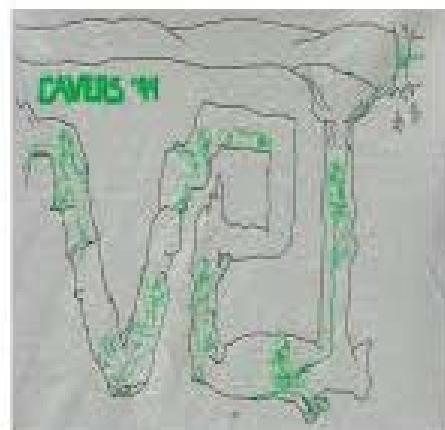
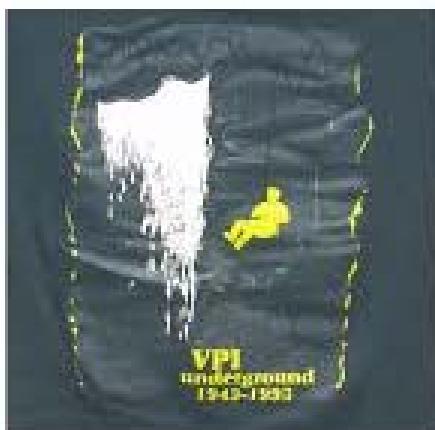
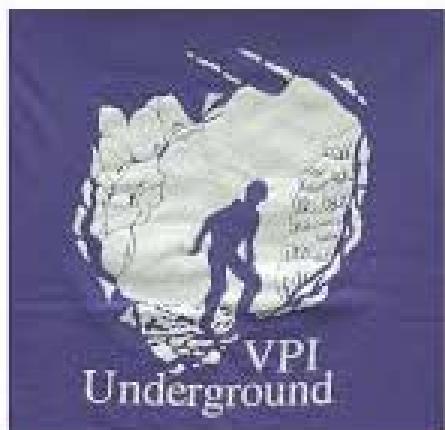
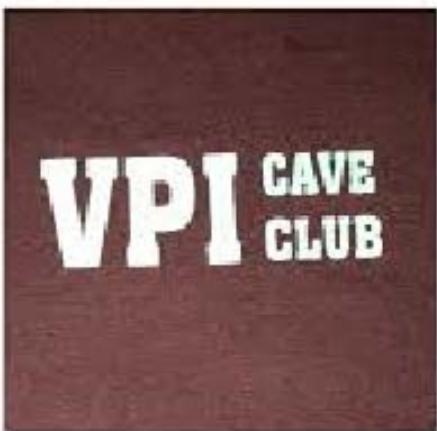
HOW TO: GO CAVING AT PICNIC

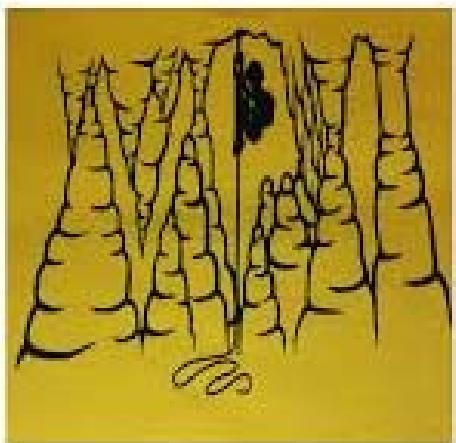
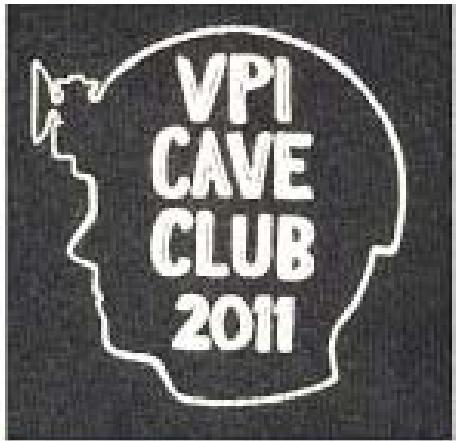
1. Get up early so you get back in time to partake in all the other activities
2. Don't forget that caving is a great hangover cure
3. Walk past people drinking mimosas and question your decision to go underground
4. Never trust Balister

VPI Cave Club Tee Shirts across the years









If you have a design that is not shown here and would like it to be remembered for posterity you can contact Richard Cobb and he can add it to the <http://www.sivtac.org/tshirts/> collection.

HOW TO: KNOW IF YOU'RE ON AN ALL-GIRLS TRIP



7. The mood of the group changed five or more times over the course of the trip.
8. There was a serious discussion about the pros and cons of various forms of contraception.



1. Look down.
2. Someone broke a nail.
3. Someone brought obviously tinted lip balm ("Oh, dude, you look like Barbie").
4. There was dancing whenever the passage allowed for it. And also when the passage didn't allow for it.
5. When someone asked if anyone had an extra sports bra and/or hair ties, an entire chorus answered them.
6. After one person went off for a pee break, everyone else had to, too.

9. There are wine coolers in the post-trip beer bucket.

10. Someone complained about their boobs and/or their birthing hips not fitting through a passage and how yes, they squish, but only so much.

Tooth in the Mud

(A Hair of the Dog Parody)

(Dedicated lovingly to Marlon Vasconcelos of RASS, YTR 2015)

Written By: Diana Orndorff

Dirt digger, beer chugger
I've been warned about you
Mud roller, naked stroller
What they've been saying must be true

[Bridge]

Rock hard caver
Drunk tree hugger
Careful where you runnin' to

[Chorus]

Now you're messin' with a
A Tooth in the mud!

(Now you're messin' with a tooth in the mud)

Now you're messin' with a
A Tooth in the mud!

(Now you're messin' with a tooth in the mud)

Talkin' bloody, broken muzzle
You ain't an emergency
Big laugher, born lover
You ain't too hurt to party

[Bridge]

Rock hard caver
Drunk tree hugger
Careful where you runnin' to

[Chorus]

Now you're messin' with a
A Tooth in the mud!

(Now you're messin' with a tooth in the mud)

Now you're messin' with a
A Tooth in the mud!

(Now you're messin' with a tooth in the mud)

[Pipes Solo]

[Chorus]

Now you're messin' with a
A Tooth in the mud!

(Now you're messin' with a tooth in the mud)

[Repeat]

PSA: The Dangers of Frostbite to Cavers!

By Jason Delafield

Frost nip occurs when skin freezes. If the underlying tissue freezes as well, you have frostbite. Small exposed body parts like fingers, toes, and ears are the most at risk. With frostbite, the skin gets very cold, then numb, hard, and pale. Your intracellular fluid includes salts and when the fluid inside the cell freezes, the delicate balance of salinity changes and fluid is drawn into the cell. This eventually causes the cell to burst causing both tissue damage and blisters to form . Mild cases can be treated with gradual warming--warming them too quickly can cause nerve damage. Severe cases require medical care to prevent complications

The most common cause of frostbite is exposure to cold-weather conditions. However, it can also be caused by direct contact with ice, freezing metals, or very cold liquids. Specific conditions that lead to frostbite include: (1) wearing unsuitable clothing, (2) wind, and (3) prolonged exposure to cold. You should avoid wearing clothing that isn't suitable for protection against cold, windy, or wet weather; and avoid clothing that is too tight. You should avoid prolonged exposure to cold and wind. Basically the same things that cause hypothermia increase your risk of frostbite. Your risk increases when the air temperature falls below 5 F (-15 C), even with low wind speeds. Frostbite can occur on exposed skin in less than 30 minutes if the wind chill is at or below minus 16.6 F (-27 C),

Any adequate caver knows the dangers of hypothermia. Hypothermia can occur at any temperature. Frostbite, however, will not occur if the temperature is above 28 degrees Fahrenheit. Now caves ambient temperature is around 52 F. Why should cavers worry about frostbite then? Cavers should consider what the weather will be when they exit the cave. The Important part, if you exit a cave cold, wet, hungry, tired, and/ or improperly clothed you greatly increase your risk of frostbite. I had to learn this the hard way.

It was Saturday 02/13/2016. My first time at WVACS. Everything was blanketed in snow outside. I was headed to Culverson Creek, to the Wild Cat entrance. The week before at banquet I saw Bill Balfour talk on the cave, so I was excited to actually visit it. The trip's plan was to check out an old rope ladder and replace it if necessary. On our way there we took a quick detour to see the log jam. What



a sight; pictures don't do it justice. We made it to the ladder, and replaced the safety rope. The Ladder lead to the echo tubes. We made echoes in the echo tubes then turned around and headed out of the cave. Culverson Creek, as you might expect, has a creek running through it. On this trip we had to do a lot of wading through the

creek. At one point the water was waist deep. By the time we reached the exit, we had been caving for 7 hours. One by one we climbed up the culvert as wind blew ferociously on us. It's important to note that the Wild Cat entrance is actually two entrances side by side, A culvert entrance which sucks wind into it and the natural entrance which doesn't nearly move as much air. In preparation for getting out in the cold of night in the snow, we stashed our clean, dry clothes, shoes, and winter jackets in the first room inside the natural entrance.



Somehow I was the last to climb out the culvert and race inside the natural entrance to get to my dry clothes. In the short time was out of the cave my wet clothes started to freeze. That's how cold it was. I got into the room and changed. I was ready to head back when a member of our trip realized they did not have dry boots. Peppy decided to put plastic bags on their feet. I thought that we could make it back to the cars and the WVACS field station faster if I gave them my dry shoes, and I wore the plastic bags. I thought I was tough and could handle a little cold.

That's how I ended up running through the snow a quarter of a mile on the coldest night of the year with only plastic bags and socks on. It was below 0F with 5mph winds and wind gusts of 15 mph. After 7hr of caving in a creek, my core temperature was lowered. I had only eaten snacks and probably could have been better hydrated. I had one thing on my mind when I exited the cave; let's get out of here as fast as possible. As I climbed over the limestone on the way out of the cave, the bags ripped some. At first I walked, but I could feel my body getting very cold. I knew something was wrong. I felt some adrenalin kick in. I started to run. I made it back to the cars shivering. I forced someone out of the front seat of a car, so I could put my feet over the air vents as heat came out.

Looking back on it, I realized at some point in the trip back to the car that I became hypothermic. I was not myself for pretty much the rest of the night. When we got back to the field station it took the whole room of people yelling at me to convince me to take a hot shower. I quickly realized that there was a problem with my feet. I couldn't feel them completely. Thankfully there were EMTs present, and they took a look at my feet and made sure I warmed them up properly. The next day I spent Valentine's Day at an urgent care. The frost bite was very mild, only one blister. However, the entire bottom of my feet had frost nip. I am still continuing to lose skin off the bottoms of my feet now.

The moral is beware of frostbite: it can happen faster than you think. If you are leaving a cave in winter, know you might be cold and plan for the worst weather possible for when you exit. Don't try to be a noble badass. Stop and think. In hindsight, there were so many better options that would have led to more favorable outcomes.

The Romantic Lives of Cave Salamanders

By Skylar Hopkins

On 6 March 2016, eight VPI cavers took a trip to Smokehole cave, in Giles County. This trip was particularly special for the author of this article, because she saw cave salamanders (*Eurycea lucifuga*) for the first time. Being a good biology graduate student, the author went home and immediately looked up all of the published papers regarding cave salamander biology. The search unearthed a gem that had to be shared: a detailed description of the process by which cave salamanders get down and dirty.

In 1966, a Dr. James Organ collected 24 cave salamanders from Links Cave and brought them to the Mountain Lake Biological station, where he proceeded to watch them get busy. Unfortunately for Dr. Organ, cave salamanders are not exhibitionists. As Dr. Organ explained, “Apparently the movement of my pencil, while sketching, had been detected by them...A slight movement would interrupt courtship behavior and the pair would move to the front of the container and stare [at Dr. Organ].”

