

THE TECH TROGLODYTE



SPRING 2020

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A Letter From the President

Greetings ladies, gentlemen, and cavers,

It has been an eventful and memorable year for VPI. We hit the (under)ground running over the summer by receiving a handsome sum of money from the Town for the role of Trash Police™ at their Summer Solstice Festival. We were so good at collecting garbage for pay that you'd almost think we had past experience. Now down to the real dirty stuff...

After only a mere 6 months (+/- 2) of saying we would, we gussied ourselves up and got down to business building a new fence at Clover Hollow. 200 feet of blood, sweat, and strategically placed subsurface rocks made real men out of the lot of us. If that wasn't enough physical labor in the cold to scare people off, we got a lot of people surveying for the first time! Granted, part of the pull was some colorful advertisement of WVACS weekends and the promise of Windy Mouth virgin passage, but many trainees agree the real reward was the splendor of their first WVACS Cave trip!

Speaking of real rewards, for the first time in known history, a Club meeting was hosted at the London Underground. Now that the old farts are aware that it is possible for the meeting to come to them, they have insisted on permanent relocation so they can drink and heckle from the familiar comfort of their second home. Of course, the Club as a whole has gotten a taste of the forbidden fruit, that is, drunken home Zoom meetings. Human White Nose (COVID-19) struck with a force following Spring Break and suspending meetings, caving, and Club events for the remainder of the school year. While this is tragic, it is only fair that the bats get their revenge and we stay inside to practice our table traverses in order to properly challenge Nittany Grotto when the time comes.

Zoom meetings were not the only time cavers were caught on film this year. In fact, many distinguished members and trainees were selected to participate in a live reading of Pulp Fiction. Our audition tape has been sent to all the major networks and a contract is currently pending for a reenactment of Cats. Muchas gracias to Elvis Grotto™ for their role in a continuing legacy of cavers on the big screen.

It has been my honor and privilege to serve y'all this year, and thank you for making it such a successful one. An additional thank you goes out to Nathan Kearney, Meredith Blanco, and Rowan Berman. I only look so good at my job because of all y'all do to support me. To all the trainees who have not gotten their membership, git on it. To those of you that finally did, congratulations, now please start heckling the aforementioned group so we can see another 77 years.

Sincerely Yours,

Taren Woelk

Taren Woelk
VPI #478

New Members



#483 Chad Casella



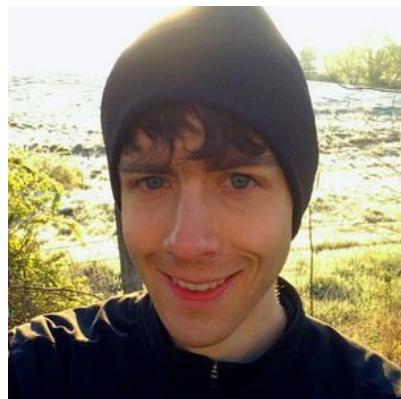
#484 Emilie Hollingsworth



#485 Jay Hedeman



#486 John Fruhauf



#487 Jeffrey McCullen

will

Joker

A Mad Lib

By Jeffery McCullen

Enter the following to complete the mad lib:

1. Field of study:
2. Plural noun:
3. Plural noun:
4. Verb ending in ing:
5. Plural noun:
6. Plural noun:
7. Plural noun:
8. A very important task:
9. Plural noun:
10. Adverb:
11. Verb:
12. Noun:
13. Verb:
14. Same verb as above:
15. Verb ending in ing:
16. Verb ending in ing:
17. Noun:
18. Verb ending in ing:
19. Noun:
20. Noun:
21. Type of punishment:
22. Place
23. Plural noun
24. Activity
25. Adjective

Abridged Version of the Constitution of the VPI Cave Club

Student Grotto of the National Speleological Society

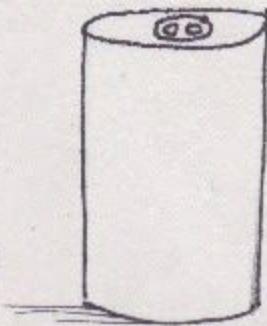
The name of this organization shall be the VPI Cave Club, Student Grotto of the National [field of study] Society. The purpose of this club shall be to promote interest in, and to advance the science of [plural noun]; to promote conservation of [plural noun] and safety in their exploration; and to encourage fellowship among those interested in [verb ending in ing].

There shall be three classes of members: full, associate, and prospective. Full membership is restricted to [plural noun]. They will have access to [plural noun] and may use [plural noun]. Associate membership shall be reserved for those who have [a very important task] but are not [plural noun]. Any individual may be invited [adverb] by the president and vice president to become a prospective member upon recommendation of a full or associate member. A prospective member may attend and address meetings but may not [verb] or hold elective office. Amendments to this Constitution may be submitted by motion of any [noun] and then tabled after passing with a simple majority of votes from full membership.

By-Laws

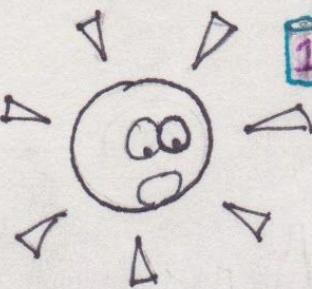
- a. Never [verb] alone. It is recommended that at least three people be on any [same verb] trip:
- b. Everyone participating in a trip should be physically and mentally capable of [verb ending in ing] on that type of trip. Mind [verb ending in ing] substances will not be used immediately prior to or during a cave trip.
- c. Never leave a prospective member or other inexperienced [noun] alone.
- d. To be qualified for full or associate membership, a prospective member must demonstrate elementary [verb ending in ing] skills in a cave, a working knowledge of [noun], and be endorsed by a [noun] in good standing.
- e. Any prospective, associate, or full member who has allegedly committed an infraction of the VPI Cave Club Constitution, or By-Laws may face possible disciplinary action in the form of [type of punishment]
- f. The officers of the club shall be elected by ballot from candidates nominated from the [place].
- g. The club files shall consist of cave maps, trip reports, meeting minutes, cave related publications, membership related material, and [plural noun].
- h. The grotto shall publish a periodic journal to advertise [activity] and other activities. It shall further contain material of scientific and [adjective] interest to the caving world.

If you give
a wolf
a claw



A rejected
children's book

By Alex Faunce



1 If you give a wolf a claw,
the wolf will ask for more.
He'll be his sassy, wolfy self
after two, or three, or more!

2 Next the wolf will find some Pabst,
and then he'll start to change.
He'll lose his sass, and say nice things,
which, for a wolf, is strange!

What happens after beer,
you ask?
Why, it's more beer,
of course!
The wolf will dance
for hours on end,
until he finds...
MALÖRT!

3



4 IF you give the wolf
Malört,
he'll respond in one
of two ways.
He'll either vanish
for a while,
or stand in a trance
and sway.

5 Time will pass. The sun will set.
But the wolf won't go to bed.
You'll beg and plead, to no avail!
He'll turn and say, instead:

6 "I won't observe your bedtime.
This wolf doesn't follow laws!
If you didn't want me to party,
you shouldn't have given me claws!"

Cave Biota Introductions and Ratings

in the style of those memes jason sargent keeps sending me

By Reilly Blackwell

1. Millipede

A millipede is quite low to the ground, but his sheer quantity of legs qualifies him as a high performer. If he is Kind he will be easy to spot. if he is grey and purple he is rude and a Hider. If he has many long wiggly hairs he is an Orndorff. **three stars**

2. Pseudoscorpion

A pseudoscorpion is your god now. someday one of us might be as cool as a pseudoscorpion. Whether he is an Arm Day Pseudoscorpion, who can be trusted with holding your baby, or a Hesper Kernel, who can be trusted with holding your corn, a pseudoscorpion can be trusted further than you can throw him. Please do not throw him, he is very delicate. **five stars** but these stars come with a warning: if you fuck with a pseudoscorpion he will fight you, and so will I.

3. Springtail

Springtails were put on this earth to punish us for our sins. I have tried thousands of times to catch springtails and because I am sinful I have dropped thousands of springtails. If you know any really nice virgins please send them my way, I can't catch springtails, my family is dying. Some springtails are silver and they get an extra star for being the Joe Exotic of springtails. flamboyant, traitorous bastards. **one star; two for the Springtail King.**

4. Snail

Snails might be sand. They're having an ongoing identity crisis. If you can spot em they are great. Some look like a boob and those get **four stars**. Mike Futrell, greatest caver in all italia, gives snails **two point five stars** for impeding the velocity of his booty scooping.

5. Cricket

Crickets are boring except for when they impersonate spiders. Make sure you bring your Jenn-O-Meter to check if this cricket is successfully impersonating a spider. **one star**

6. Shrimp

We don't have cave shrimp in virginia. Get the fuck outta here. **zero stars**

7. Isopods

These come in two flavors: Aquatic and Ranch. Aquatic Isopods can move with no vitesse but they do have pretty sweet antennae. **four stars**. Please do not eat isopods unless you have a permit from the state.

8. Salamanders

A salamander is the supermodel of the cave. Her tail is long and has many curves. She is sparkly, or green, or orange, depending on her wardrobe. If she is green please Report Her To The State because she is probably a communist. If she is orange you can trust her, not with your life, but probably the life of a trainee. **four point five stars**.

9. Diplurans

Diplurans dance only to Wiggle by Jason Derulo & Snoop Dogg. A dipluran has two tails, so if you are an ass man this is the cave biota for you. I am not an ass man so diplurans get **two stars**.

10. Bats

There are many species of bats and all of them are knowable only by the Inimitable, Effable Biomancers of the Southwest Reach. bats are like statics: good fuckin luck. Regardless of species they are sure to be cute but bewildering, which should be a life goal for all of us. %&*&\ stars

Monday club

-Vanessa Pinter

Monday club was formed out of necessity and boredom. Two friends with an unusual day off and no one else around found each other and united. On the inaugural Monday, Joker and I decided to take my 4Runner out to a local four-wheeling track. All was going well. We descended steep embankments, traversed rushing creeks, and escaped bottomless mud pits with only the loss of one running board. We decided we needed more. I took a short horseshoe shaped track straight up the mountain, and on the descent, the trees seemed to be closing in on the small path. I looked left, I looked right, I even backed up, but the only way was forward. I positioned the 4Runner the best I could, pulled in the mirrors, and crept forward. With encouragement and spotting from Joker, we squeezed the truck through the trees to the sound of creaking and groaning that I can only imagine was last heard when the titanic sunk. I do not know how wide my vehicle was (measurement "x") but the path between the trees was $x-1$ inches in width, as later evidenced by a rather broad dent on my passenger quarter panel. Alas, victory was won and celebratory PBR was soon at hand.

The following Monday, a third caver, Ashley Lewis joined this small rambunctious cohort and the Monday Club was formed. With lessons learned from the previous Monday and the 4Runner in shambles, we set off for the off-road track in Jokers Ford. Not surprisingly, a near catastrophic amount of metal was unsheathed from the passenger side of the cab and bed after trying to desperately maneuver around a tree while neglecting the limits on the turn radius of this monster of a vehicle. This "accident" was later determined to have been a valuable insight into the rust damage accumulating in that general area and thus accelerated his ability to repair the truck. With a few donkey kicks from beneath the truck and some profuse apologizing to Ellen Crowder we retired four wheeling for a while.