But in his stealthiest moments of voyeurism, Dr. Organ gleaned quite a lot about cave salamander courtship. For instance, the default position for cave salamanders involves the female straddling the male’s tail from behind while the male does something magical: twerking. With his head close to the ground and his hind end raised, the male gyrates the fat end of his tail while doing pushups with his back legs, so that his badonkadonk repeatedly rubs against the female’s face. If that’s not romantic, I don’t know what is.

So, male salamanders have moves, but do they ever go spelunking? Alas, no. Instead, the male eventually makes a very special deposit for the female: a packet of sperm called a spermatophore that is suspended above the ground by a small stalk. The female, sufficiently impressed, plucks the spermatophore from the stalk with her cloaca, and insemination is complete. I’m proud to say the first and perhaps only documented occurrence of this process occurred in the VPI Cave Club’s stomping grounds.



Forgetting the Surveyed Past

Shining an Invisible Light Underground

By Eric Lee Hahn

Cave surveying is a phrase most cavers are familiar with. Without a cave survey, a cave map would be very difficult, if not impossible to accurately create. Throughout this article we'll talk about the evolution of surveying techniques/equipment, where it may be going, and what could be lost.

The Survey

A cave survey can be thought of as a point to point route through a cave. While this point to point "survey" of the cave will get you through the cave, it will not give you a clear picture of what the cave actually looks like. This is where the actual cave map comes into the picture, but let's make sure we understand what the survey process is first.

Some of the equipment needed for surveying include a compass, clinometer (fancy angle measuring device), measuring tape and laser distance meter, paper, pencil, sketchbook or camera, and of course cavers.

As cavers move throughout a cave they take different measurements at selected survey points and record the angle, distance, and orientation of each point relative to the last. Though this is a tedious process of measuring, re-measuring, sketching or photographing, and recording data at each survey point, the cave map would be impossible to make without it. Using all of the data recorded at each point a point to point route is drawn to create a preliminary cave map.



The Map

The actual cave map that most people are familiar with reading is created by using the cave survey as a starting point. Through comparing the sketches (and sometimes photographs) taken at each survey point, a map can be drawn to visualize what the entire cave actually looks like; sort of like a cartographer mapping a coastline.

Grading Systems

While no cave is the same, no surveying run done by cavers is ever usually the same either. The BCRA (British Cave Research Association) grading system for line surveying was created to

grade the accuracy and precision of surveys to show how similar surveys could be.

Grade 1 is a low accuracy sketch of the cave done without any sort of measurement.

Grade 2 is usually a grade 1 sketch used to aid in a grade 3 survey.

Grade 3 is a rough magnetic survey where horizontal and vertical angles are measured to $\pm 2.5^\circ$ with distances measured to ± 50 cm and a station position error less than 50 cm.

Grade 4 is between grade 3 and 5.

Grade 5 is a magnetic survey similar to grade 3 with tighter tolerances. Angles are $\pm 1^\circ$ with distances accurate to 1 cm and station positions to less than 10 cm.

Grade 6 is a magnetic survey more accurate than grade 5.

While there are higher grades above grade 6 we won't get into them here. Feel free to look more into surveying techniques and their associated grading levels. Some of the higher levels require a great deal of training and practice.

Errors

Even through extreme diligence when recording survey data small errors overtime can add up by the time you reach the back of a cave. Only a couple millimeters at the start can compound to a cave survey being hundreds of feet off in the end. Loop closure can be a way to help reduce but not completely eliminate some of these errors. By using alternative techniques to map points in the cave to known points in space you can "close the loop" on cave maps. One way to do this is place an antenna at points along the survey route and use a radio above ground to tag survey points to their global coordinates. Through doing this you can help detect and reduce survey errors to produce a more accurate map. Yes, this would make surveying the cave take even longer, but it would be more accurate!

Emerging Technologies

Though surveying is an incredibly important part of cave mapping newer technologies are beginning to replace the old point to point measurement technique. LIDAR, or Light Detection and Ranging, is a form of photography that uses invisible laser light to capture a picture of points with distance information for each point. Imagine a picture that doesn't use colors for each point but a distance away from the camera for each point. These pictures are sometimes called a point cloud because the distance information of each point can help paint a 3D picture of the scene that's being recorded.

LIDAR cameras, or sensors, are incredibly accurate today. A plane carrying a LIDAR unit can image the ground thousands of feet below and still have an accuracy of 30 cm or better. Ground based LIDAR units that are closer to the surface they're trying to map have an accuracy of less than 1 cm. Think about it for a second, this is an entire 3D picture of the world around the sensor that is more accurate than the width of your finger.

Cave Use

Mapping a cave using LIDAR sensors would not only be more accurate than the tape and compass method but would also produce a 3D map of the entire cave. Mapping a cave using LIDAR sensors would consist of holding the sensor and walking through the cave using a software

method called SLAM, Simultaneous Localization and Mapping, to image. As the internal laser showered the walls with laser light, collecting distance information of each point, a 3D structure would be recorded almost instantaneously not only of the surrounding rock, but would also record the location in the surrounding cave of where the sensor was located. From the map that's created as you walk the sensor along the cave you could produce 2D maps, 3D printed models, discover how close to the surface potential dead runs lead, and have a better idea of how the cave was formed. Though costs for these units have been prohibitively expensive recent breakthroughs in research have brought costs down tremendously, almost to a hobbyist level.

The Future

Cave surveying will certainly be a useful tool in the near future although, like the telephone replaced the carrier pigeon, 3D mapping may replace cave surveying. Higher accuracy, faster mapping times, and increased data collection are all reasons to adopt this new technique. Dirt and water can be challenging with precision electronics and may be a reason to continue teaching the older techniques. Water, being highly reflective, can mess up distance measurements leading to incorrect maps. Dirt can fall onto the lens and prevent any data from being taken. Time spent underground holding tape measures and sketching unique features would be lost, dropping your notebook in slime-y mud would be a thing of the past. Old timers could emerge from their caves and yell about how new technologies can lead to youngsters never learning the traditional techniques that everyone has grown up on. Techniques that instilled a true love for nature and internal calling to live underground.

Lost Skills

Any new skill can lead to forgetting older ones, and the old timers may have a point. With the carbide lamp test being pushed away due to the availability and affordability of LED headlamps, maybe soon even our cell phones will be able to map the cave for us. A form of technology that we've rapidly adopted since its invention. We'll be flooded with methods to map the world below us, what happens when we forget why bringing a pencil and paper underground was important? How do we continue to adopt newer and more accurate methods of mapping without losing the valuable lessons, skills, and experiences that are gained through the older ones? Is more gained by spending more time surveying the cave than just walking through it with one of these fancy new sensors? There are millions of questions during any change that you can ask and a lot than can be lost. The big question, I think, that we should be asking is how we move forward while continuing to carry along the important lessons and experiences gained through using older techniques.



Cave Rescue Report

THIS IS NOT A PRESS RELEASE AND THE INFORMATION WITHIN IS NOT FOR PUBLIC DISTRIBUTION. PLEASE CONTACT A BCRG BOARD MEMBER FOR INFORMATION THAT MAY BE RELEASED TO THE PUBLIC.

On the evening of Saturday March 12th at approximately 9 pm a small party of cavers from the University of Maryland Terrapin Trail Club entered Link's Cave. Sometime around 10 pm someone—let's call him Henry—became stuck in a high lead in an area of the cave known as the canyon section. (See attached map) After several attempts to free the caver by the caving party, the decision was made to get help around 10:30 pm. Reaching the landowner's home, who is a caver himself, contact with BCRG was made and a VPI caver on site, Alice Jaworski, entered the cave to assess the situation and report back.

Zenah Orndorff received the call for BCRG at 11:33 and began to inquire on availability. Jon Lillestolen responded to the scene to make an assessment of the situation. Given the size, familiar nature of the cave, and the late hour the hope was to resolve the incident with little fanfare.

First contact was made around 11:50 by Alice and Jon arrived shortly after, around midnight. It was quickly determined that freeing the entrapped caver would require more than simple tools and techniques. Calls were placed to BCRG members experienced with rock removal techniques and Mike Ficco, Katarina Kosic, Eric Stanley and Steve LePera responded.

Mike and Katarina arrived around 1 am and with a large drill began the process of drilling $\frac{1}{2}$ inch holes and using hand tools to further fracture the rock. The caver was stuck in a keyhole type passage with a knee and ankle tightly wedged. Eric and Steve arrived around 3 am with a second drill and extra batteries.

With dawn approaching an Echo Responder alert was placed. Gabe Lavine and Tom Lovejoy arrived on the scene with Response 53 and the BCRG trailer with additional supplies from BVRS that included air chisels and cribbing material. Fortunately, the caver was freed at approximately 4 am without the need for the air chisel. After a brief rest period for food, water and rewarming the caver was able to exit under his own power. All cavers and resources were out of the cave at 4:30.

Of note, the times around this event are complicated by the change with daylight savings time and uncertainty among different parties as to which time their watch was set to.

Respectfully submitted,

BCRG-
3/13/16

Prepared by Eric Stanley



HOW TO: DO BIKRAM YOGA ON THE CHEAP

Are you tired of shelling out cash to sit in a sauna listening to some hippie mumbo-jumbo about feeling the toxins leaving your body?

You're in luck!

This summer, the VPI Cave Club is offering FREE Hot Yoga to all those who express interest! All you need to do is get your gear on and sit in the blazing sun while the Old Farts get their shit together!

Benefits of our program include, but are not limited to:

- improving and expanding your griping skills**
- sweating out the previous night's alcohol efficiently**
- learning how to grumble more effectively**
- coming to terms with your future lifestyle**



Rocks Left by the Living

By Kellen Levinson

The sport of caving has attracted curious adventure seekers for over a century. Caves not only offer a thrill to the adrenaline junkies in the world, but also dazzle us with beautiful rock formations, sediments, and a unique array of flora and fauna. However, caves have more to offer than just their gypsum and salamanders. Caves are the home of many magnificent fossils, million year old remnants of strange creatures found nowhere else on the planet. For the archaeologists among us, caves can give an exciting first-hand opportunity to discover new species and specimens that surpass those found anywhere else on the surface. But what makes cave fossils special? How do fossils forms in caves, and what fossils can you find in your area?

Fossils in caves tend to appear in two ways. The most common way is via sediment. When an animal dies, its body becomes entrapped in silt or mud which then turns to sediment. In this sediment, the bones, teeth, and even cartilage can be preserved into rock. When caves form, it's not unusual to see massive splits in the earth where limestone layers have separated and become exposed- potentially exposing any fossils within the sediment. Cave walls can be worn away by water and time to expose fossils as well, and we occasionally find them underneath our feet. Depending on where you are on the planet, the fossils contained in these sediments are typically creatures that had once been in the ocean, and contain mollusks, arthropods, and even fish. Fossils can also be preserved in caves when animals wander in or become trapped and die. Insects and bacteria will eventually strip the flesh, but the bones remain undamaged and un-moving. If the cave has conditions that favor preservation, these bones may fossilize with the natural formations of the cave.

One example of limestone fossils can be found in our very own Tawney's Cave. There are multiple areas in the cave where the wall and ceilings have been worn or split to reveal shells that were once part of an ocean floor.



Photo by: Randolph Colby in Tawney's Cave

Several years ago, a cave found in the Dominican Republic gained worldwide notoriety when it revealed some of the best preserved fossils of ancient crocodiles, monkeys, lemurs, sloths, and bats. These animals had once lived in and around the cave, and the bodies of the de-

ceased were left behind. At some point the water rose in the cave, flooding it with cold water which has almost perfectly preserved the remains inside. This cave was publicly nicknamed the "fossil cave", because divers swimming along the cave floor would see white sand littered with black, fossilized bones. Entire bodies are perfectly preserved and unaffected by erosion, weather, and other damaging conditions.