After several weeks of vehicular repair, this threesome decided we could get into less trouble if we just went caving. Following an old lead near James cave, we began our mission by entering a promising cavern that, while dry today, appeared to take a whole stream recently. We gathered our tools, picked a point of attack and began to dig. After 6 hours all we had to show was a pile of logs, a pile of trash, and a pile of dead animals (rest in peace). After a short break for Taco Bell bean burritos we continued until we penetrated a small opening. With desperation and impatience we began to try to cram ourselves into this restriction. With a shove from above, I was able to enter the passage. A whole new world! A place, none of us had ever been. Simply amazing; until the passage choked to a fist sized hole after about 25-30 ft.

After a hiatus of several months, we reunited for a Monday trip, this time at another lead in the James Cave area. Joker and I brought on an additional caver, and former VP, Dustin Schleifer. After purchasing a digging bar from the Rural King we made our way to another hole under a tree. While the passage was wide and had some mild airflow, it was lacking in overhead cover and pitched downward. With a couple hours of digging a penguin slide, I was able to squeeze down the shoot and drop into a passage. Another awe inspiring moment. Surreal, somewhat scary. Was there booty to be scooped? I called for the men to follow but alas a rather

ill placed rock was causing some shoulder dystocia and had to be modified. Without the more traditional means, a come-along was attached to this rocky impediment and it was quickly relieved of its imprisonment in the passage. All cavers made haste into the passage. There were tall ceilings, pretties, bats, and ongoing passage to be surveyed. Due to the new pandemic that was just reaching the U.S, this cave was named COVID Cave. When the pandemic passes and caving resumes we will determine what secrets this little hole in the ground holds, perhaps on another Monday.



A Virginia Caver's First Year in Texas

or

Cavers are the Same Everywhere, I Don't Know Why I was Worried

Randolph Colby

Excluding the last nine months, the New River Valley has been my home since I was seven years old, and I have been a VPI caver during the entirety of my time at Tech. When I moved to Austin last June, I left two families behind.

Within just a few weeks of moving in, I had found and started attending the meetings of Austin's UT Grotto. I was welcomed in despite joining at a particularly hard time for the Grotto, which had recently lost several of its oldest and best-loved members. It was a comforting surprise to find that a lot of cavers here knew cavers from back home (most specifically Reilly Blackwell, you seem to have made a very good impression on a lot of people). As the University of Texas is no longer officially affiliated with the UT Grotto (today that stands for "Underground Texas"), very few of the members are students, but the group still has plenty of young adults and an excellent set of annual social events. On the Fourth of July, just weeks after I had moved, the grotto put together a flotilla of kayaks and canoes to watch fireworks from the river that runs through the heart of downtown Austin. We got two shows for the price of one, as 1.5 million Mexican Freetail bats poured into the evening sky out of South Congress Bridge around sunset. Drew Thompson and Patty Calabrese graciously loaned me a kayak, and watching the lights of the city and the fireworks mix together in their reflection on the Colorado river, I felt like I had found a group and place where I would be happy. Over the months since then, I've met many delightful cavers of all degrees of intensity, and generally enjoyed my life here in Austin. Another VPI caver (Naomi Orndorff) has also moved to Austin, and several more have passed through.

The actual caving around Austin is significantly different from what we have around Blacksburg, and the caving in Texas at large is very different than the caving in Austin. West Texas has stunningly decorated caves with large passages, sometimes formed by dissolution not with carbonic acid from rainwater, but instead geologically sourced sulfuric acid. This creates incredible speleothems unlike the ones in Virginia. West Texas is a long way from Austin though, and most of the caving I have done since moving here has been within the City of Austin itself. The city contains dozens and dozens of caves, and while most are closed to the public either through gating or location, the UT grotto has access to many. Most of the passage is small and dry, and the chert is white instead of black. The land is beautiful and covered with a mix of low oak trees, cedars, and cacti. Cave entrances often have Texas persimmon trees growing nearby with their sweet, juicy black fruit hot in the sun as a post-cave snack. The

equipment you need differs little from back in Virginia, but you may want to ditch the extra polypro and pick up a pair of elbow pads. Keep your trash bag/heat tent in case of emergency though, if you get wet and super-hot 70ish degree rock will leach out your heat eventually.

The bulk of my experience and thoughts caving here have been focused either on the delightful social interactions you get on a caving trip, or on the physical realities of moving through passage. Dealing with hazards is an important part of caving, but a proportionally small part of the experience compared to the previous two. I hope you'll forgive me then if I spend the rest of my article discussing them; I think they're very interesting to write about.

When you move from Virginia to Texas, you trade one set of hazards for another. First the good side of the trade; hypothermia after wading through a waist high stream is no longer a pressing worry, as the caves here are warm (around 70 F) and for the most part dry. Falling a significant height is rarely a worry either, as while Austin does have a few notable pits, exposure isn't frequently a part of caving the same way it is in SWVA. As far as approach & entrance hazards, you needn't worry that freeze-thaw cycles have loosened rocks above entrances on warm spring days; it hardly ever freezes here. Lyme's disease isn't as prevalent here as in the east, instead there's a relapsing fever that can (usually) be quickly treated by antibiotics and lacks the long-term effects of Lyme's.

Now the negative: Bad air does exist, although it's usually just a problem in the summertime. Standard practice here is to carry a BIC lighter to test the air as you go, as changes in the flame's behavior will alert you when the partial pressure of oxygen in the air starts to decrease. A few cavers also carry CO₂ meters, but these are expensive and not rugged. I have heard some cavers insist that the oxygen content of bad air always varies inversely with the CO₂ content, and thus the lighter is sufficient for testing, while others (notably including someone who carries a CO₂ meter) say there is a second, secret flavor of bad air where the CO₂ content of the air increases without an equal decrease in oxygen. Short of caving with someone who carries a CO₂ meter, all you can do about this sort of air is ask around before you go and pay close attention to the way you feel as you cave, especially in the summer. The situation where you must test most carefully and pay the closest attention is when rappelling into pits within caves, where CO₂ can stratify if there's not much airflow.

Texas also has plenty of snakes. Rattlesnakes and copperheads love to hang out in cave entrances (I've seen one of each in caves so far!), which provide both an easy place to feed as mice enter and leave the cave in the morning and evening, and a cool place to be during the heat of Texan summer. Because of this, you enter and exit caves slowly and carefully here, maybe even tossing some sticks in front of yourself to drive the snakes back into their cracks and out of the path of travel. Listen carefully for rattles, and don't take it personally if you need to turn your trip around before it starts because the rattlesnake wedged itself under a rock you need to crawl past. Keep in mind though that the snakes don't want to bite you, and if you don't mess with them they generally won't mess with you.

Spreading histoplasmosis spores by kicking up dusty bat poop is also a worry in Texas, particularly in dusty caves with large bat populations. However, many of the caves in Austin specifically don't host large bat populations, and no matter where you are avoiding close contact with bats and their waste is good practice.

While the specifics of the activities might differ a bit from place to place, it seems to me that cavers (and their parties) are much the same wherever you go. If anyone wants to come visit me in Texas after the pandemic winds down, I'd be happy to show you around and take you caving. Two last things I need to mention: One thing the UT grotto (or more specifically Kara Savvas) does exceptionally well is programming for the meetings, every single meeting has some incredible talk with hosts ranging from expedition cavers, bat, salamander, and fish scientists, and cave divers, to forensic anthropologists. Coronavirus has not managed to put a stop to this, as even our Zoom meetings have presentations. The other is that Bexar grotto down in San Antonio is another lively, active group whose cavers have left good impressions on me. Stay safe and have fun VPI, I'll see you at Halloween!

TAG spring break trip summary in the form of what could potentially be described as an epic poem if you were to squint at it

By Alex Corrigan

Monday:

Hang em high was Monday,
rather a fun day.
We traversed fields and woods and small cliffs to find the cave
Even though we nearly lost Monty in the woods on the way.
Many of the rappels were shoestrings,
uncomfortable, mildly alarming things
On which sometimes a croll wouldn't catch,
Little slips in the latch,
Which is alarming to say the least.
However, we found many magnificent beasts in the cave
Salamanders of glorious splendor
Long and orange with spots rivaling the stars
Small and yellow, shy and with bars of color
Tan with stripes and small and dark
They're truly remarkable creatures.
We came out of the cave to a sunset
but hiked back in the dark.
With coyotes howling and crickets and peepers, we made our way back to the start.
Alas the rain continued, the hot tub could not be revived.
Although heartbroken we managed to survive.

Tuesday:

The rain continued on and off the entire week.
'Twas cloudy, and painfully bleak.
But on the way to Valhalla we fit all of us nine
In Nathan's dad's truck and that was a time
All the way up the road in the truck
We hit potholes and stones and mud and muck
With Nathan in the drivers
Other Nathan and Ariel in passenger
Pete in a back seat and Rowan on the floor, Chad in the middle back, myself on Meredith's lap
And Monty on the center console, head poking out of the sunroof, smacking his helmet with every bump.
A hammock was set up as a refuge near the pit,
With many of us hiding under the tarp above it.
200ft down we found mushrooms, fossils, and a bat
We looked up at the sky and wondered that
The rain had briefly stopped for us.
200ft up, then hauling gear back to the car

Rowan climbed up last and we thought a rope pad was forever lost
A sad but acceptable cost of the trip.
But upon pulling up the rope,
We found that the rope pad had tangled its strings,
And somehow formed a knot two feet from the bottom of the rope
We thought it was lost, it said nope,
Back down the hill, we packed in the truck again
And bounced along back to our cars

Wednesday:

Lovely hike to fern cave with the manager Steve
Got some stories, spilled some tea
Found a red eft on the way up, a lovely little friend.
Split the group in two for a full send.
Four went horizontal,
My five went to surprise
Walking in the stream under the waterfall
Where the cave resides.
Crawling along an edge to an abyss
With a room of caver mud art
I nearly didn't go down because with the rope weight I couldn't get a good start.
Headlights were deceiving,
Distance wasn't real,
Reaching the bottom was relieving,
And climbing up in the darkness an incredible feeling.
Overall on the trip-we gained an appreciation for space blankets,
One walkie talkie was lost to a puddle, brave soul, for its service we thank it.
And I found an albino crayfish.
Once out of the cave and back down the mountain
We learned of the newly declared pandemic And how our fountain of learning
Had declared all classes to be online.
We were mostly fine,
Kinda in shock

Thursday:

Thursday was tumbling rock
Speed caving for fun
The short people unlocked their powers to run
Fully standing where others had to bend
Ariel was quite proud of her ability to full send
We had a dance party at one point
And a photo shoot near the Christmas tree
Truly both sights to behold, indeed.
Back out of the cave we got pizza at joes
With 8 huddled around a booth for 4 as it goes

Back at nss, cards against humanity was played
With some delayed reactions
Like "Black, COMMA, dude"
(A request for a black card)
We laughed incredibly hard.
Some sock wrestling was had
Otto was tied to a chair
It was an overall interesting day, to be fair

Friday:

Stephens gap was the last cave
And my first to rig
I did half my test
And the rest was completed
A week later.
The pit was nice, though wet
As waterfalls tend to be.
We found trout lilies and trillium on the hike,
Lovely as always to see.
It all made me think of last year when Moneyhun went down the pit on his bike.
We returned and packed to leave
Having had a damp but enjoyable week.