© Phillip Lehman/Pietor Donnagio/Alfred Rosenberger



Caves can be very valuable to archaeologists by providing remarkably well preserved and complete specimens like those in the Dominican Republic. Some of the most important cave fossil discoveries were the bones of prehistoric ancestors to humans, unearthed in 2013 in South Africa. This discovery was so profound because the cave not only held the remains of our 2.5 million year old ancestors, but it held the remains of an entire family. The cave was excavated for a

month, and held at least 15 individuals of the species *Homo naledi*, representing men, women, and children of the oldest member of the *Homo* genus- and at the time of the discovery, a new species. Such a complete discovery outside of the protective environment of a cave is unlikely. The bodies' placements suggested they were placed there by relatives after death and are the earliest records of a burial by humans.



Homo naledi

If you're living on the east coast of the United States, you're probably not going to find perfectly preserved crocodiles or ancient cave men. However, the caves throughout the appalachians have very fascinating fossils nonetheless. The sediments left from the ice age have very few fossils in them, but the limestone layers in which caves regularly form can include layers left from three to five million years ago when Richmond was still part of the ocean. These layers are richly populated with the clams and oysters that lived in the shallow oceans. Some of the best cave fossils nearby are found in West Virginia, where discovered fossils range from ocean-dwelling molluscs, to massive mammals such as the mastodon, wooly rhino, and giant ground sloth.

Whether you are an archaeology buff or not, keep your eyes on the lookout for fossils wherever you cave. You never know what you might find, and not every discovery has been made by someone who was looking for it! Keep in mind that you should never disturb, move, or take anything out of a cave, including fossils. Not only is it illegal, but you could harm the fossil and the soil context around the fossil which is very important to proper dating and excavating. If you think you've found something special, take pictures and notify your local speleological society or club. Happy caving!

Helictites and the Great White Way

By Randolph Colby

This February I was lucky enough to go caving in the Norman half of the Bone-Norman system with a great group including Dave C and Spotty Dog. The trip was a wonderful time, and even though it only took about 5 hours, we saw a lot of cool passage. This included a room the size of a small performance hall not far from the entrance as well as a nice stroll through a stream that was sometimes waist deep! At one point our glorious leader Tommy Cleckner poured out some boot water he had been marinating his foot in onto Spot. As cold and exciting as all of this was, the most impressive part of trip was a passage known as The Great White Way.

The Great White Way was somewhere around a quarter mile long, and was covered in both calcite crystals and helictites, as well as some small hairy crystals. The helictites grew in crazed shapes and looked as if they would break at the slightest touch, so we were careful to keep our muddy hands away from them. This was my first time seeing helictites, and I was confused as well as impressed, as they bend and twist into strange shapes with seemingly no respect to gravity. Soda straws, stalactites and stalagmites all grow straight up and down. So why not helictites? I wanted to find out.



Photo 1: Helictites



Photo 2: Tommy prepares to dump out his boot

It turns out that helictites form in a very similar way to soda straws. Normally, a soda straw has a small capillary in the middle that allows water through at a fast enough flow rate to form a drip on the end. This drip dangling off the end evaporates and leaves behind calcite, allowing the soda straw to grow. The fact there is enough water to form a droplet is important, as the droplet moves to the lowest point, allowing the soda straw to grow straight downward. In helictites, there is not enough water to form a droplet, and the water evaporates at about the same rate as it is excreted [1]. This means that gravity no longer plays such an important role in the direction of growth, and other variables such as wind or impurities in the crystal can decide the shape of the helictites [1, 2]. Water flow may pick back up and again allow droplets to form, which leads to interesting cases where a helictite will suddenly have a vertical section. We were lucky enough to see some examples of this, and it was exceptionally neat (See photo 4).



Photo 3: My roommate Jason Delafield and myself



Photo 4: Helictites that reverted to vertical growth

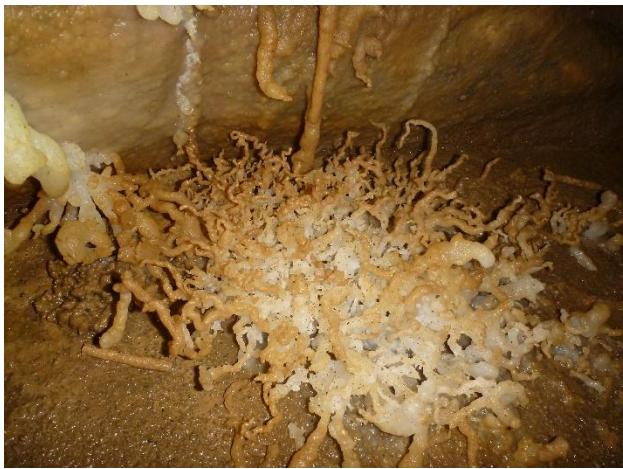


Photo 5: Helictite salad



Photo 6: In clockwise order from the bottom left:
Dwayne Sykes, Penelope Vorster, Bobby Grayson,
Samantha McCarter, Erik Sjørdal, Jason Sargent,
Molly Lucier, Scott Rapier, Jason Delafield, Dave C,
Randolph Colby (myself), Tommy Cleckner

References

- [1] G. Smith. (1998, February) "Helictites – What Are They?". *Australian Caver*. [Online]. No. 143, pp. 14. Available at: <http://nhvss.org.au/wp-content/publications/Helictites%20-%20What%20are%20they.pdf>
- [2] P. Onuk, M. Dietzel, C. Hauzenberger. (October 2014) "Formation of helictite in the cave Dragon Belly (Sardinia, Italy) – Microstructure and incorporation of Mg, Sr, and Ba" *Chimie de Erde – Geochemistry*. [Online]. Volume 74, Issue 3. pp 443 - 452 Available at: <http://www.sciencedirect.com/science/article/pii/S0009281914000336>

Photos 1, 2, 4–6 by Randolph Colby.

Photo 3 by Penelope Vorster

Expectation vs Reality of the Cable Ladder Belay

By Samantha McCarter

There's a saying in cave club that everyone always fail the Cable Ladder Belay Test once, or at the very least, watches somebody fail their first time before attempting it themselves. Having seen someone fail their test, and then walked through the process, I knew all the steps of how not to kill the member pretending to be a trainee I would actually contemplate dropping in a regular situation. At the next vertical session I pleaded with the available members, I went through the motions, said all my steps out loud, and felt I was destined for success. I was thoroughly coached to not let the pretend trainee give me any lip. I tied the bowline on a coil, the retraced eight, said the commands.

Let me back track for a moment: every other time I've seen the belay test done, it seemed... effortless when it came to actually holding the person. As a smaller person, I never completely appreciate that for the test, I'd be holding an entire human with a rope wrapped around my body. When the

moment came for my 'trainee' to take a slip and fall from the cable ladder, the incredible burning across my back seemed to be from nowhere. I instantly knew I failed, but couldn't fathom how so many parts went wrong. I got a rope burn, the rope slipped through my hands a few feet has I fought to grasp it and my left arm simply followed behind my back as my 'trainee' plunged to his death from the short distance. After hearing a bunch of shit from the other people on the platform, we revitalized my dead 'trainee' and tried again to figure out what went wrong. This time the zombie 'trainee' eased his weight slowly off the ladder and while I was mentally prepared for the shock this time, my body bulked as I crossed the break rope across my chest and felt the weight compress the life out of me. It was at this point that I realized I physically couldn't do it. I physically couldn't top belay someone heavier than me with a body belay. Disregarding my improperly thin shirt, the crashing fire python in rope crushed my kidney, spine, and ribs. We switch to a munter hitch and while my bicep burned as I took slack out, I was able to support his weight and the zombie 'trainee' was able to hobble away.

So if you're of a smaller stature, be cautious. There's more to top belaying than following steps.



Maxwelton: Beyond Thunderdome

By Nick Socky

Resurveying caves is a lot of fun in my opinion, but sometimes it's not the most rewarding thing. You do not get the glory of being that astronaut caver, because—in this day and age—you are more than likely just cleaning up “The Firsts” crappy job of mapping the caves. Sometimes, however, we resurvey caves because we speculate there is more cave then was originally thought! This of course is hard because most of the time, new cave is in hard-to-reach places or you have to dig. My tale is a story of the perseverance it takes to find new cave. The key is to not be let down when you don't but when you do... damn is it worth it.

Slight backstory to the project! Maxwelton Cave of Greenbrier County, West Virginia is one of the classic caves in the area! There were initially two entrances to the cave: The Cove Creek Entrance and the Airport Entrance. Sadly, the airport paved over the airport entrance and a hurricane silted shut the Cove Creek Entrance in the 1990's. Then in 2004, after several years of digging, cavers finally reopened the cave to the area in the cave known as Heaven! This was a big accomplishment. One now gets into the cave by climbing a ladder down a 60ft vertical pipe. The purpose to putting this man-made entrance into the Cave was: 1. To re-gain access to the cave, 2. Re-survey the cave, and 3. Find new passage in the cave, with much emphases on the last. Sadly, no real break-through in new cave has happened... UNTIL NOW! It has taken 12 years to find significant new cave.

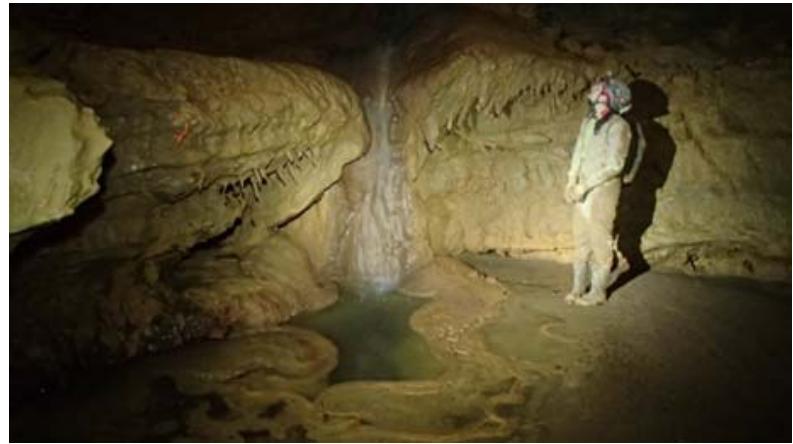
I have been assisting in the re-survey of Maxwelton now for about 3 years. I am sure most of you who read the Tech Troglodyte caught my edition of Downstream Cove Creek that I wrote for the Trog last year! That was a fun trip, but as I said earlier it's just a resurvey—nothing new found, but projects are projects! Talking with Greg Springer and my father, Dave Socky, it was looking like we were going to finish up the cave in probably a year's time. We had a few leads left, but nothing promising. I had been asking around WVACS where there were some good leads and I heard from Errol Glidden and Larry Fischer that this area of the cave known as Thunder Hall had decent bolt climb at the end of it. Surprisingly, looking through Greg Springer's notes on areas that needed resurvey—Thunder Hall needed a re-re-survey due to a few botched shots and some sub-par sketching.



Trip 1: So on Saturday October 10th, Dave Socky, Amy Skowronski, Andrew Lycas, Joe Calderone, and I ventured to Maxwelton to resurvey Thunder Hall. The first trick was navigating to this area of the Cave. We got up into the upper levels trying to find the way into the Thunder Hall passage and we got a bit lost, of course. Getting lost was good though, because Andrew and I found a very tight lead that had going virgin cave! We turned around after about 150 feet of nearly walking passage with the sound of water and cascades ahead. My dad couldn't fit into the lead and we had other plans for the day, so we made a note to go back! We finally found our way up into Thunder Hall and it was (is) some of the most impressive cave passage I have seen in a while! The first section is a 40 feet high dome canyon complex with two 15ft waterfalls you have to climb up. These climbs are really kind of awkward and terrifying actually, and all of the good hand holds are in the water so you get soaked. At the top, the passage is muddy with lots of waterfall air circulation. There was a lot of complaining involved, but we continue to survey and we stopped after about 200 feet at the bot-

tom of an 80ft dome! We also left three leads back there: 2 needed bolting or some other assist and the other was a very low, crappy, muddy crawl. This was a 11.5 hour trip, and we had found an impressive dome and dubbed it THUNDERDOME! To stay in line with the initial name of Thunder Hall.

Trip 2: The second trip took place on Saturday, November 21st. There were two teams in the cave: Team 1 (Joe Calderone, Andrew Lycas, and



Tommy Cleckner) continued the passage that we found when we got lost in the cave last trip. They yielded around 400 of surveyed passage which was not on the map! And I led Team 2 (Tony Canike, Amy Hein, Hope Brooks, and Eric Pelkey) back to Thunderdome to start the bolt climb! We were able to work our way up the second lead that we found via a short 15-bolt climb which eventually put us about 40ft up in the dome to a traverse line. While Eric and Tony

were doing all of this bolting, Hope, Amy and myself took it upon ourselves to survey the tiny mud passage near the bottom of the dome. Man is it tight, and it goes, has animal footprints and moves cold air, but will need more enlarging. This trip was about 12.5 hours long and we still had a ways to go.



Trip 3: We were going to get to the top of Thunderdome, damn-it! We returned on a WVACS Project weekend on January 9th , 2016. Tommy Cleckner, Andrew Lycas, and Amy Skwornoski returned to their area they had been working in, while Dave Socky, Hope Brooks, Tony Canike, Beth Mutchler, and I went to Thunderdome, this time loaded down with a crap ton of ropes, bolts, and hangers. The bolting team went ahead and started a traverse that was discovered back in November, and the survey team followed along behind them, surveying the passage up to the traversable shelf. After a few hours of bolting, Tony eventually got to a point on the 40 foot shelf that he could

set some bolts for a rig so that others could climb up. I went up the rope to look at the remaining obstacle and Eric and I decided that I would let Tony and Eric continue the last 20 to 30 feet up a very sketch-tastic mud slope. I was not too keen on learning how to bolt climb forty feet up on a two foot shelf that could hold barely

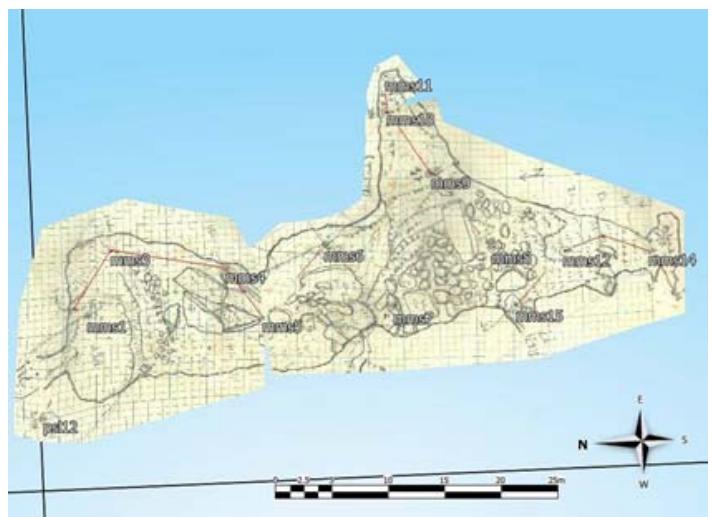


two people. So I returned to the bottom and let Tony climb on up. Meanwhile, the survey crew had wrapped up with a nice survey of around 100 feet of passage! For the next several hours, Hope, Beth, my Dad and I decided to entertain ourselves by playing with the 3lb sledge in the mud, and attempting to build a mud damn to block up the lower waterfalls. We also enjoyed the occasional “ROCK!” and watching breakdown ranging from the size of a baseball to a microwave pelt down a 40ft dome. Hope also brought her small speakers and mp3 player so we jammed out to a wide variety of music from the 80’s to Top 40 hits. And yes, Africa was played many a time. Eventually, Eric got to the top and rigged twenty more feet of rope to get to the steep mud slope. We ran out of time to continue our survey but from Eric’s description it potentially went! From where the waterfall is coming from, there was a narrow canyon that cut back across from where the lower passage entered the dome. This would require a few bolts to set a traverse line to get into. The other potential passage was a large break trunk that hopefully would go more than 50 feet! It

certainly has the potential to turn and end immediately. Tony and Eric descended the ropes, we packed up, and commenced our 4 hour trek out of the cave. It was a 15.5 hour trip.

And finally, **Trip 4:** Our return to Thunderdome in (Mad) Maxwelton Cave, WV finally occurred on Saturday, April 2, 2016. Our team of five (David Socky, Tony Canike, Nick Socky, Eric Pelkey, and Hope Brooks) climbed down the entrance culvert at about 10:45am, loaded down with large, heavy expedition packs. We were weighted down because we had individual vertical gear, 200 feet of rope, a hammer drill, 8-inch nails, a hammer, bolts, hangers, links, and lead climbing kit, along with all our normal caving gear, warm clothes, food, and water. At the entrance to Thunder Hall, an area we now call “The Lunch Room”, we had lunch before starting to work on fixing up the waterfall climb. We had decided that it would be best to put bolts and a rope at the top of the second waterfall so that we could have a safety while free climbing the two waterfalls. The climbs were not particularly difficult, but if a slip occurred and/or a hand or foothold failed, a fall would have resulted in a long, difficult, and protracted rescue. Not a good thing to happen that far back in the cave. I put a couple of nails in at the base of the first waterfall, letting us get up the climb without getting soaked.

Hopefully we would no longer need to bring a rain jacket in for the climb! Once at Thunderdome, Tony and Eric climbed up first to see if we really had anything to survey. As Hope climbed up to set the first station, we heard Tony and Eric yelling and screaming – “OMG! Wow! Borehole! Lots of borehole! How much survey paper did you bring?” At first, I thought maybe that they were joking around, especially since yesterday was April 1, but we kept hearing their exclamations of surprise and excitement.



Hope set the first station most of the way up the dome, on a large rock at a break-over in the climb. Nothing like setting stations while on rope. Our survey designation for the day was decided to be MMS, for Mad Max Survey – a nod to the ‘Thunderdome’ theme (and ‘Max’ for Maxwelton!). Thunderdome turned out to be 90ft high, from floor to ceiling, although the climb itself was only about 55ft. The third station, MMS3, got us to a safe point at the top of the dome, and gave us a good setup for continuing into the HUGE passage taking off to the south. To the north, across the dome, you could see the stream passage from which the waterfall issued.

Above the waterfall, it looked like a large canyon took off to the north. This passage was only accessible via a steep ledge on the right, one that would have to have a bolted traverse line installed in order to do safely. At this point we split up the team. Eric would put in the traverse line to the waterfall lead with Tony belaying, while Dave, Hope, and I would survey to the south. Hope was point and back sights with a second DistoX2 (yes, we had two DistoX2 instruments – it was great!). Even though this was new virgin passage, I still moaned and groaned a tiny bit being the sketcher. Passage this challenging with this much breakdown is hard to draw! I quickly got over it and into an awesome sketchers groove, though.

After a few stations, we came to the short climb down where Tony and Eric had put in a hand line and nail to make the way back up a lot easier. The floor below the climb down was covered with large pieces of breakdown with lots of space in between. There were little cracks and spaces where you could see down a good ways. The eastern side of the passage was covered with flowstone with a good portion of the rock welded together by wet calcite flows. Down on the left and in the back of a short crawl was a flowstone covered crack which led downward for a good 15 to 20 feet, where it looked like it opened back up into a room or passage. You could also hear active water and when a rock was dropped, there was a pleasant splash. But the crack was too small to fit through. Digging would also be difficult as the walls creating the small crevice were made of flowstone. Hopefully there is another way in.



Continuing south, it soon became obvious that we were actually in a large breakdown room instead of an actual passage. We pushed and surveyed up into both corners of the room but there was no way onward. However, along the western wall of the room, behind some breakdown, we found a pit, which led to a very nice looking tall phreatic canyon which was 10 to 12

feet wide and heading off in a southwesterly direction. The pit measured out to be about 38 feet deep and would require a rope to get down. Unfortunately, we didn't have any rope left! Guess we will have to return here! After finishing up the survey, we decided to name the room "The Coliseum" because of its size, and as a reference to the ancient battle arena - still playing on the "Thunderdome" theme. We then made our way back to the top of the dome where Eric was just finishing up the traverse. He had made it all the way to the lead, but ran out of bolts for the last little bit. Only one more bolt will be necessary, so it will be necessary to carry in a drill one more time. However, Eric reported that the lead looked really good.

By this time, it was getting close to 10pm, which we had agreed would be our turn-around time. It took Eric a while to clean up the traverse line, and after re-working the rig point at the top of the first waterfall to make it safer, and then getting all the way out of Thunder Hall, it was a little after midnight. We also placed a rope, instead of webbing, at the entrance to Thunder Hall. Currently, this area of the cave has a total of 4 ropes being used: one to get down into Thunder Hall, one rigged in two places to get to Thunderdome, another rigged in two places to get to the top of Thunderdome, and one acting as a traverse line to get into the large canyon. We plan on replacing the 9mm rope going up the 60ft drop with a 10mm rope, and we are also going to bring another 100 feet for the canyon drop at the southwest end of The Coliseum. Maxwelton has suddenly become one of the more vertical caves in the area with potentially 155 feet of vertical work, just in this area! It was a 16.5 hour trip.

So it took a total of 4 trips totaling 56 hours of caving, over 20 bolts, set and 155 feet of rope to get to the top of Thunderdome AND it was worth it. We plan is to return sometime in the near future and continue both of the leads which (hopefully) will go for a long time! We are about 100 ft above all known cave in the area, with a lead going down again, and one that is following the water up—and they are large leads too! So finally, after 14 years of resurvey, a big breakthrough in Maxwelton has finally been made. Hopefully it will continue for a while.





200 PROGRESS STREET, N.E. - BLACKSBURG, VIRGINIA 24060
(540) 961-1189 FAX (540) 951-9060
EMERGENCY DIAL 911

NEWS RELEASE
October 3, 2015
FOR IMMEDIATE RELEASE

Chelsey Williams, EMT-E
Public Information Officer
540-558-8564
chelseywilliams@blackburgrescue.org

BLACKSBURG CAVE RESCUE GROUP RESPONDS TO WEST VIRGINIA CAVE INURY

BLACKSBURG, VA –

On October 2nd at approximately 4pm, an 18 year old male fell and broke his leg in a cave in Monroe County, West Virginia. He was about 4000 ft into the cave. One of his companions returned to the entrance around 5pm, called 911, and called two West Va cavers with rescue experience.

A Blacksburg Cave Rescue Group (BCRG) member was notified by one of the West Va cavers a little after 5pm, and BCRG notified the Blacksburg Volunteer Rescue Squad (BVRS) duty officer that our assistance was requested. 15 BVRS members (14 from BCRG) responded to the scene, while 1 additional BCRG member ran dispatch. 23 affiliates of the VPI Cave Club (mostly students) responded to the scene per BCRG request. BCRG and the VPI Cave Club began arriving on scene around 9pm. The groups worked with local Fire and Rescue personnel to remove the patient. At the time of arrival the patient was already packaged in a litter and transport was underway. 14 BCRG/BVRS members entered the cave to assist with transport, 1 BCRG member remained at the surface and assisted with incident command. 21 people from the VPI Cave Club entered the cave to assist. An ER Physician from BVRS assessed the patient underground and the evacuation continued. The patient was removed from the cave at 1:00 am, and transported to a local hospital. He was reported to be in a lot of pain, but in good spirits.