Saturday:

The entire ride back consisted of cave themed yo momma jokes via messenger, such as the following:

yo mama so fat I have to get a belay to do a body traverse on her
yo momma so ugly that she's been repelling for the last 4 decades
yo momma so stupid she tried to put a fat rabbit knot on a diet
yo momma so fat she considers borehole a squeeze
yo momma so stupid, ants go spelunking in her brain
yo momma so fat you could survey her chin rolls
yo momma smells so bad we had to send Wil Orndorff in with an air measurer
yo momma so ugly she could get cast as a chud without needing any makeup
yo momma so stupid she'd try descending with a "rack" in a way that would cause some very interesting friction burns
yo momma so stupid she keeps trying to take bites out of a bowlines
yo momma so stupid she thinks two figure eights are a figure 16
yo momma so stupid she painted her nose black to stop the spread of WNS
yo momma so ugly that the trip leader suggested doing lights out the whole cave trip
yo momma so fat that when she coiled rope we could fit it over the whole car
yo momma so fat we had to switch to 11cm rope
yo momma so fat she uses 8mm as actual shoestrings

Things I've Learned in TAG

By Matthew Kok

At the time you are reading this (probably at, or just after Picnic), I will have spent almost two years caving in TAG (Tennessee, Alabama, Georgia). During that time, I have learned many things, and this is a short list naming and describing some of those learned things. Trainees¹, this article is mostly directed at you. If you ever have an opportunity to visit TAG to go caving, I (and pretty much everyone else) highly recommend you take it.

There is no such thing a dry cave

I don't mean that there are no dry caves, you just probably won't visit one because they're boring relative to all the other caves which will probably get you wet. The good news here is that TAG caves tend to be a few degrees warmer than Virginia/West Virginia caves. This means that hypothermia, while still a threat, is not as much of a concern, especially during Summer. Water can be fun, but project caving while you're soaking wet still kind of sucks (at which time you should recall and adhere to Rule #5)². Wetsuits are still recommended for full-body submersion.

VPI is very different from other grottos

I've spent time caving with Dogwood City Grotto and Birmingham Grotto. You can go caving as a brand-new person in TAG, but don't expect to get on weekly trips like you would at Virginia Tech. DCG and BHG rarely do public trips, so going caving usually means paying for a yearly membership to get on the member-only trips. Just like VPI, existing members of these grottos volunteer to lead trips. Unlike VPI however, TAG caves worth seeing are usually require a long drive and the members are usually adults with jobs, families, and other things more important than caving to attend to³.

The ease at which you can start caving with VPI is something that you take for granted until you see how other grottos operate. VPI has caving trips weekly, loaner helmets and lights, regular vertical training sessions, loaner vertical gear and members who secretly wish they could teach a class called "Caving 1015: An Introduction to Caving". Going caving as often as you can and the ease at which you can learn new things is something unique to VPI, appreciate it.

Carbide is still a thing

People still use it.

I assume for novelty.

¹Sorry, I meant Prospective Members.

² If you are unfamiliar with Rule #5, please contact your nearest VPI Cave Club member.

³ Yep, some people believe there are more important things than caving.

Sometimes it smells bad.

TAG cavers still like to have fun

In TAG, age truly is just a number. TAG cavers are just like VPI cavers, except with more money and less hair. Mudslides, swimming, and playing in the mud are a few of a TAG caver's favorite things to do underground. When not in a cave, you can find a TAG caver participating in activities such as: partying, planning a party, and cleaning up after a party. The average age of a VPI caver tends to be lower than non-college affiliated grottos, yet for some reason, the amount of partying, shenanigans, and general hooliganism remains consistent across all age groups of cavers.

Whatever people have been telling you about TAG, it's probably true

Longer caves, deeper pits, more organisms, more water, stickier mud, darker darkness – it's all true. Whatever caves in Virginia do, TAG probably turns it up a notch.

Everyone knows everyone

Cavers are a tight knit bunch, as you've probably figured out. It is not uncommon for one caver to belong to more than one grotto, or for non-members to show up at your grotto camp out or trip. In my time here, I have met an unexpected number of people who have caved with VPI before or know another VPI member. Ever heard of the Six Degrees of Kevin Bacon? Well in TAG there is about one degree between you and just about any other caver; if you don't know John Doe personally, you definitely know someone who does.

Caver Measurements

You've probably learned from fellow VPI cavers about "Caver Time". You probably learned about Caver Time the morning of your first cave trip because the leading member was horribly late. There is not exact definition or formula for Caver Time, but a safe formula to follow when planning caving trips is:

$$t_{caver} = t_{actual} + 15$$

t = time

What you might not have heard of from Virginia cavers is "Caver Distance". This is something only recently I learned about in TAG. Caver Distance refers to, as you are probably figuring out, the inaccurate estimate of distance by a caver.⁴ When a caver tells you that a cave is only a short walk from the parking area or campsite, they really mean the cave is a mile up the mountain. If someone says they can see the cave entrance from here, they can see a mountain and know the cave entrance is on the other side. Basically, if a caver is telling you about a cave to you using ambiguous words to describe distance, they are either exaggerating or understating the true distance.

⁴ VPI cavers do not seem to use Caver Distance. I suspect this is because a large number of VPI members are engineers whose degrees and careers depend heavily on their ability to accurately measure things.

A Place Where I Belong

By Ariel Carter

When I stumbled into Smythe 146 for the first time, I had no clue what I was getting myself into. There were so many people, it was chaotic, loud, and confusing. I had absolutely no clue what was happening, but I did my best to understand everything that was going on. By the end of the meeting, I somehow got on my first trip to Starnes, with Maddie as trip leader. I would later be terrified by her driving skills.

At the time, the Starnes entrance descent was one of the hardest things I had ever done. It was soon replaced when I had to climb out. Despite the terrifying canyoning, I laughed more in the few hours in that cave than I had during the first weeks at Tech. I wanted to come back, even though I was a little terrified to do so.

In the coming weeks, after proving I could tell people what it was two weeks in a row, I became a member of the Trog committee, kicking Landgraff to the curb, and replacing Chad as the main Trog speaker at meetings. My reign of sassiness telling people to do their damn Trots began.

At the writing of this, I've been on 20 cave trips. I have a distinct memory with every trip I've ever been on. Some highlights:

- Seeing the "flowers" in Clover Hollow and witnessing the nicknaming of Gummy Nathan
- Getting stuck in the Filter in Links for twenty minutes and almost throwing up then participating in a gummy war
- Being led on what felt like a wild goose chase in DMC by Delafield
- Climbing probably one of the sketchiest climbs at the waterfall in New River
- Going through the tightest crawl ever at Hancock and getting tiny rocks stuck in my ear (courtesy of Taren)
- Being semi-terrified when finding a demon baby, zombie person, and fake skeleton on my second trip to Giant
- DOING LINKS WITHOUT GETTING STUCK
- Being one of maybe a few dozen people to see the horizontal part of Fern (now my favorite cave) and climbing out to find a pandemic had been announced.
- Activating my short people powers in Tumbling Rock

Despite all the fun in the caves, the activities done aboveground are some of the best memories I have at Tech. The potlucks and speleos are filled with the chaos that seems to follow cavers around, debauchery, smiles, scary movies, and laughter.

The people in VPI, young and old, in my opinion, are some of the best people on this campus. Through the months, I never once felt alone, which is a little bit of a surprise. It's been one of the few places I've felt like I belong to. And I have everyone reading this to thank for that.

When Worlds Collide: A Tale of Cavers and Middle Class Suburbia

By Nathan "Otto-Bot" Otto

It was a quiet, peaceful morning in the Foxridge parking lot. Children played on the sidewalks, old ladies took their dogs for walks, UPS drivers delivered packages that were hopefully free of coronavirus. All in all, it was an idyllic scene that looked like it was ripped straight from a stereotypical movie set suburbia. But, something out of place soon caught the eyes of the onlookers. To the confusion of many, a young man was seen wrapping what appeared to be a very long purple belt around one of the trees near the lot, muttering something about 2s and 3s and wrapping and pulling. After much fuss and faint cursing, the man eventually appeared satisfied with his work and took his strange purple belt back inside. Peace and order returned to Foxridge. However, legends soon formed around the mysterious man, and rumors concerning his eventual return grew and spread. One almost shudders to think what kind of havoc could be wrought on the delicate minds of the suburban residents if the man ever decides to throw a rope in a tree of all places, and practice the fabled "Changing of Overs." Let us hope it never comes to such madness.

Right Gear for the Right Cave

Chad Casella

When exploring the illustrious cave systems around the state of Virginia, across the United States, and even outside of the country, it is important to recognize that not every cave will be structured exactly the same. Some may have large open boreholes that give you plenty of room to explore while others may have you stream crawling for a large portion of time and being really mad at the person leading woke you up hungover from the previous night to go this trip. In any event, having the proper gear for the type of cave you are going into can really affect whether you had a really good or horrendously bad experience. This is something I had to learn the hard way when I got invited to my first out of state cave trip to Windy Mouth at WVACS last October.

Being still semi-new to caving and only having gone to the more local caves around the Blacksburg area I did not really know what to expect from this opportunity to delve into a cave I have never been to or heard of before, but like any naïve and eager trainee I wanted to go regardless. Once we park and get ready to head on into the cave I was kind of confused at first because we were right next to a stream and that's when Nick Socky (the trip leader and amazing caver for any new trainees who happen to read this at some point in the future) pointed downstream and said it is about a twenty min walk to the entrance. This scenario is what some individuals like to refer to as "Caver Distance"¹. Now, this brings me to my first point of being properly prepared for cave trips; depending on the amount of walking you will be doing to the cave, into the cave, around the cave, back out of the cave, and finally back to your car you will probably want some sort padding in your boots or wear a couple layers of socks to reduce the amount of strain on your feet. Obviously rule #5² will automatically come into effect if it starts to become an annoyance and you complain, but if you can prepare for a lot of walking beforehand then why not?

When we finally reached the entrance, the shape of the passage looked like someone had just drilled a large hole into the side of a cliff and just made a really long mineshaft. There were some old and worn out knee pads by the entrance and that's when Nick has described it as his "graveyard of old cave gear". When I asked if he thought I could still get and use out of them he did not really say anything, but instead just laughed. We then proceeded to crawl for

about 900ft (~274m) down the first passage and then another 800ft (~244m) through the Windy Stoop with even more crawling afterwards. Moral of the story for all of the trainees that happen to read this at picnic, or by some chance years after, unless you enjoy not having any feeling in your knees for like three days afterwards it would be in your best interest to just buy some damn knee pads. Any industrial hard cover ones work well, but I prefer volleyball knee pads just because they are a lot more flexible and have just as good of cushioning as the former. It also saves you the hassle of trying to create innovative ways to crawl around that do not involve being on all fours, although depending on what you come up with it may actually be useful and amusing for other individuals on your trip.