In total there were about 75 responders (including two or three local fire departments), 57 of whom entered the cave (35 of whom were BVRS or VPI Cave Club). Blacksburg and VPI crews returned home by 4:30am without incident.

#####



PROVIDING QUALITY PRE-HOSPITAL EMERGENCY CARE TO
THE TOWN OF BLACKSBURG AND MONTGOMERY COUNTY

Trog Article for VPI Cave Club 2016

By Autumn Parker

□ □ □ □ □ □ □ □

MY TROGG
IS BIGGER THAN YOUR TROG.

• • •••

□

V.P., old V.P. you know our hearts are with you, in
our hearts and ourluck which never seme to die.

□

□

Trog.

Trog. TroG. TROG **TroG** Trog. *Trog. Trog. Trog. Tr* O g.

Trog.. *Trog* *trogTROG*

T

T

R

O

o

G

g

Windy Mouth Trip Report

By: Dianna Orndorff

Date: 4/9/16

Cave: Windy Mouth

Cavers: Nick Socky, Tommy Polson, Megan Junod, Dave Socky, Andrew Lycas, Mitch Berger, Deirdre Conroy, Scott Zagrodny, Jonathan Roberts, Kristy McCord, Tommy Cleckner, Amy Skowronski, Jenn McGuire, Dianna Orndorff

5 Teams went into Windy Mouth for the WVACS Work Weekend. The hike, which usually burns me out before we even reach the cave, had been recently well maintained, so getting to the cave was quite enjoyable. I can't speak for the other teams, as I'm sure they have their own stories to tell, but our

team included
Andrew Lycas

(sketcher), Megan Junod (lead tape/backsights), and myself on frontsights. Our survey designation was GD, for Gaping Dickhole or God Damn. The latter was the phrase of choice on this trip, as we dealt with almost getting lost on the way to our survey (Goddammit, Lycas!), terrible volleyball kneepads, god awful squeaking of the tape, and my forgetfulness in passing our one set of instruments to Megan for backsights (Goddammit, Dianna!). At least all the crawling back and forth kept me warm!

The overall survey was quite fun, really. It was a good team, singing and joking and cursing like we do. It was also a very flat survey; the majority of our inclinometer readings were at dead 0, and after the 5th zero in a row, I exclaimed "fucking zero" and this phrase was included in the survey notes and used for the remainder of the trip. Towards the end of our trip, we were crawling through ~2ft high passage that was littered with formations, including anthodites (I think? I'm no geologist), and fluffs of gypsum

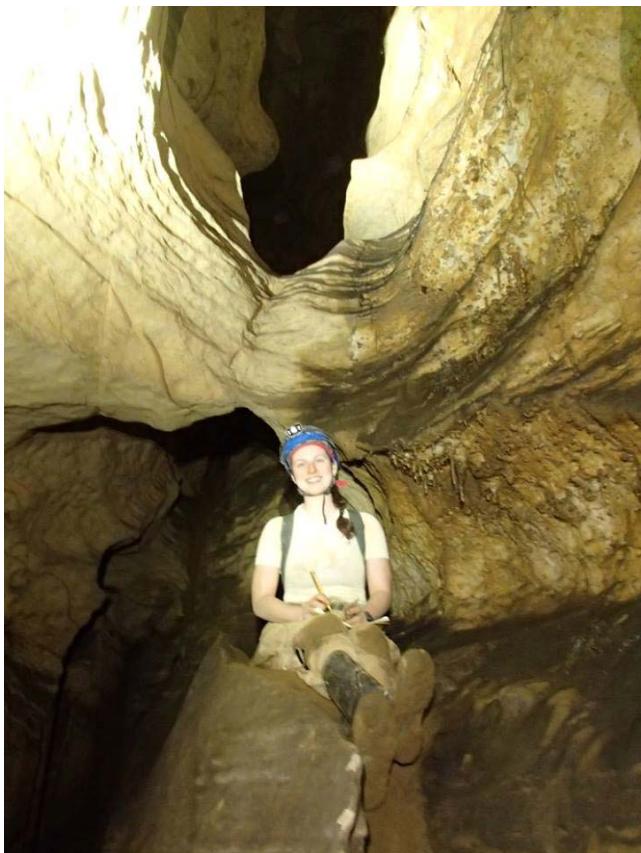


on the ceiling and floor, like gypsum spiderwebs, or like someone sneezed gypsum cotton candy everywhere. In this same passage, Andrew Lycas was almost crushed by some flaked off pieces of ceiling. Thankfully, he was able to carefully maneuver out of the way and let the ceiling fall in a more controlled fashion. We used a lot more caution when we caved back out through this section of the cave.

As we headed out, I noticed a speed deficit due to pain from our poor Megan's knees. Volleyball knee-pads are terrible for Windy Mouth, and we needed to get out quickly, so I decided to switch kneepads with her, since I have done this cave before using bad kneepads and figured I could handle it (for the record, I DO NOT recommend caving Windy Mouth without kneepads. Rolled up socks are definitely NOT a good substitute, either). Turns out I was able to handle it, but only because I was distracted by the pain in my feet from wearing boots that were just a bit too snug. By the time we exited the cave, I was worried about twisting my ankle, my toes felt abused, I had an awful blister on the back of my right heel, and my feet were cramping pretty badly.

About 2 minutes away from the cave I decided I would rather die than continue wearing the shoes (and if I continued wearing them, on that hike, I just might've died) so I removed my right shoe and as soon as my foot was set free, I felt a thousand times better. Did the rest of the hike with only one shoe, wishing I had taken those damn boots off earlier, and swearing up and down that the shoe I was carrying would burn a nasty death soon.

The total survey for our tea was about 1022 feet and 32 stations, and considering we were using instruments and tape, we felt quite proud of ourselves. I counted about 13 bats for the trip; a dozen on the way out of the cave, and one that flew past us on the way in. We caved for 9.5 hours.



Why I Cave

By Deirdre Conroy

Black all around, so dark its suffocating.
Wedged in on all sides. Sharp popcorn under
knees and elbows, crawling along in

the most grim of states. Shoving through
breaks in the rock with unlikely and unfriendly
dimensions. Testing the laws of body contor-
tion, physics, mental capacity. Straddling pits
that gape up in between legs, the black below a
threatening dark, inviting you to look down, to
slip. In the beginning I had frequent terrors of
sliding down slick canyons- no handholds!- and
getting swallowed up by the dark. Caving takes
those petty, mortal fears and squeezes them a
bit, drops some rocks on them, and spits out a
transformed little CHUD with a strange addi-
tion to the dark, dank, and grandiose places
that fit the mold as some of the coolest in the world.

It's all pretty surreal. I remember a transfixion with the lack of a concrete way to gauge space and the passage of time underground. Most of those reality-establishers that we cling to on the hollow crust of the earth become irrelevant in

a cave. A watch becomes is little more than a pretty little plastic contraption used to track sanity levels over the course of a trip. In this way, the passion has an equalizing effect. The cave doesn't care about how much money you make, or if you failed a test, or if you have the nicest new gadgets. It'll take your effort and hand over the rewards; sparkling gypsum flowers, crisp, white columns straight enough for a stripper to straddle, soda straws so thin and perfect they defy existence, delicate rim-stone pools stretching away into the depths. The dividends are huge. There's the physical satisfaction, of course- the addictive cave soreness- but even more hooking is the head rush, crawling out exhausted, happy, mentally victorious. I was blown away by the rush of feeling that hits upon resurfacing after longer trips. Rebirth; sensory overload. The humanoids blink their

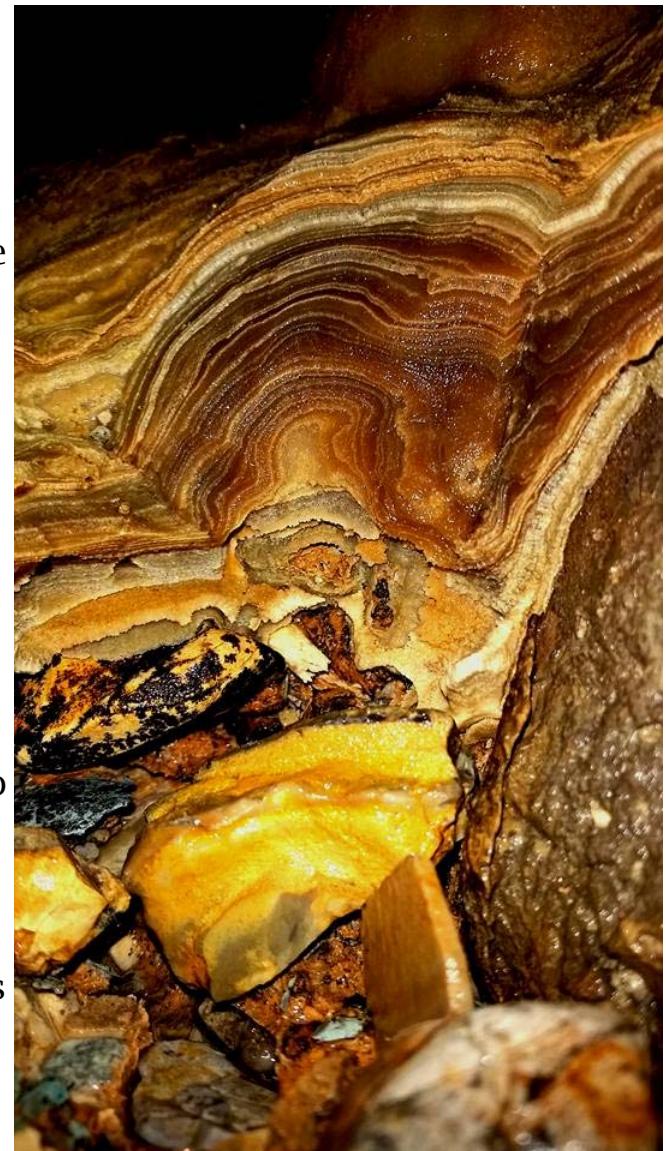


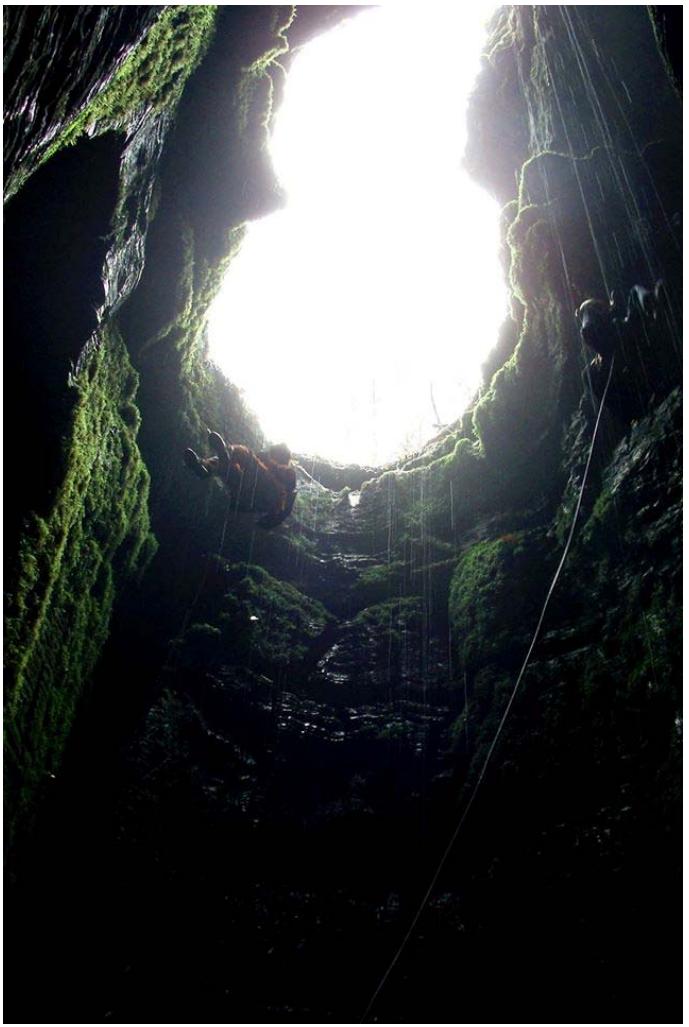
dark-adjusted eyes and sniff the fungal mess of the carbon world with confusion before clicking back into civilized-human mode.