¹Refer to “Thing’s I’ve Learned in TAG” article by Matthew Kok in this troglodyte, good read.

²If you are a member this should be self-explanatory. If you are a trainee, ask a member.

Why do I cave?

By Monty Noblezada

I probably ask myself this question every time I get stuck in some uncomfortably painful squeeze or finally get over an absurd lip on a vertical climb. I think it's healthy to probably remember why one would voluntarily put themselves through pain, even if it's fun pain. I knew after going caving for the first time at Links that I was hooked and have felt extremely motivated to go all the time. The feeling of visiting and exploring a new cave for the first time is addicting. I mean, who wouldn't want to spend 6 hours in a dark, wet hole in the ground covered head-to-toe in glorious cave mud. Caving brings out my inner adrenaline junkie, but I don't go for just fun thrills and danger. Exploring caves satisfies a strong, innate desire to discover and see new things. I will never forget viewing the beautiful gypsum flowers in Clover Hollow or rappelling into Valhalla. It's mind boggling to me on just how many caves exist. There's no shortage of caves and pits to visit and I plan on continuing to cave wherever I live. One day, I will explore all kinds of caves around the world from Siberian ice caves to Saharan desert caves and tropical pacific island caves. If I am lucky, I might live long enough to be able to explore lava tube caves on the moon or mars when interplanetary space travel becomes affordable. Although I will always remember how fortunate we are to have so many fantastic caves near Virginia Tech. No two caves are really the same and I appreciate that fact immensely. I also like that caving can be easy or deeply challenging depending on the cave and one's skill level. I enjoy the highly physical and technical challenge, but sometimes I also like to take things slow and make time to marvel at cave formations. While I prefer long horizontal trips, I have grown to really enjoy all the complexities and nuances of vertical caving and pit bouncing. I am still learning new knots, rigging, and how to improve my frogging technique. Lastly, caving forces you to rely and trust others, even with your life at times. It's a dangerous sport and I am fortunate to be a part of this club where I can learn safe practices from some of the best cavers out there. We have amazing people and I am happy to have caved with them during my time at Virginia Tech. So far I have racked up over 150 hours of being underground and I am content knowing I don't regret a second of it. When I ask myself why I cave, I simply say it's a part of who I am.

Writing a neural network to write a TROG article instead of writing a TROG article: A Proposal

By Paul Walko

While trying to come up with an idea for this year's TROG I wondered if I could just make a computer do it for me; turns out that's a lot of work so here's a proposal instead.

There are about 95 TROGs total on Sivtac with each one containing 30-80 pages. Using the low end of this, 30, on average this puts each TROG at somewhere around 15,000 words per TROG or 1.5 million words total. I've never worked with neural networks, but based on some quick google searches this seems like it should be more than enough content to do something. I anticipate writing the actual neural network being fairly easy compared to organizing all the TROGs.

There's a couple major blockers here: Transcribing all the TROGs where either you can't copy/paste text or where there's issues selecting text, figuring out if this is even feasible, and determining a name for the neural net itself. Let's say 1/3 of all articles need to be transcribed, so $1.5m/3$ gives us 500k words. Assuming typing at 60wpm this gives us about 8300 hours. For reference, there's 8760 hours in 1 year. Clearly we need a better solution here such as adding "transcribe 5 TROG articles" to the membership requirements, some really good OCR program to extract the text, or find some people really interested in helping out. We may also be able to get by without doing all this manual labor, it's hard to say though.

Once the neural net is finally built, I propose naming it A.I. Cartwright. In addition to this, I wonder if the article would count as the author of the neural net or not? Assuming we have success with this, what's next? Trip quotes? Songs? Nicknames?

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Robyn Koerschner

Biographies are the best histories. Here is mine. Where is yours?

I was born a Redneck Doctor's Daughter in Richmond, Virginia on July 11, 1951. Young Robyn LeFon liked dirt and water. She also loved horses. While in High School, I attended a Fundamentalist Baptist Church. When I decided to attend Virginia Polytechnic Institute (VPI), the Preacher told me, "If you go to that school, you are going to Hell."

In September, 1969, I found the VPI Cave Club. My first cave was New River. Bill Douty led the trip. Bill called me, "a typical girl caver." I took it as a challenge and learned to be a VPI Caver. I became VPI #138 In April, 1970. I did all kinds of caving: vertical, horizontal, sport and mapping. I lit my way with a carbide lamp. I rappelled with double break bars attached to a Swiss seat. I climbed rope with knots.

Cavers never date. They just get together, stay together or split up. I became Mrs. Ed Loud in June, 1973. I had a new B.S. in Biology and worked in the Biology Department at VPI for four years. In 1977, I decided to try and grow up. I left my Blacksburg life to get a B.S. in Medical Technology at the Medical College of Virginia (MCV).

So, what did I do in 1979 with my new degree and independence? I went to work in the lab at Montgomery County Hospital. I also moved into the Main Street House run by Glen Davis. Now, I will explain how Bill (Kersch) got left holding the bag. The bag could push crawlways. After all, I pushed a crawlway into a beautiful virgin passage in Spring Hollow. Bill and I were married on May 28, 1982.

We moved to Texas, where Bill began his over 30 year career as a Petroleum Geologist for Conlips. While living out West, I had a few cats, dogs, horses, and Kathryn. Bill caved and worked. I did as little as possible.

In 2013, My family of 3 plus retired to Blacksburg so we could be near caves and cavers. Bill has loved caving, especially in the Mammoth Cave System. He has also partied like he never was able to when he was a student at Virginia Tech (VPI&SU). I have been to Jones Cave in West Virginia and New River, among others, since we have been back. I want to cave more with Bill when he slows down.

Over the years, I have had fun at OTRs, NSS Conventions, and VPI events. I got together with many cavers. As Wil Orndoff says, "Why not me?". I want to thank my caver family for allowing me to be me. Special gratitude goes to Doug Perkins for being Vice President when I was a Trainee. Now back to Bill Douty who said, "I would rather drink with my caving buddies, than cave with my drinking buddies". Trainees, get your membership and be a VPI Caver for life.



How **NOT** to Cave.

By Matthew Kok

You've all read countless articles on proper caving technique. This is not one of those articles.

- Break formations in your way. They're probably in your way, plus they'll grow back.
- Take your broken formations home with you. They'll look cool on your shelf.
- Use spray paint or glow sticks to mark your path. This will keep you from getting lost.
- Sneak into closed caves. Closed caves = less traffic = more likely to see cool stuff.
- Wake up bats. Who wants to just look at a sleeping bat?
- Cave without a helmet. Helmets are hot and heavy, increasing fatigue.
- Carry minimal gear. One light and as few clothes as possible. Less weight = easier caving.
- Share pictures of your caving adventure online. Be sure to include a name and location so others can also experience the wonders of the cave for themselves.
- Refuse all belays. Belay rhymes with delay. Coincidence? Delays mean you see less of the cave.
- Refuse assistance from others. It makes you look weak. Nobody wants to be the weakest link in the chain.
- Leave your trash. Somebody else will pick it up.
- Rappel as fast as possible. Don't want to hold up the group.
- Don't bother checking your harness. It wastes time and you probably put it on right anyway
- Don't lock your 'biners. Again, this wastes time.
- Don't tie a knot at the end of your rope. This wastes rope.
- Tie the rope straight into bolt hangers. This way you don't need to carry extra carabiners.
- Take a salamander or two home with you. They're cool pets.
- Free dive those sumps. Organizing a dive trip takes too long. Better to just check it out now.
- Pass gas in tight passages. It's unhealthy to hold it in.
- Don't pad lips. They don't call it Indestructible Rope Technique for nothing.
- Don't question other people's rigging. It's offensive. They will see this as you not trusting them or thinking they're not good enough.
- Don't ask how others are doing or check up on them. It's none of your business.
- If somebody is uncomfortable doing something, make them do it anyway. Otherwise they'll never conquer their fear.
- Don't call landowners or knock on their door to ask about their cave. You don't want to wake them up from a nap.
- Sneak away from the group. Don't be a sheep.
- Run whenever you can. It's faster than walking.
- Jump down everything you can. It's easier and faster than getting on rope.
- Don't write TROG articles. You should probably be studying instead.
- Share this article with others. It's full of good tips.

Beginner's Luck

A trip report from the CRF New Year's Expedition to Mammoth Cave, Kentucky

By W.F. Koerschner

There is a bolt climb objective in the Roppel portion of Mammoth Cave that I had been pondering for 20 years. The north end of the 20Wx5H Ursa Avenue ends at a shaft that bisects the passage preventing access to the possible continuation. Bob Alderson had planned to climb it during the CRF New Years Expedition but he was struck down by illness and had to abort at the last minute. I knew of a dig nearby that had the potential to bypass the climb and decided to check that first.

Upon arrival at Hamilton Valley I consulted with expedition leader Ed Klausner as to who he could give me for the Ursa Ave trip. He suggested Mandy Harris and her boyfriend Matt Domeraki, but he cautioned me that Matt had never been caving before at all. Roppel has a reputation for killing noobs, so he was justifiably concerned but left it to me to decide. Mandy really loves caving and was eager to share the underground world with Matt. She wanted Matt to get on a good trip and I could see the pleading look in her eyes. Matt is long, lanky and strong so no problem physically, but would he wig out mentally? I described the trip to him – 10 to 12 hours, 1000 ft of stooping / crawling, dryish, a few squeezy bits but otherwise pretty mellow by Roppel standards. He was totally calm and I could tell that nothing was going to ruffle this guy so I took a chance on him.

We entered the Weller Entrance to Roppel Cave at 10:35 AM and proceeded out Walter Way to Goes Canyon and stooped / crawled in from J1 to J26.

We first surveyed the lead to the left at J26 (JR-Survey from J25) which is a 3hx8w tube. At JR2 a trickle infeeder joins from the right, past which the tube fills. Above JR2 there is a relatively easy hole up into a narrow walking canyon crossing overhead. On the wall of the canyon above the hole is a smoked arrow, labeled 'IN', pointing to the right. We took the survey paleo-downstream to the west (left) to JR5 where the canyon splits into a twisty slot above and a crawl below that are both impassable.

Next, we surveyed east from JR2 to JR7 where we intersected the survey route of Goes Canyon coming up from J27 below. Here the canyon has an additional 12Hx1W upper component that departs paleo-downstream but is too narrow to follow. The JR-survey route is clearly preferable to laying on your side in the water and squeezing up through the heinous slot above J27. I wish I had known this thirty years ago so I could have avoided 20 odd trips through this nasty obstacle.

Past J27 is about 100 ft of floorless 'death slot' that Matt admitted he "did not like" very much, but he did it. We followed Goes Canyon to its termination at the J42 Dome (the bolt climb lead) where we climbed up to the left and doubled back into Ursa Avenue.