It has a sneaky way of getting under your skin. In the beginning I couldn't understand why people would subject themselves to 12+ hours in the dark, or volunteer for sketchy climbs, or hop down into canyons they hadn't before seen the bottom of. At the same time, I also couldn't explain why I kept signing up for trips and attending vertical sessions. Caving can be sneaky that way. It only becomes apparent how important it's become to you when you spend a weekend going through the motions of a civil human being and realize all you really want to be doing is getting underground. Along with the regular urge to frolic along the adult subterranean playground, the exploration bug creeps in. The yearn for discovery, the drive for undiscovered beauty. It's a pretty powerful thing. Coinciding that, the knowledge that the passage in front of you is one that has never before been seen by man is pretty mind-blowing. The realms of uncharted territory on the earth seem to become smaller and smaller in this day and age, driving the adventurous to lengthier ends to experience the undocumented. Although there are no shortcuts in caving, that's what it offers in itself. Instead of paying millions to launch yourself into the cosmos or spending weeks diving to the bottom of the ocean, you can buy a light and a helmet, borrow a Disto and some instruments, and meet the same end. We're a curious species, and caving feeds - and fuels- that inquiry for the unknown.

In an era when people, lives, and technology are constantly changing- new jobs, new phones, new equipment- there's stability in the knowledge that the hidden passages have existed quietly for centuries, waiting for the light of curious eyes. No matter where the humans go, the rocks remain. There's comfort in the familiarity of that one foothold that calls out during every trip through a certain passage. Of course rocks dislodge, and break down, and dissolve, but for the most part these things remain solid. In a constantly evolving, ephemeral world, there's solace in that permanence.

There's also something to be said about the culture and the people who make up the lifeblood of caving. There's a prominent brotherhood, an ingrained comradery

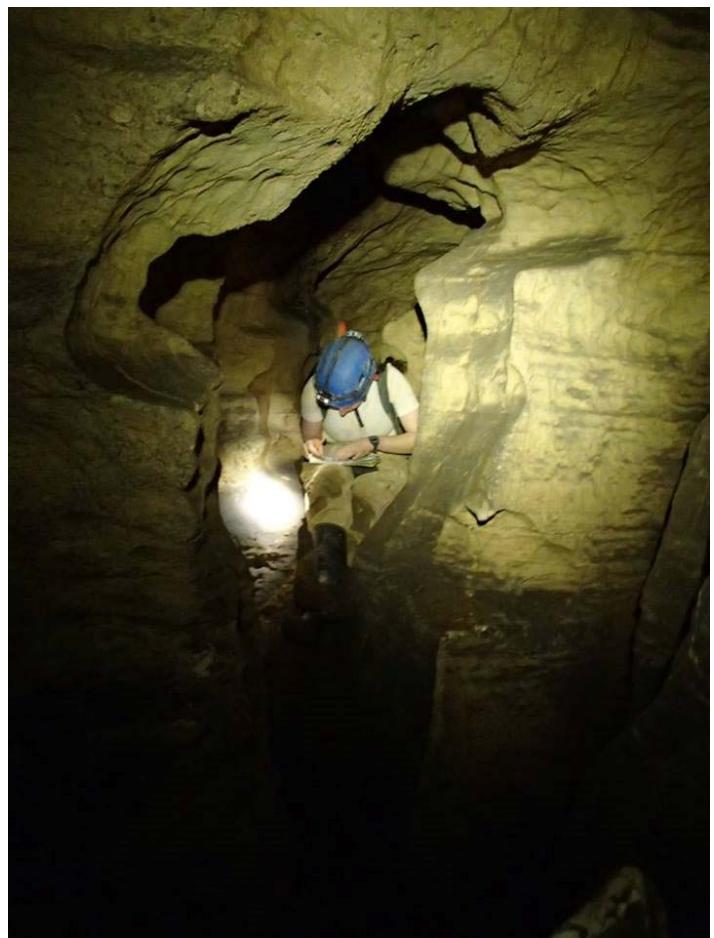




built through pushing each other through the suffering to share the glory of scooping. And this is no nonsensical thing; the pretenses and the social scripts all go to shit (as they should) when you're in a cave and your life is in this other persons hands. The petty things all fall away. One of the coolest moments from my introduction to caving was hearing the celebratory woops and welcoming howls roll across the valley as the lights of a 13 hour trip flickered their way out of the cave entrance under a blanket of stars. There was genuine enthusiasm and passion to hear the trip stories, to experience it vicariously. That's a pretty cool thing.

The memories built through these kinds of experiences in the caving world are the ones that the little nagging voice in the back of the brain wakes up for, yelling "Pay attention! These are the ones you'll want to remember." The glow of headlamps across

white draperies, The Forest Room in New River, Heaven in Maxwelton, The Great White Way in Bone-Noman. Rappelling off the Empire Ledge, feeling extraordinarily insignificant, like a candle lowered into the home of some giant LOTR-worthy creature. Guitar strings, traditions, and countless opportunities for bad puns and innuendos. The flicker of firelight on the faces of friends. Groveling out of grim crawls into expansive boarhole. Laughter echoing away into the night. The things that originally piqued my interest, are the same things that have kept me hooked.





The Ring of Canoe Cave

Submitted by Eric Stanley

In 1956, when Josey Carleen Pace received her high school ring, she had no idea the strange journey it would make.

In spring of that year she graduated from Stewartsville High School just outside of Roanoke, VA, wearing a gold class ring with the initials JCP inscribed in it. Shortly after graduation, she followed boyfriend Robert Lewis Hayden to VPI as he set off on his course of study. While enrolled at VPI, the two soon found the VPI Cave Club and began to explore many of the caves we still visit to this day. As times change, so have the popular caves of the club, and in the late '50s and early '60s a common stop was Canoe Cave. It was in that very cave, in spring of 1962, just before graduation that Josey and Robert would lose her class ring.

When they first came to VPI Josey and Robert found the VPI Cave Club to be quite an active group. Robert's studies were a 6-year track that involved a service component that accounted for the two extra years -- all the more time to spend caving. Josey told me they would go caving every weekend, often Saturday and Sunday, and there were only two or three trips she could recall in all those years she did not go on with Robert.

It was on one of their very last trips, into Canoe Cave, that the class ring was lost. In a section of narrow passage that connects the entrance descent to the main portion of the cave, the ring became disconnected from Robert, its keeper at the time. They knew it had been dropped, although the details of how are lost to time, but Josey remembers the search lasting over an hour. However, at the end of it they had nothing to show for their efforts. The cave had the ring, and Josey had sorrow.

Josey and Robert left VPI that spring. Over the next 60 years' time had its way with things. The story of the ring was forgotten. Canoe Cave was no longer a common stop for the club. And all the while the ring sat patiently in the dark -- until late on the night of January 13, 2016 when it would find its way into my hands.

With the threat of a pipeline crossing the path of the cave, a small group of surveyors set forth to update the 1943 map. On one of the final mop-up trips we were working in lower passage that connects the entrance descent to the main body of the cave. The passage we were in had turned to a breakdown pile but connected to main route above and I had just watched Philip Schuchardt worm up a path that

looked tight and bothersome, albeit pleasantly short. As I began my climb into the worm-hole I saw something shiny just off to my right. I grabbed it without looking much at it, assuming perhaps Philip had dropped something and I would get to taunt him with it at the top of the climb.

To Philip's and my surprise, it was a class ring. I had finally found gold in a cave! Buried treasure. At first glance I assumed the ring was more recent. It looked like any high



school ring today. Its condition looked essentially new, but to our surprise the date was from 1956. In the cave we could see the name of the school and the initials inside. I slid the ring onto my pinky, and we continued our survey.

The next day I set out to ask the internet who JCP was, expecting it to answer, "I have no idea". But it is startling what you can find. First I learned a bit about Stewartsville schools, "*Stewartsville has maintained a public school since 1850. The one room log building was located on the Mitchell place, and in 1900 the site was moved to the Drewry farm. There, a two-room log schoolhouse was first built. In 1904, a new site was found, and a two-room, frame house was built. In 1912, a two-story building of four rooms with an auditorium was constructed and provided instruction for grades 1-7 and the first year of high school. At this time, there were three instructors at the school. In 1914, the first class graduated from Stewartsville School. In the fall of 1930, Bedford County consolidation of schools began, and students began to come to Stewartsville from other schools. The fourth year of high school was added. The 1934 school year saw ten teachers and a principal. The school also became a fully accredited high school by the Commonwealth of Virginia. Enrollment in 1936 was 270 students.*

In 1964, the further consolidation of schools in the county resulted in the building of Staunton River High School. This left Stewartsville as an elementary school with grades 1-7.

JCP was the last senior class to graduate from Stewartsville High School. I wondered if there was an



electronic copy of the 1956 yearbook online, and I found one on a website called ClassMates.com. There was only one match to the initials JCP, one Mrs. Josey Carleen Price. Armed with this name, a google search led me to Ancestry.com showing a marriage record to a Mr. Robert

Lewis Hayden. Adding his name to the search led me to an obituary stating the two lived in Washington state and Josey now went by Carleen Hayden. Her new name led me to her Facebook page, but this turned out to be mostly a dead-end, but did serve to make me think I had a good chance of finding her and speaking with her. The next result after the Facebook page was for a church in Longview, WA listing her as the president, which included a number. I called and left a message, saying I was calling from Blacksburg, VA and thought I may have found something that had belonged to her. I then searched for Robert Hayden in Longview and found their home phone number.

There it was: in just five quick google searches, the owner of the ring. It seemed too easy. Carleen called me back before I had a chance to call the home phone.

The very first thing she asked me was if I had found her ring. It seemed after all these years the thought of it had not gone far from her mind. I relayed the story I have laid out above and collected the details I could from her. She was clearly anxious to see the ring again, offering a reward, and then offering to pay the post. I declined both but said I would send it ASAP.

I sent the ring with only a request for any stories it may have brought back when she received it. I sent along with it a copy of the old map and any clippings I could find from her days in the club I gathered from the Sivtac site. Today I have still not gotten a reply, but I hope she is enjoying having the ring back as much as I enjoyed finding it and its owner.

No Morimos

By Madeline Williams

What! Caving! In the Amazon! With my MOM. What a treat! Who needs to wear boots and synthetic clothes? Not my mom—she has suede loafers and only packed jeans! Gloves? NO! Headlamps? HAH— we have that old pen light my dad bought to bring his amazon order to the required \$30 for free shipping. Who needs helmets?! We don’t—we have fragile skulls and weak eyesight! LET’S GO.

OH MY. First thing we see is South America’s classic scorpion–spider. Oh Ecuador, you sure keep things lively. My mom overcomes claustrophobia while I lithely skip from rock to rock, avoiding the raging stream my mom is sloshing through at waist level. Our guide Gary the Ecuadorian laughs while he tells me in Spanish we really shouldn’t be here. The nearby town had flooded just 12 hours ago—and all those planks and bricks and trash we saw in the street on the way here was debris and destruction from it. HAHAHAH. Man, what a RUSH. I’m sure we’re safe downriver from the town— protected by 12 hours of time, half a mile of rainforest, and the fool–proof security of no one knowing we’re underground.