We replaced the first shot of the old K-survey from J46 to K1 and then turned into the N-survey where we reshot N1 to N6, and N8 to N11 to hunt down blunders that cause bad

closure in this loop. We located four major blunders in the inclination readings of the N-survey; this loop now closes nearly dead-on.

We put in the N-Survey in 1999 (20 years ago! Wow! Really?) and on that trip Jim Currens had explored a short breakdown gallery north from N11 to a hole where you could see into a 20x20 ft room. He described the lead as a “Prybar Dig”. I had always assumed that this just overlooked the J42 dome and so gave it a low priority.

I had given Mandy and Matt the heavy, steel digging implements (“I can’t take them because I am carrying the DistoX”) so I figured we had better put them to use or I would never hear the end of it. Time to dig!

Mandy pulled out the crowbar and Matt and I scrambled up to the breakdown hole to begin work. The lead was just as Jim described; three shingled rocks blocked a short crawl into some sort of large space. I accessed the physics of the blocks and determined that it was safe to remove them without bringing down the ceiling (a single massive slab). A few minutes with the bar and they were all loose but entangled with each other. After watching my futile attempts to remove even the smallest pieces, Matt says, “Want me to give you a hand with that?” Matt just grabs the biggest block (1x1x1) and rocks it right out of the hole, followed by the two smaller ones. A good hand to have on a dig!

We were now looking into a tight but passable squeeze. I wriggle on through tossing small rocks ahead so that I would hear any cliff before I crawled off it. Shouts reveal an echo, but the rocks make no booms. I emerged at the top of a breakdown slope leading down into a 15hx10w canyon with flow scallops on the walls. I look up and there is a 15 ft diameter well rising through the bedrock overhead and, above that, an expanse of flat ceiling. My heart starts to pound, ‘Holy shit! That ain’t the ceiling of no dome! There is a huge passage up there!’ I start excitedly chanting, “Virgin Cave! Virgin Cave!” Matt, who has never been caving before, is wondering, “Should I be getting excited about this?” HELL, YES! You should be excited – this happens like once every fifty leads and ten years! It looks really big ahead and I restrain my urge to run down the slope, saying, “I am not going to scoop this, we need to go back and start the survey, but I think you are going to like it!”

We continue the N-survey from N15, and by N18 we are through the squeeze and at the top of the slope. We set N19 at a major intersection at the base of the slope and turn right into a dome which I expected to be the dome at J42 at the head of Goes Canyon – it was not. This dome is 25 feet high and 20 feet across. There are several slot canyons at the top, but they do not appear to be passable. The dome has a passable active drain that heads southwest for at least 35 feet, and above that a possible abandoned drain that is obscured by breakdown. These leads are heading towards the J42 Dome which is literally 35 ft away – they must connect. Matt locates an 8Hx5W canyon off the side of the dome that heads northeast, paleo-upstream, with air. We place our last station, N23, into this. Matt reports that it goes at least 100 feet and shows no sign of ending.

Back at N19 there is a steep breakdown ramp that heads northwest up into a large upper-level passage with an expansive flat ceiling 28 feet above N19. Mandy balks at climbing the slope due to all the precarious virgin breakdown. I send Matt back up towards N18 where I had earlier spotted a hole up though breakdown into black space. Sure enough, Matt can climb

into the upper level which turns out to be a tube 30 feet wide! To the right it goes 2hx20w, but Matt heads left towards Mandy's ramp. He traverses around two scary pits that drop into the lower passage to reach the top of the ramp. Mandy is inspired to make a second attempt and manages to stem her way past a particularly scary block to reach the gentler slope leading up to Matt. The passage is 50 feet wide up here and heads northwest to another pit that looks climbable (well maybe). Across the second pit the passage continues 10hx20w heading into the ridge!

We are out of time at this point and leave the booty for next time.

We exited the cave at 10 PM for an 11.5 hour trip.

This was Matt's first caving trip and he had a great time and got to participate in a discovery of major virgin passage – I think he is hooked.

Work Remaining:

N7 - 5Wx2H BD crawl partway up climb between N7 and N8 – 10 ft to BD hole going up into black space that lies north of the known upper level passage.

N23 – Paleo-upstream canyon 8hx5w, good air movement, 100 feet plus, dirt floor, heading northeast.

N18 – Across slope to right and up hole in breakdown, upper-level tube 2hx20w, unexplored. Air?

N19 – Upper level tube 10hx50w northwest to pit then 10hx20w. Ties back to N18 also

N20 – Drain to southwest, 2.5hx5w, heading toward J42 dome

N20 – Paleo drain to southwest, up on ledge 10 feet above active drain, obscured by breakdown. Need to traverse ledge to check it out

Mortuary Caves in the Southeastern United States

By Emilie Hollingsworth

With an air of darkness and quiet akin to that of the womb, it is no surprise that early human populations tied great religious significance to caves, and associated them with the process of death and dying. The indigenous populations of the eastern United States made similar connections. Ritual use of caves in our area (VA, KY, TAG) dates back to the Woodland Era (approx. 1000 BCE to Colombian Contact).

Virginia itself is home to 50 known mortuary caves as of the early 2000's. The closest example is Bone Cave, located in Lee County. Remains found just outside and fully within Bone Cave include those of one newborn, a child, an adolescent, and two adults, as well as those of several varieties of animals. Pottery, beads, and plant material dating back to the Woodland Era were also discovered.

A larger-scale example of the religious importance of caves includes the Salts/Mammoth Cave System in Kentucky. 43 individuals of various ages and sexes were found in the Salts system, along with a very wide variety of plant and animal specimens from the same era. Marks on the human bones suggest ritual defleshing, scalping, and burning. Children and infants were mostly spared from this treatment. Given the location of certain specimens in the vestibule of the cave, it is thought that the entrance was used as a sort of staging area for ritual activities that took place further in the cave. Larger water features, such as the streams and waterfalls present in this particular system, would have likely attracted a large amount of ritual activity. In addition, human mummies found in the cave were possibly consulted as oracles, as was common in Mesoamerica around the same time. Fecal matter in the cave indicates a ritual diet of unusual foods, as well as the fact that this particular population were not skilled hunters, but possibly relied on a more humanoid source of protein.

This intense history of subterranean ritual and sacrifice is a testament to the long-standing religious value of caves, and a sign that our tradition of sacrificing inadequate trainees to the CHUDs is a valuable one.

Sources:

"The Case for Ritual Caves in the Eastern United States" by Cheryl Claassen

"Southwest Virginia's Burial Caves: Skeletal biology, mortuary behavior, and legal issues" by Boyd et al.

Karst along the New River Trail

By Eli Meyer

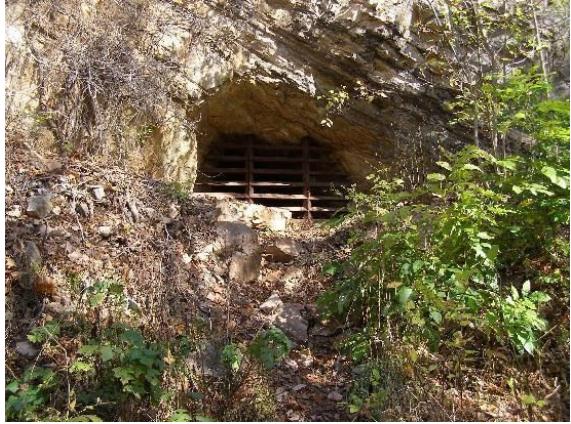


The entrance to the ungated cave, up a steep embankment and noticeable from the trail.

The New River Trail, a Virginia state park, stretches a 58 mile route, between the towns of Pulaski and Galax, paralleling the New River for most of it. The crushed gravel roadbed, gentle grade, and slowly sweeping curves of this former railroad right-of-way makes for an easy ride. The observant cyclist or hiker will notice many interesting cracks, crevasses, and fissures in the limestone cliffs which tower in places up to a hundred feet over the trail. Between Foster Falls and the Route 622 bridge there is a cave entrance immediately adjacent to the trail. It is gated, locked, and maintained by the State Park service. A few miles southwards, about 2.5 miles downriver from Foster Falls, is the above pictured cave. Overlooked by most casual passersby, access is gained from a short, easy scramble over boulders and moss covered logs. Some patches of flowstone adorn the walls near the entrance, and a natural skylight to the left allows light farther into the tunnel. The skeletal remains of a deer were found just inside the entrance.

The cave is not particularly spectacular, nor large. It consists entirely of a short section of walking passage, ending in a breakdown choke after only 100 feet or so. A possible lead through a very tight crawlway was noted near the top of the breakdown, on the left-hand side. However, no air movement was observed.

The trail passes adjacent to many exposed limestone cliffs, most natural, some made by blasting for the construction of the railroad. There is doubtless fruitful potential for further exploration of karst features present along the right-of-way.



Impossible to not notice this cave, a mere 20 feet from the trail.



A view from inside the cave.



The author ascends the breakdown choke at the terminus of the borehole.



Evidence of a prior inhabitant?

Seven lessons you might learn from a New Mexico lava tube

By Penelope Vorster

1. **To appreciate shitty boots:** Before you reach the entrance, your trusty boots will be so shredded from the approach that you will wonder how and why Ancestral Puebloans shod in yucca sandals traveled this hellish landscape. beyond the entrance, abandon all hope for your footwear. by your fourth day on the lava, your toes will look out in horror from their newly ripped windows at the floor of the crawl, which is cooled from God's searing hatred for us all. wear boots you're fine with putting in the trash soon.
2. **New kinds of pain:** The scrape of a chert nodule is a butterfly kiss compared to the wrath of a basaltic corallloid.
3. **North is a lie:** The walls are magnets. The floor, ceiling, and every piece of breakdown you encounter makes a direct attempt to sabotage your survey. You may feel dread as each backsight betrays you more than the last, this is normal. Your face may be permanently changed from furrowing your brow at your book, trying to reconcile lines with sketch. Thankfully, maps of lava tubes are rarely used for navigation other than to find archeological sites.
4. **Spatial mistrust:** each rock, regardless of size, will move. Expect it, lurch with every step you take, learn the dance of the west. Don't touch the ceiling.
5. **Humility:** Your squeezebox number means nothing. See 2, 4.
6. **Improvisation:** Cartographic symbology for lava tubes is as nebulous and arcane as New Mexican cartography standards are tortuous. Does anyone know them? Will you tell me? Make something up, it won't matter.
7. **Discernment:** Sometimes it is worth it to do unpleasant things in the pursuit of data, of booty, of glory. Usually it's better in limestone. You like limestone.

A Comparison of Knot Ascension Systems

By Jeff McCullen

There are numerous ascender systems that can be constructed using knots and friction hitches. I experimented with some of these systems at the platform and identified some of the advantages and disadvantages of each one. In particular, I evaluated two components of knot ascension systems: friction hitch choice and whether to use a two or three knot system. In the end, my preference is to use helicals with a two knot system because it is easy to slide the knots and has two connection points to my harness so I don't have to worry about getting in a heel hang.