Whoops. The stream passage is now so high I have to put my pen light in my mouth and wade neck deep, illuminating the way for my nearly–retired mom and dumbass Gary who forgot HIS light (but sure had his waterproof camera). He rattles off the same indigenous story he has for everyone while my mom struggles to stay above the water—that the first part of the cave is black and the part we’re now entering is white because we’re no longer in indigenous hell. We’ve realized by this point in our weekend that Gary hates his job.

LIGHT. We ascend. Gary gifts my mother with a crown of ferns, forces us together for a photo, then rips it away from her to give to the next gringos. He calls me Mackenzie. I felt adequate amongst these spelunkers.

Penlight ablaze—>



Friction's Role in Vertical Caving: A Half-Assed Review of the Fundamentals of Rappelling Devices Or

An Insight into the Physical Principles Preventing You from Plummeting to Your Gristly Death or Grievous Bodily Injury upon the Correct Employment of Friction Based Devices

Tony Ratté

Friction is experienced as a force which resists motion. The factors which determine the amount of resistance to motion, the magnitude of friction force, are twofold: a numerical representation of surface roughness, and the force perpendicular to the plane of motion. To enumerate the details:

Frictional force F is proportional to normal force N ; N being the force with which the surfaces push against one another.

The friction coefficient μ takes into account the roughness of both materials in contact with one another, in this case, the roughness of the rope and rappelling device.

The frictional force can be found as follows:

$$F = \mu N$$

Observe the table on the right. Under identical loading, the rope with a higher μ value will produce a larger friction force. Note that the coefficient is different for dry and wet rope. This explains why it is easier or more difficult to rappel on different types of rope.

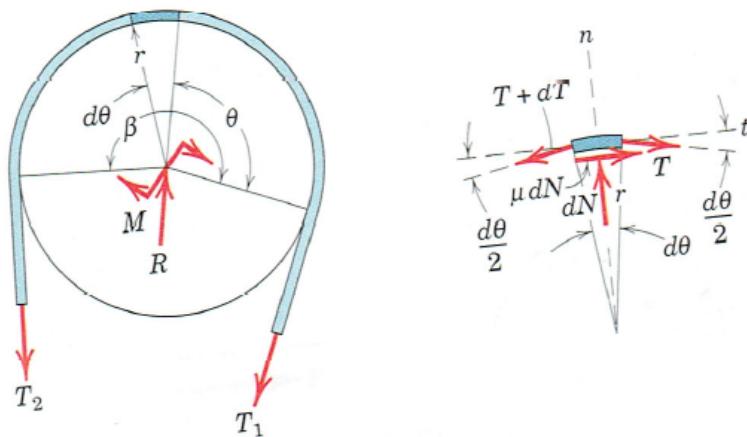
Typical friction coefficient ranges for ropes of various materials sliding on smooth steel surfaces

Rope material	Friction coefficient – static	
	Dry	Wet
Nylon	0.1–0.12	0.12–0.15
Polyester	0.12–0.15	0.15–0.17
Polypropylene	0.08–0.11	0.08–0.11
Aramid	0.12–0.15	0.15–0.17
HMPE	0.08–0.11	0.08–0.11

Unfortunately, I did not find relevant coefficients for rope caked in mud after being dragged through a 100 foot crawl, nor could I find any information on the friction coefficient of the steel cable permanently rigged at the platform.

In the case of the rappel devices commonly used by cavers, a rope under tension is passed over

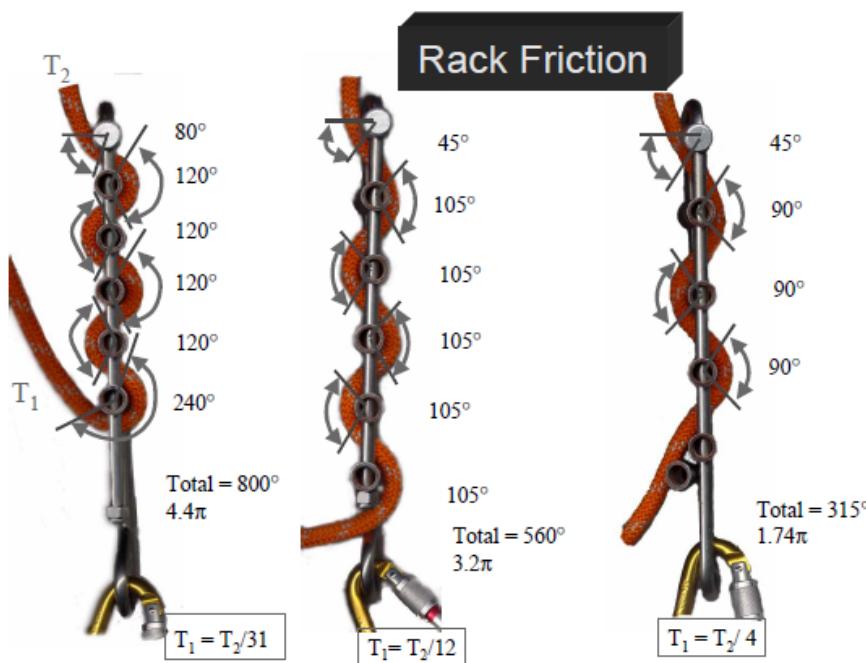
curved surfaces (i.e. the bars on a rack, or the curves of a figure 8). The normal force in this case is derived from the load on the rope and the geometry of the device itself. The diagram below details the geometric specifications of the forces at work:



To spare the reader the pain which is mathematical proof, and to summarize what is happening, the basic equation is as follows:

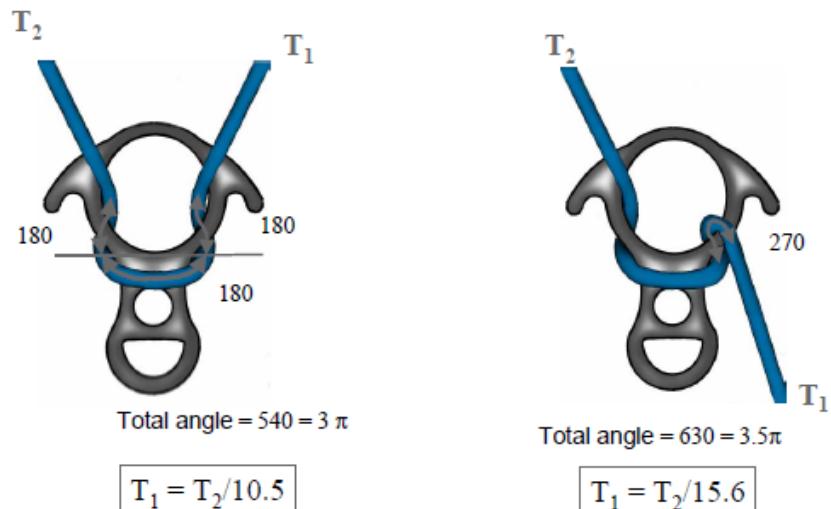
$$T_2 = T_1 e^{\mu \beta}$$

There is a difference in the tension through the continuous rope which increases exponentially as the contact angle increases. If μ is considered constant through the rope, then the only way to increase or decrease resistance is to add or remove surface contact. This is done by either adding a bar or pushing the bars together on a rack, or changing the path of the rope through a figure 8, (specific examples to follow).



In the case of the rack, both adding bars and pushing them together creates a larger contact surface. Starting from the right, total contact angle is shown to be 315° . Adding two bar adds an additional 245° . Keeping the same number of bars, but pushing them together adds 240° of additional contact! From start to finish, the difference in tension has increased by 775%, which demonstrates the high level of safety and control provided by the rappelling rack.

When rappelling on a figure 8 device, simply changing the angle of the rope using one's brake hand can significantly increase or decrease resistance, in this case by 49%. If increased resistance is needed in an emergency, the increased contact area and high μ value acquired by pulling the rope under the leg creates a brake force greater than that of stainless steel.



In the cave, the most advanced knowledge of ropes and friction is useless if a rappel device is used incorrectly. There is no substitute for training, and vertical cavers should be well versed in the use of the equipment they intend to use underground. One point that should be stressed: TECHNICAL KNOWLEDGE IS NO SUBSTITUTE FOR EXPERIENCE.

Author's note: In an attempt to disguise the lack of actual effort that went into the composition of this piece, I was sure to over-explain the subject matter and include completely superfluous verbiage while intending to lend myself the dubious façade of credibility. To exacerbate this point, I've taken pains to make this aside exceptionally obnoxious.

For a more concise, well written, and informative explanation of the topic covered, refer to these sources which made this article possible:

1. *Engineering Mechanics, Statics*, J. L. Meriam, J. Wiley & Sons, p377
2. *The Mechanics of Friction in Rope Rescue*, Stephen W. Attaway, Ph.D.
3. *Handbook of Fibre Rope Technology*, H A McKenna, J. W. S. Hearle, N O'Hear, Woodhead, P138



It's A Long Way To The Top

By Beth Mutchler

Rappellin' down a long rope
Into the cave below
Stop to take a photograph
Whoops, there went your croll
Tumblin' down
Gettin' stoned
Gettin' beat up
Broken boned
You get down
See it's cooked
That croll is mangled
It was softer than it looked



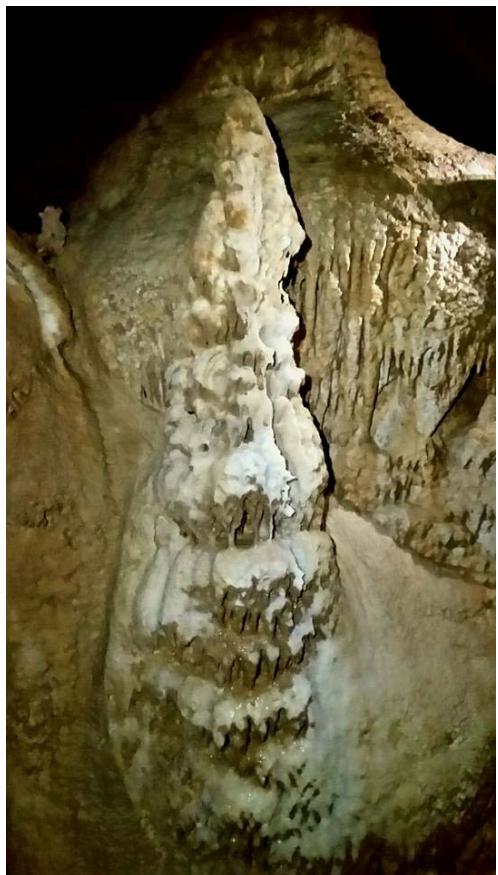
It's a long way to the top if you've got a busted croll
It's a long way to the top if you've got a busted croll
If you think it's easy doin' sit and stands
Try movin' all the knots with your hands
It's a long way to the top if you've got a busted croll

Pull out your spare rope
Makes you wanna cry
Sit there and hope
You remember how to tie
Helicals
Get it right
Proper length
Nice and tight
Thousand feet
Up a pit
That's how it goes
And you're getting' sick of it

It's a long way to the top if you've got a busted croll
It's a long way to the top if you've got a busted croll
If you wanna see the stars up in the sky
Look out, keep climbin' high