There are numerous friction hitches to choose from. The ones I decided to evaluate were the helical, prusik, klemheist, and hedden (upside-down klemheist). The helical was the easiest to slide after loading, however, it required more time to tie and practice to reduce the slack to minimize the stretch after loading. Unlike the other friction hitches, it is tied with a single line of rope rather than a loop, which makes it possible to untie it from the rope without first untying the end that ties into your harness during a changeover. The prusik did not stretch as much and, unlike the helical, tightened automatically so there was no need to worry about reducing the slack. However, it binded easily, especially with six coils, requiring me to loosen the bridge of the knot to begin sliding the hitch again. Unlike the other friction hitches, the prusik can be loaded in both directions, making it suitable for traverses. The klemheist and hedden hitches were similar to the prusik but less prone to binding after load and only able to be loaded in one direction. However, neither of these was as easy to slide as the helical.

A knot ascension system can use two or three knots. In a three knot system, at least one point of contact must connect to your harness and the other two can attach to your feet with "chicken loops" so that, if your top knot capsizes, you will get caught in a "heel hang". To ascend the rope, you slide your top knot (which is attached to your harness) up about as high as your head and sit down on it. With the top knot weighted, slide your bottom two knots (which are attached to your feet) up. Finally, stand up on your bottom knots, unweighing your top knot so you can slide it up again. In a two knot system, both points of contact must connect to your harness. The top knot attaches to your harness in the same manner as in a three knot system. However, your lower knot attaches to your harness as your backup in case the top knot capsizes. A loop in the same cord extends down to your feet but there is no need for chicken loops because you already have a backup attachment point on your harness. To ascend the rope, you slide your top knot up, weight it, and step down on the loop extending from your bottom knot, allowing you to slide your top knot up again. This two knot ascension system is called the "texas kick".

See this video from Cornell Tree Climbing:
https://www.youtube.com/watch?v=4_1MTxvR3TQ&t=300s (how to do it using knots is at 4:25)

In my experience, the two knot ascension system had the following advantages over the three knot system:

- Required less rope
- Used fewer knots
- Was easier to ascend. Since both knots were above my waist, I could slide my top knot up and bring my hand down just above my waist to slide my bottom knot up. Conversely, in a three knot system, you have to bend down to your knees, grip the rope underneath both your bottom knots with one hand and slide them up with your other hand.
- Had a second attachment point to my harness. This is perhaps the greatest advantage since I didn't have to worry about getting into a heel hang. Also, falling into a heel hang could easily result in hitting your head on the ground if you are not high up the rope or on other cave features if it is not a free climb. Additionally, getting caught on your harness would be less of a shock load on your bottom knot. Shock loading friction hitches creates a lot of nylon on nylon friction, which can fuse the rope in excess.
- Was easier to change over. Since both knots are above your waist, you can attach the descender below both of your knots when changing over from ascending to rappeling. In a three knot system, you would attach your descender below your top knot but above your bottom two knots, which requires you to slide your bottom knots down a ways in order to have enough slack to attach your descender. Also, some descenders like the figure eight and the rack without a hyperbar require tying an overhand knot above the device for a hard lockoff, which can be pulled undone if you pull the rope below the device, which happens when stepping into your bottom knots to unweight your top knot. Changing over from rappeling to ascending is also easier for similar reasons.

In fact, I found the taxas kick even has some advantages over the frog system too:

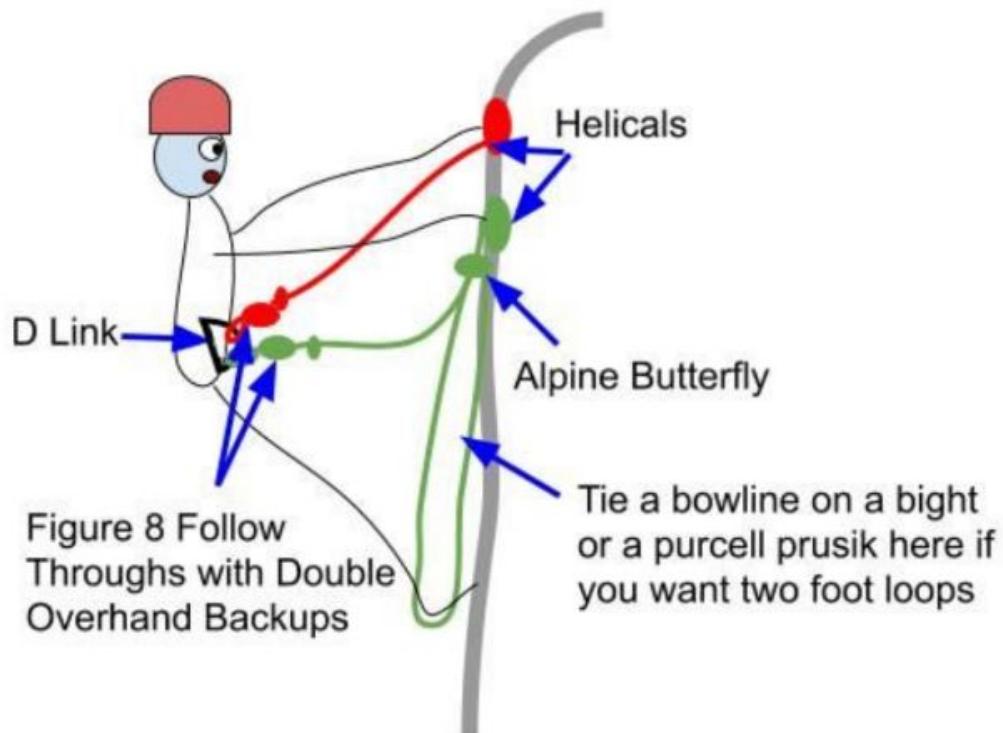
- No chest harness is required.
- You are not forced to be snug against the rope, which gives you greater mobility and is particularly useful for technical rope maneuvers, topping out, and going over lips. However, some people may prefer being tight against the rope.
- It doesn't require rope weight to work smoothly.
- I find it easier to slide top ascenders and knots that are above me. Sometimes the chest ascender doesn't slide up, particularly when there is little rope weight.

The primary disadvantage of the texas system is that it can be less efficient than the frog system because you have to slide your bottom ascender after loading your top knot. Ideally, in the frog system, your chest ascender moves up with you as you stand. However, sometimes it doesn't due to lack of rope weight or because you are doing a more difficult maneuver like going over a lip. In any case, you can not mirror a frog system using knots so this disadvantage does not apply when you are only comparing knot ascension systems.

However, there are a few disadvantages to the texas kick knot system described by Cornell Tree Climbing:

- The use of the prusik requires loosening the bridge of the loaded knot before you can slide it again. In the video, he preferred to do a "hand over hand" motion to advance the knot, which is inefficient and shouldn't be necessary. Ideally, you should be able to simply slide the knot from below without grabbing the rope above the knot, which could cause you to accidentally apply downward pressure on the loaded knot and capsizing it.
- Their use of the prusik used carabiners to clip onto the harness, which I've found often require careful attention to avoid cross loading them while ascending since they are being repeatedly loaded and unloaded. However, this disadvantage can be mitigated by simply tying a figure eight on a (large) bight on the end of the cord and using the loop to create the prusik and the other end of the cord to tie in with a figure eight follow through. Alternatively, using a clove hitch to attach the carabiners may also prevent cross loading, though I have not tested this idea.
- Since the prusik is tied on a loop rather than the end of the rope, you need to untie or unclip your harness attachment point to undo the hitch to do a changeover.

So I wanted to modify this system to use helicals and tie in knots rather than carabiners. Doing this with the top knot cord was simple because you can tie the helical with one end and tie in with the other, just as you would in the three knot system. However, doing this with the lower knot cord is not as simple. Since the prusik (and any of the other aforementioned friction hitches except the helical) is tied with a bight of rope rather than a single line, you can have two lines coming out, one attaching to your harness as a backup and the other extending to your foot, as shown in the video. However, this is not possible with the helical since it is tied with a single line at the end of the rope. Thus, I had to tie an alpine butterfly loop that extended down to my foot just below the helical. I could then use the other end of the cord to tie in. If you want a foot loop for each foot, you can tie a bowline on a bight on the alpine butterfly loop. Alternatively, you could tie a purcell prusik, which would allow you to adjust the length of your foot loops. See the next figure.



So, after much experimentation, I found that I prefer this two knot texas kick system with helicals for ascending rope, primarily because my backup attachment point is connected to my harness and the knots are both above my waist and are easy to slide after being loaded. In the future, I will continue to test it on other single rope techniques like passing knots. Perhaps there are some advantages to the standard three knot system that I have not discovered yet. In any case, it is fun to learn and test new techniques to figure out my preferences and discover the strengths and weaknesses of different approaches.

Best Cave Accident Reports by John Fruhauf

By John Fruhauf, VPI #486

These are some of my favorite cave accident reports I have read this year. All these stories were transcribed by me which took some time because the text was pdfs. Lots can be learned from reading these accident reports. Everyone cave safe, have fun, and stay healthy.

Book 1: American Caving Accidents 1967-1970

Pennsylvania, Carnegie Cave, 1967: On Sunday, 9 July, Jerry Kyle (16), Charles Richter (16), and Nancy Vanderlafske visited Carnegie Cave. All were inexperienced, only Kyle having been caving a few times previously.

The entrance to Carnegie is a 36-inch, tar lined drain pipe, 150 feet long, passing under Interstate 81. The three met another group of novice cavers coming out of the cave when they arrived. Someone from this group, whose ages ranged from 15 to 20 years, left two candles burning in the middle of the drain pipe.

The three passed the candles on their way through the conduit without disturbing them, but it is possible that one of the party could have kicked over one or both of the candles upon entering the cave. Approximately 15 minutes later they started to return and smelled smoke. Upon reaching the conduit the group saw a wall of fire blazing before them in their only avenue of escape from the cave.

Richter became terrorized and started crawling through the pipe into the flames. He continued on and out the conduit despite Kyle and Vanderlafske shouting and warning him not to go. A nearby resident saw black smoke pouring from the pipe, and then Richter emerged and fell to the ground, his clothes on fire. The local police and fire departments arrived quickly and Richter was rushed to a hospital.

Meanwhile, the other two retreated as far back into the main part of the cave as possible, to await help. About three hours later, the fire had burned itself out, firemen, and cavers who had been to the scene, found the two safe and brought them out.

Richter died three days later from second and third degree burns over 59% of his body.

Source: (York Grotto Newsletter, June-July 1967)

Analysis: The accident seems improbable, but there have actually been numerous caving accidents due to fire fed by dumped fuels, escaping acetylene, etc. It is possible that if an older and/or more experienced person had been present, Richter could have been stopped from entering the fire.

West Virginia, Overholt Blowing Cave, 1967: At about 3 p.m. on Saturday February, Ralph Bucca (20) and Jon Lock (19) commenced an exploration in Overholt Blowing Cave. In mid

winter the water temperature is very low; the outside temperature was 6 degrees below freezing. The pair wore slacks and long-sleeved shirts with Air Force exposure suits over them. Over these suits they had an additional pair of slacks and a jacket. They wore hard hats and had adequate primary and back-up lighting. Mr. McKeever, the cave's owner, had advised them not to go due to high water and cold, but did not forbid them entry.