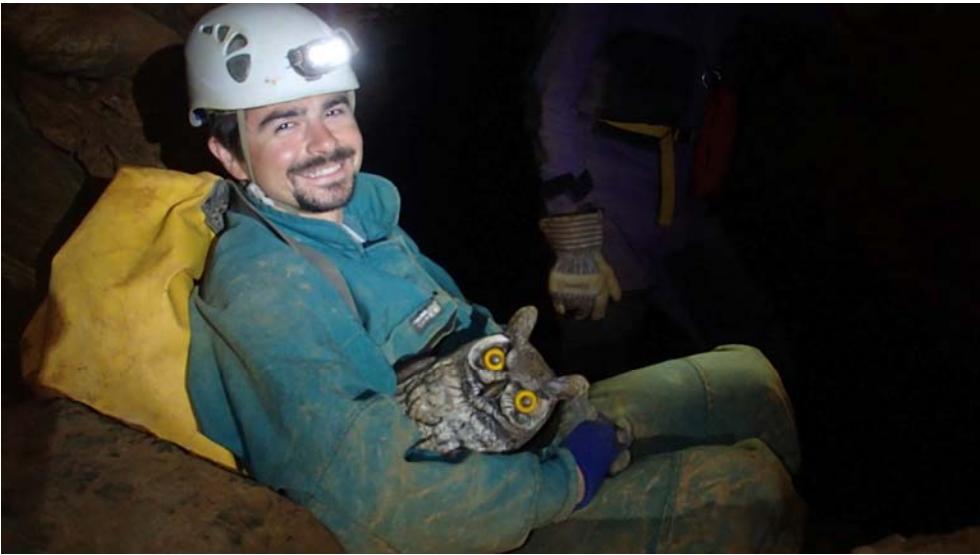
It's a long way to the top if you've got a busted croll
It's a long way to the top if you've got a busted croll
It's a long way to the top if you've got a busted croll
It's a long way to the top if you've got a busted croll

Well it's a long way, such a long way
It's a long way, such a long way
It's a long way, it's a long way



HORACE THE GREAT HORNED OWL

Horace's earliest memory from childhood is vague and revolves around a hate for pigeons. He felt a special animosity toward said creatures, though - as far as he knew - he'd had no run-ins or poor experiences in their company. His hatred toward pigeons seemed to serve as a calling, but over time he began to question his position against pigeons and similar birdfolk. There was



He was first introduced to the VPI Cave Club was at the 2015 NSS Convention in Missouri and therein found alcohol and cave photography. The latter served as a creative outlet to express himself, forever changing his life. One caver, Nick Socky, even created a caving database to record his underground adventures for him.

no one to turn to about his hesitations and questions except his human employers. He soon learned that pigeons were considered pests, and he was being used to scare off similar nuisances. Upon this realization, he resigned in order to focus on "finding himself."





From there on out, Horace has made many true friends who have taken him to new places all over the country. At the encouragement of his ever-widening expanse of two-legged companions, Horace expanded his photography and modeling career to the aboveground world.

To this day, Horace enjoys his time living with a myriad of different folks. He's a very easy house guest, as he requires no real food or drink. In fact, his stay is entirely free of expense to whomever is putting him up. When he does get out, his popularity and borderline-celebrity status grants him special privileges - he often gets one of the best seats at any event and at least one photo-op with other well-known guests.

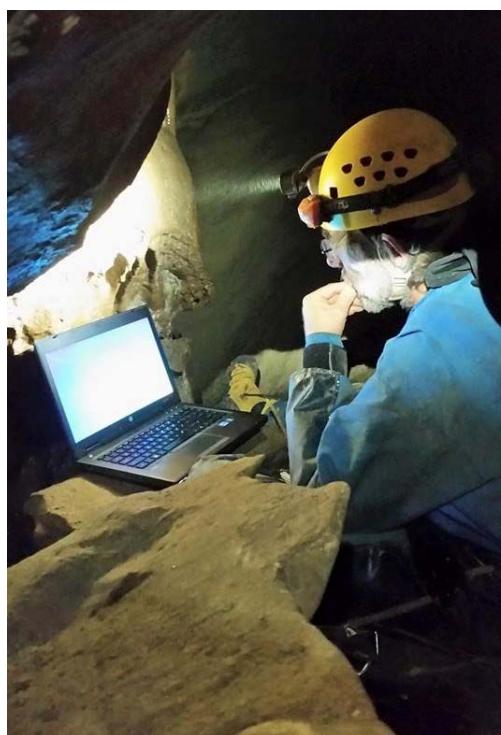
We as a club are respectfully grateful to have Horace as our cohort and look forward to many years of tomfoolery with him. However, in the event of his falling down a pit that no one wants to rappel, we'll just buy a new Horace from Dick's Sporting Goods.
HA - dicks.



THE GROTTO GRAPEVINE

In January 2015, Dan and Ellen Crowder moved to Australia. They had a fair number of run-ins with local wildlife, chased a storm in their ute, and took the time to visit CheeseWorld (open seven days a week!) and Crocodile Dundee's Walkabout Creek Hotel. It is expected that upon their arrival back to Blacksburg, we will discover that they no longer understand Fahrenheit, nor how to measure things in feet and miles, relying instead on metres and kilometres. This will make cave surveying with either Crowder extraordinarily challenging.

John Echols and Sam Huff moved to Florida and promptly joined up with the University of Florida's outdoor club. They've even brought some Floridians back to Blacksburg so we could ogle them and their weird coconuts. Almost immediately, we put rum in the coconuts, shook 'em all up, and proceeded to get drunk with the Floridians.



In October 2015, there was a cave rescue in Scott Hollow Cave in Monroe County, WV when an individual broke his leg. Those of VPI decided this was a far more worthy rescue than the 46 cavers who got stuck in some cave somewhere when the batteries of the portable projector died while they were watching footage of Big Foot and the Loch Ness Monster getting it on. Said cavers were rescued later without injury or mishap, and rescuers were very impressed with the stadium seating they had arranged for their underground video viewing. The 46 cavers were trapped for twenty eight hours with nothing but, "You know what they say about big feet..." innuendos to keep them company.

At TAG, a beer fairy was born, quickly advanced through the ranks to general, and successfully led its troops against the forces of sobriety. The beer fairy was spotted on numerous occasions across the TAG Fall

Cave-In property and late one evening was found shaking Jeramie Clifford's tent with some of its soldiers.

John and Katrina George were married in May 2015 and in September of the same year, they and Baby Juniper moved to North Dakota. They now measure how cold it is by how long one can stay outside before their eyeballs freeze to their eyelids. Juniper is pictured to the right.



The Long Rope Committee set up a massive Tyrolean traverse during the month of June 2015 that reached from Deighan's platform to the London Underground Pub. It was deemed by local authorities as "a truly impressive feat achieved by individuals with truly impressive drinking habits."



Brian, Deborah, and Georgia McCarter came up to visit Blacksburg from their home in Louisiana and attended the Orndorff Holiday Party. Baby Georgia was found upstairs asleep in her baby carrier with a note scrawled in Sharpie on a paper towel that read, "If screaming, find Deborah or Brian." (pictured to the left) Their awe of the Orndorff house prompted them to purchase a house of their own.

In September 2015, Steph Petri came down with a bad case of bronchitis. She was under the weather for quite some time, during which we consulted with experts in the field who told us that she had begun speaking at a "normal" volume.

Travis and Jessica Coad got married on a beautiful spring day in May 2015 (pictured below). Of all those in attendance, the officiate seems to have been the one with the longest hair.

In December of 2015, Philip Balister invented Microsoft Word so he could write a paper and graduate. Congratulations, Philip! We're all very proud of you.

After a long evening of darts and drinking at the Underground one Wednesday, it came to light that Steve LePera never actually got anything signed off for his membership; instead, he stood in front of the club and tied a bowline on a coil with a cherry stem using his tongue. He was voted in unanimously.

Matthew Skowronski had a mishap in Thailand. You, dear reader, may make up the details as you see fit.



QUOTABLE QUOTES



Andrew Lycas: Take inspirational pictures of people and put their shitty quotes under them.



JEchols: Well, I was dressed as a box of wine and I was swinging around on the pole and the box was pretty big and awkward and I ended up slamming my arm into the wall. And now I have this huge bruise.



Tommy Cleckner: I had zero experience and zero guidance and performed accordingly.



Wil Orndorff: Every time you change anything in Microsoft Jerk-Office, it shits all over your entire document.



Joe Calderone: I thought you said you sold your superfluous organs on the black market.

Nick Socky: I thought it was blood and semen.

Amy Skowronski: There is a myriad of ways that I make money.



Philip Balister: Why aren't there any caves in Kentucky or Tennessee?



Calvin Long: They're talking about reintroducing wolves to that particular Bass Pro Shop.

Nick Socky: Back in my day, we used to have to go into the office! Now I can do work in my bathrobe and fall down canyons!



Bill Koerschner: I coulda made punch, all I needed was orange juice, lemonade, and ginger ale *turns away from the sink* and SOMEHOW I'VE GOTten WATER ALL OVER MY PANTS!



Andrew Lycas: Is the station behind your head?

Jonathan Roberts: Okay.

Andrew Lycas: No, I'm asking.

Jonathan Roberts: Yes. What?

Andrew Lycas: God dammit.



Jason Delafield: I tried Deighan's meat stick.



Brian Ekey: I'm cutting the bread. Like I'm gutting a fish!

Philip Schuchardt: You gotta bone the breadfish.

Brian Ekey: That sounds dirty.

Philip Schuchardt: I'll butter your bread... fish.



Kelly McCarthy: I'm having a goblin in the pickle jar situation.



Alex Booker: Me and my friend ain't never tasted a earthling before.



Jonathan Roberts, after tossing keys to Nick and hitting him in the face: Oh! Are you okay?

Nick Socky: No! I'm not wearing my helmet, babe

T Cleckner: I'm surprised you're ever allowed to take it off.



Jeramie Clifford: By the second night, I was still drunk.

QUOTABLE QUOTES

Deirdre Conroy: Do caterpillars have existential thought?

Steve LePera: Our cave was near the I Love Cox Bible School.

Calvin Long: What are we listening to? Peter and the Wolf on shrooms?

Tommy Polson: Give me all the slack, I'm off the fucking cable ladder.

Mike Futrell: You are like a shining star careening through the universe.

Deirdre Conroy: Don't give me that, you old skeeze.

Brian Ekey: If you don't understand Night Bacon, you need to get the fuck out.

Bill Koerschner, doing a Philip Balister impression: Back when I was a trainee, we had to change a tire four times to get to Bland County.

Steve LePera: Gear up, intrepid explorers, booty abounds!

Phil Benchoff: There's a market vacuum for tactical camisoles.

Tommy Cleckner: Usually, I run about fifteen minutes late. My PR is two hours, though.

Philip Balister: When do I put my pants on?

Jenn McGuire: I think I'm just going to just chill up here and eat cheese.

Amy Skowronski: Dude, cheese?!

Naomi Orndorff: You can come sit over here.

Beth Mutchler: You just went for the goods. You didn't even inch your way there.

Lee Olson: Absinthe makes the heart grow fonder. And makes the mind grow duller.

Deirdre Conroy: Good thing my pee preceded me down this tunnel.

Molly Lucier, about upper deckers: That is not a life skill, so I will not include it in my curriculum.

Amy Skowronski: I'm fascinated by Booker's hips.

Andrew Lycas: Aren't we all?

Alex Booker: It's my Irish heritage.

Calvin Long: Why is there shit in the woods? Oh yeah, *animals*.

Kelly McCarthy: There's never *not* a good time for male strippers.

Wil Orndorff: So if you insert that into your rectum, which end do you put in first?

Steve LePera: That's a Sorting Hat question.

Scott Rapier, gesturing with a pint in hand: She's my niece. I'm her Drunkle Scott

Andrew Lycas: "Eight eight."

Amy Skowronski: "Eighty eight or just eight?"

Andrew Lycas: "Eighty eight."

Amy Skowronski: "What? Eight?"

Andrew Lycas: "Ten times eight point eight."

Amy Skowronski: "Or eleven times eight."

Andrew Lycas: "Fuck off."

Tommy Cleckner: This raccoon has committed adultery and by the laws of our people must be stoned to death.

Daniel Crowder: "Trog article from a rainy English ferry terminal—SUCK IT NERD."