At the Dardanelles (some 3300 feet in), a low stream crawl about 500 feet long, Bucca's exposure suit began to take water, either due to looseness or rips. The pair proceeded to the Mountain Room and about 1000 feet beyond, when Bucca began to feel the effects of the cold water; numb hands and feet. They commenced to leave. At the Dardanelles, Lock also got wet for the same reasons as Bucca. As their progress toward the entrance continued, the cold took a firmer grip upon Bucca.

In Lydia's Lake he stumbled and fell many times. Lock gave continual encouragement to Bucca, who was now "completely numb and stiff;" he crawled the last 1000 feet to the entrance with much difficulty. This was at 11-12 p.m. Lock partly carried and dragged Bucca to a shed where he changed their clothes and cooked some soup. Bucca, however, remained unconscious. Lock then sought out the assistance of Mr. McKeever and together they carried Bucca to the house.

Lock and McKeever received Bucca, but in a state of delirium he burned himself upon the hot stove. Finally, about two hours after entering the house, he recovered sufficiently to talk about the incident.

Source: Ralph Bucca, G. Dallas McKeever

Analysis: Bucca could not have been more than minutes away from death by hypothermia

(Bucca) "Overholt is an exhausting cave under ideal conditions. The combination of extremely cold weather and the failure of the suits to keep dry defeated us more than anything else. I suggest a tougher suit with a different neck enclosure would make the difference between comfortable caving and needless exposure in a cave such as this."

Book 2: American Caving Accidents 1972

Mexico, Sótano de la Tinaja, 1 July 1972: A group of cavers entered Sótano de la Tinaja for the purpose of pushing a siphon in an attempt to connect the cave with Sótano del Arroyo. It was thought that the siphon might actually be only a sump with air space just on the other side of the duck under. It was hoped that a swimmer could determine this within 20 feet, and if he could not, he was to return without going farther. Don Broussard was going to try the connection. He was wearing a diving mask and had a flashlight tied to his waist/ John Fish was to belay Broussard with a safety line tied to the diver's waist.

"A system of tugging signals was arranged and the caver entered the siphon. After swimming about 17 feet he surfaced in what turned out to be only a small air space . He took

several breaths glancing around the pocket to determine this and then dove to return to the group. At this moment he blacked out as the pocket apparently contained very little oxygen and high concentration of methane. The belayer saw the rapid dropping of the caver's flashlight and quickly pulled him in with the assistance of the group. Upon being pulled from the water, the caver showed no signs of breathing so his throat was cleared of water and mouth-to-mouth resuscitation began immediately. The caver slowly regained normal breathing and the group was able to exit the cave." (*Inside Earth*)

Analysis: Even with a safety line, diving with only a face mask and a flashlight is reckless. Driving in cavers has always been extremely hazardous.

Sources: Anon. (1973) "Accident - Sótano de la Tinaja, Mexico." *Inside Earth*. No. 1,

pp. 60-61.

Fieseler, Ronnie. (1972) "Accident Report, Near Drowning on Sótano de la

Tinaja." *AMCS Newsletter*, Vol. III. No. 6, p. 118.

Florida, Little River Springs, Sunday, 27 August 1972: Three New Jersey divers, Kenneth R. DeGrazia (23), Micheal R. Williams (24), and Robert Lewis Grauer (18) scuba dived into Little River Springs sometime Sunday. All three drowned. Grauer's body was accidentally discovered at a depth of 60 feet and about 15 feet from the mouth of the cave. He had a knife wound an inch wide and 2 inches deep in the stomach. The other two victims were about 10 feet apart but 45 feet deeper into the cave.

Analysis: Williams was a diving instructor and was the most experienced of the trio; Grauer the least. All three were experienced in open water diving, but it is believed that they had little or no cave diving experience. The National Association of Cave Diving had placed a sign near the spring warning of its dangers for novice divers. The New Jersey group ignored the advice. They did not use safety lines, wore only single tanks, and used inadequate, commercial lights.

Several possible explanations for Grauer's knife wound were given. His mother stated it was just a scratch and probably happened at the funeral home. The Suwanee County sheriff thought there had been a struggle for survival after one person ran out of air and tried to take the air from one of his companions. The deputy sheriff thought Grauer, being the least experienced, had panicked and the other diver had tried to prod him along with the knife. A scuba shop owner speculated that Grauer tried to escape from the diver with the knife. Any one of these explanations could have happened; no one will ever know what really happened to the divers. It is clear that all three underestimated that hazards of cave driving. These were the 14th, 15th, and 16th drowning in this cave since 1960.

Sources: Anon. (1972) "3 Jersey Divers Found Dead; Were Exploring Florida Cave." Clipping from unidentified newspaper.

Anon. (1972) 3 N.J. Divers die in Cave; Cut Indicates Fight For Air." *Philadelphia Evening Bulletin*. 29 Aug. 1972, p. 31.

Karasik, Ellen. (1972) "Did Carelessness Kill N.J. Trio Exploring Perilous Ocean [sic] Cave?" *Philadelphia Inquirer*. 19 Sept. 1972, pp. 1,6.

Sharp, Eric. (1972) "Underwater Cave Claims Ever-Growing List of Victims." *Ann Arbor News*. 3 Sept. 1972, p. 11.

Anon. (1973) "Wat Ging Er Mis?" *Speleo-Nederland*. Vol. 3, No. 2, pp. 10-12. (in Dutch)

Book 3: American Caving Accidents 1974

West Virginia, Canterbury Cave, Friday, 25 January 1974: At about 2:00pm, Pete Williams (25), Albert Ogden (23), and Scott Roths, all of the Mountain State Grotto, entered Canterbury Cave to make observations for Ogden's Ph.D. thesis. About 200 feet inside the cave is a 34-foot pit which Williams rigged with 70-foot length of soft-lay rope similar to Goldline. The rope belonged to Ogden but had recently been returned to him by a fellow caver. Before beginning the rappel, Ogden stated, *Gee, this is so short, if I fell the worst that would happen is I'd break both ankles.* As Ogden began to rappel, the rope broke, dropping him 28 feet to a flat, gravel floor. Ogden yelled as he fell and may have struck a small ledge in the descent.

In the fall Ogden lost his lamp but the Fibre-Metal helmet with a chin strap stayed in place. Although in pain, he remained conscious and was able to report his condition to his companions. He had a broken right leg and a back injury but was not bleeding externally.

Since the only available rope was at the bottom of the pit, Williams left to seek aid while Roth remained at the top of the pit to keep Ogden company. William was able to notify the local doctor and rescue group and several cavers representing the VPI, Greenbrier, and Pittsburgh Grottos. By 4:00pm Williams returned to the cave with rescue gear he had gathered. Williams and a medic from the local rescue group rappelled into the pit. Ogden was placed on a backboard and wrapped in blankets.

Doctors Gewirtz arrived at the cave but was very claustrophobic. A rather small girl let him know that he was not going to leave until he had examined Ogden. The doctor descended by cable ladder and confirmed that the victim had a broken leg but not a back injury severe enough to hinder the rescue effort. With the use of the backboard Ogden was raised from the pit, but was later placed in a Stokes litter for the last 120 feet.

Analysis: The rope broke near the top. Later inspection showed green spots on the rope at the break. The West Virginia University Chemistry Department analyzed them as being due to dilute hydrochloric acid. Ogden, a geologist, commonly carries a container of hydrochloric acid in his geological sampling kit.

The rope was not inspected before use. Routine inspection and testing of caving ropes is unfortunately not done as frequently as it should be.

The rescue was hampered by the lack of proper rescue equipment such as pulleys. Since no leg splints were available, an inflatable arm splint was used on Ogden's leg. This caused his leg fracture to become compound. Much valuable time was lost waiting for the frightened doctor to enter the cave.

Sources: report by P. Williams and J. Hempel.

Kyle, Jerry (1974) "Cave Accident." *Carabiner Wrap Up*, Vol. 3, pp. 3-4.

The Descent: An examination of the portrayal of caving practices and errors in the film media *The Descent*

By Ellie Burnett

The Descent, a somewhat classic movie that is beloved by people everywhere and despised in the caving community as stupid and inadequate when it comes how caving is portrayed. But exactly what did this film show that pisses so many cavers off? This article will examine the actions of the six cavers in the descent, praising the accurate moments and correcting the sketch moments.

Before I start, keep in mind that although I am by no means an expert caver I am basically an expert on *The Descent*. The first time I watched it was in 2012 when I was at a middle school camp. I remember thinking how cool it was to go into this giant pit and explore a place no one had ever gone. Between then and now I've seen the movie about 7 or 8 times; drunk, high, sober, alone, with friends, with caving friends, in a cave, and not in a cave. Also, this article is about the first release that was in the UK, and the sequel will not be included because it's complete shit. Each action that the characters do will be classified as the following:

Safe: Yes you should do this while caving

Safe BUT: The action is safe but there are things you could do better

Sketch: The practice is something you probably should not do, but is most likely not life threatening.

Not safe: Please do not do this while caving because it is not accurate and will mostly result in an injury or death to yourself or others on your trip.

WTF: Honestly has anyone making this movie ever seen a cave because what the fuck.

Shitty: Not really caving related but just shitty stuff

Disclaimer: This movie is a British film that was shot in England and Scotland. Considering half the directors and actors are American anyway and I know nothing about caving in the UK and the characters are caving in an American national park in America I am going to judge off of US caving techniques.

- At the beginning of the movie Sarah's entire family is killed in a car crash. Juno goes to the hospital but walks away instead of comforting her. Instead, Juno could have helped her friend by being there for her instead of waiting a whole year to take her on this crazy dangerous trip. This is shitty.
- Going for a long run before a long cave trip: Safe BUT caving is very exhausting and requires a lot of energy. Maybe save the run until later so you have all your energy for caving.

- Hungover before caving: Becca, Holly, and Beth are all hungover before the trip. Sketch, you want to feel your best especially if it's a day or several day trip.
- Sam wears a watch. This is a safe practice so that you know how long you have been in the cave and if you need to head back early to meet sign out BUT
- THERE IS NO SIGNOUT. The six friends go without telling anyone that they are going or using a sign-out. This is not safe at all.
- They are in a national park. They have not received permission from anyone to be in the cave, and do not know if anyone else is in it. This is not safe.
- Juno leaves the book of cave maps in the car. This is not safe, you should always have a map unless it is a cave you and another are very familiar with. Honestly, it's a good idea to bring a map anyways.
- No one is wearing seatbelts on this winding off road. Wear your damn seat belt.
- Safety talk: Sarah gives a safety talk on the way to the cave. Safe BUT it should feature more of cave conservation and actual safety, not just bad shit that can happen.
- Rigging is not really seen but looks a little sketch.
- Second lights: Not everyone has a second light, and the ones that do have a flashlight. This is not practical and not safe.
- Juno lights a flare in the middle of the cave. She also yeets it off a cliff. This is bad for cave conservation and potential bats.
- Juno and others jump from place to place in the cave. Not safe for people or the cave.
- Stopping for a snack break: safe but an apple isn't very calorie dense and you also have to pack out the core. They should have brought more calorie dense foods with minimal wrappers, especially since this is such a long trip.
- Holly is the first one to go into the tight crawl space. She has never been caving before, so why is she going first? Juno or Sarah should have led. Not very safe.
- Holly hears the rocks rumbling but fails to tell the others and says it's clear. Not safe.
- Juno decided to lead them in an UNKNOWN cave when everyone thought this was Boreham caverns. WTF NO. Never go exploring in an unknown cave without others who are very experienced, and don't lie to your friends and tell them it's one cave when it's really another.
- Beth keeps unclipping her helmet strap. Not safe, especially after that rock fall.
- Juno lights another flare. Not safe.
- Beth drops a rock and doesn't say rock. This is inconsiderate to the CHUDs.

- Also Sarah should have communicated with everyone and said she left the rope bag, yet she chose to wait until they needed it. Not safe, and at that point everyone is screwed.
- At 39:48 during the crossing Beth has a literal drill on her harness. I have no idea why they would need this drill but at this point whatever.
- The ‘biner used is not a lock off. Not safe. I also know nothing about this clipping thing so I’m just going to ignore it.
- Juno took the safety rope off to “conserve rope”. All this could have been avoided if Juno wasn’t such a show off.
- Sam’s gloves were not rope appropriate; why didn’t she put on the gloves she used to descend if she knew she was going to handle rope?
- Juno mentions that the batteries on their lights will run out. Good on her for conserving light but shouldn’t they have brought at least one extra light? Not safe at all.
- As they venture farther into the cave it becomes apparent that they aren’t marking their path, which they really should be doing if they are trying to get out.
- Holly dives head first into a small passage for no reason and then starts running. This isn’t safe, but maybe it would be safer if Holly died at this point.
- Holly falls down a hole. This could 100% have been prevented if she was walking instead of running.
- Everyone starts taking off their helmets all of a sudden. Not safe.
- Juno decides to free climb up an unknown wall. There is a waterfall spraying water everywhere, making it extra dangerous.
- Sarah starts screaming in the cave. This is not good for cave conservation as it could wake hibernating bats.
- Beth just saw Juno go crazy and kill 3 CHUDs and then silently walks up behind her. Not safe.
- Juno stabs Beth in the neck with an ice pick. Also not safe, and honestly pretty shitty.
- Juno leaves her dying friend to die alone in a cave. Shitty.
- Instead of bringing an extra light Sam brought a giant green glow-stick. Not practical or very alpine.
- Sarah searches the dead bodies for any supplies or lights. This 100% is a great practice because dead people don’t need their light and you should do this if you are ever in a freak cave accident surrounded by CHUDs.
- At this point everyone has decided not to call back to Juno. Some might consider letting your friend die alone shitty, but Juno is the one who got everyone into this mess, so it really is the most practical and safest option.

- After finding Beth still alive Sarah finds out Juno had an affair with her husband. Very shitty Juno, very shitty.
- Sarah breaks Juno's leg and leaves her to die. Normally this would be shitty behavior but is it really with Juno being the worst person ever?

Overall I found this film very inaccurate and the choices made were stupid and sketch, mostly because of Juno. Remember kids, CHUD attacks are not preventable but caving accidents are!

Lessons Learnt Partying with Dwayne

A special report prepared by Eric C. Landgraf for the 2020 publication of American Drinking Accidents.

For those missing the context: on New Years' Eve, rather than making it out to the Bat Ranch or the Ficcoss', I accepted Dwayne's invitation to the party he and Matt Vest were hosting. I broke my leg later that evening. This is a particularly biased (and truncated) version of that story.

1. Car club kids have fragile masculinity

Dwayne and Matt Vest have a hot tub. I was the only caver guest at what was basically a car-club party. Hilarity ensued.

2. "This is the kind of thing that, when you look back, will make it a great story"

What Dwayne said, when we got off the 100-foot zipline off the porch, and I asked if we should take our harnesses off before getting food.

3. "Someone will twist an ankle there"

Dwayne's observation on the step up at the top of the drainage ditch (yes, this is foreshadowing).

4. Bojangles closes at 22:00...

We knew before leaving the house, but it wasn't less disappointing.

5. ...But gas station taquitos are very good

Especially when you're eating while walking, and have been drinking for 8 hours.

6. The moon is bright; still have lights

Dwayne and I did this whole journey with 1 light. Which wasn't too bad going up, but it was definitely one reason for my fall. It likely wouldn't have been a problem if we both had lights.

7. Adrenaline sobers you up quickly

Dwayne and I didn't do anything particularly stupid once I had broken my leg. Dwayne got assistance for rescue, and I made sure someone besides Dwayne knew. But we weren't sober enough to call the rescue squad: it didn't seem that bad. At least I hadn't dropped my taquitos and gatorade.

8. "Pics or it didn't happen"

Basically what everyone said after hearing about my broken leg. There are no pics. But I do have some pretty nice scars, instead. Once this coronavirus thing dies down, I may even make it to the hospital to get copies of X-Rays.

9. Always come to a rescue prepared

Dwayne did bring backup when he got back with his Jeep. But no medical supplies. And Matt Vest showed up in nothing but flip flops, a bathrobe, and a cowboy hat. Allegedly, they debated bringing actual medical splints before deciding against it; I had to improvise instead.

10. "So, uh, a hiking accident? Hiking accident"

Dwayne's proposed cover story, for some reason. Lewisgale were very very confused by my improvised splint, and wheelchairs really suck when you have a broken leg.

11. Beer's a hell of a drug. Electrolytes and morphine are better

The ER nurse was just thrilled to pump opiates into me. IV, anti-nausea, opiates. Of course, I wasn't in much pain; I just wanted some water. 6 hours after getting checked in, I'm finally put on a saline drip. Pros.

12. Cavers are good in a tight spot

Obviously, Dwayne and Matt were critical to the self-rescue. But I hadn't seen the last of the cavers for the day: I got out of surgery that evening to find Joker, Ellen, Delafield, and my housemate Paul nervously awaiting my recovery. They told me how damn near everyone wanted to come visit or offered to help.

My profuse thanks goes out to all the folks who visited me in the hospital and at home, and brought me food and conversation, and to those who bussed me to doctor's appointments and the Pub. A special thanks to Paul, for keeping me from dying for those first 2 weeks, Benchoff, for dropping by at midday just to chat, and Joker, for coordinating all of the responses..

Building the Ultimate Cave Bike

By Paul Walko

Do you ever wish you could bike to all your favorite caves instead of getting your car all dirty every time you go caving? Yeah? Me too. This is THE definitive guide to building a bike capable of handling any ride to a cave including all gear.

Here are some specific features I'm looking for:

- Steel frame (for a more comfortable ride vs aluminum)
- Somewhat relaxed geometry good for endurance (not racing but also not full touring)
- Front rack compatible
- Rear rack compatible
- Frame bag compatible
- 650b wheels for hills (bigger than typical mtb, smaller than typical road)
- Good gearing for hills
- Dynamo hub for charging 18650s
- Disk brakes (for better breaking in bad weather)
- Lots of holes for mounting things

For you bike nerds out there this style might sound familiar; that's because it's essentially the same as old style randonneuring bikes, but unfortunately it's a fairly niche market now. Between the rear rack, front rack, and frame bag we should have enough space for everything.

The first 2 requirements narrow things down quite a bit. I mainly looked at 3 manufacturers here: Surly Bikes, Soma Fabrications, and Velo Orange (VO). I really liked the Soma Fogcutter for a while, then I discovered the VO Polyvalent and liked it even more. Both of these are steel with similar geometries, but the Fogcutter required a bit more work to find the fork I wanted. They also both have all the features I was looking for, great! I definitely spent days looking through tons of different bike models and reading reviews until I knew exactly what I wanted.

With the frame out of the way the next big things are figuring out the wheels and drivetrain. Thankfully East Coasters helped out a lot with the wheels and I decided to use a standard 11 speed Shimano groupset to keep things simple. I won't bore you with all the tiny details about sizing or figuring out which brakes to get, but I spent a lot of time looking through tons of different options.

The specific front and rear rack aren't super important as long as you can fit a front randonneur bag along with 2 rear panniers and have spots to strap more stuff on the rear rack. With all that figured out, let's take a look at what we're working with!



I don't quite have everything yet but it's almost there! Here's my recommendation for splitting up gear:

Front Bag

- Boots, possibly sticking out the top
- Phone (for strava)

Left Pannier

- Helmet
- Food

Right Pannier

- Change of clothes
- Water

Strapped to top or rear rack:

- cave bag

I haven't gotten a chance to test this out yet thanks to the Coronavirus, but look out for an update next year!

The Art of Climbing

By Robert Smith

Ever since I was little, I enjoyed climbing. It started off as a necessity because I couldn't reach light switches, so I would climb the door frame to turn it on or off. After that it was trees. Trees provided a new frontier to climb and explore. The views from the top are breathtaking and are worth the journey to the top. In my experience it is easier to go up than down no matter what you are climbing.

I've always enjoyed climbing because it makes me feel like I'm on the top of the world. Since joining the cave club, caves have provided a new challenge and area to test out my climbing skills. Links is a cave that is mainly canyoning and I like that because it is more of a challenge than just walking. There is an area after the filter which has the highway and the low way. I enjoy the highway because it is easier than the low way and there is a small passage to squeeze through at the end. Links will be a special cave because it was on my first trip to Links and third overall trip which I got elementary climbing requirement signed off. I also did the 5-9 step over as the challenge climb. From then on, I have always been looking for challenge climbs in other caves.

For someone who likes climbing, there are some that make me rethink what I am doing with my life. One of them that made me slow down and strategize my moves was in Starnes. This was not in angry Starnes, but in happy Starnes. It was at the waterfall where you look up and see it coming down. I decided to climb up the wall to the right of the waterfall because there was a cool ledge I wanted to be on top of. The first half of the climb was easy because it was just climbing up to a ledge I could stand on. The other half had hand/foot holds in the wall surface that looked like they were carved out of mud. Some of the holds were not as deep as I would have liked, but I managed to get to the top. After getting to the top I felt a sense of accomplishment and dread because I knew I had to eventually go down. I knew climbing down I had to be cautious and move slow. Since the handholds were not ideal and it was a 20-foot drop; it would have been embarrassing if I fell or slipped in front of a bunch of trainees, scarring them for life. Thankfully, most of the trainees left when I started the descent so they wouldn't see me mess up if I did. I made it to the halfway ledge slowly but surely. After making it to the halfway point I knew I had made it down because I had completed the difficult part. The hard part of down climbing is that you can't see where to put your feet. Also, the waterfall didn't help because it was noisy and that made it hard to hear any instructions given to me on the down climb. It is good to challenge yourself on climbs and sometimes they serve as a reality and ego check to make sure I don't get too cocky.

Climbing is an essential skill used in caving. It helps cavers reach new areas to explore virgin passage or to get to their favorite areas while leading a trip. On your next cave trip, I challenge you, the reader, to climb something new or out of your comfort zone. But the most important thing to do while climbing is that you must challenge the rock and go where no man has gone before.

Fifty Shades of Cave

By Matthew Kok

The End.

No Belay, No Delay - a visual demonstration created by Samantha McCarter



