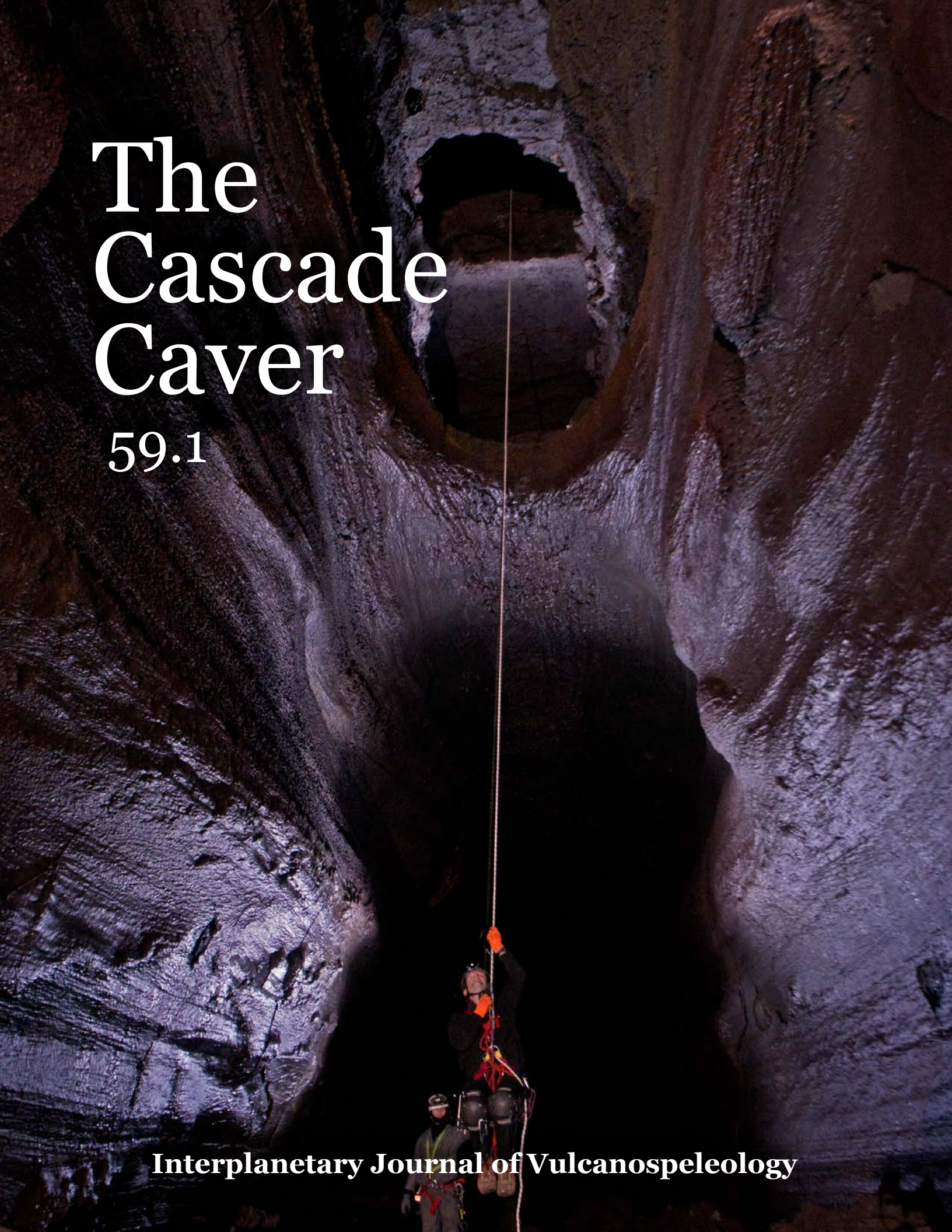


The Cascade Caver

59.1

Interplanetary Journal of Vulcanospeleology





The Cascade Caver

Interplanetary Journal of Vulcanospeleology
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In This Issue

SRT Training February 2020

Page 6

Newton Cave February 2020

by Tyler Christensen

Page 8

Jackman Creek Cave

by Laina McNichols

Page 10

Dynamited Cave

by Laina McNichols

Page 13

Deadhorse Cave Trip

Laina McNichols

Page 18

Mysteries of the Bobbin

Tips and Tricks for using the Petzl Simple and Stop
(reprinted with permission from *NSS News*)

by Stephen Gladioux

Page 25

3	Update from the Chair	30	Treasurer's Report
4	Upcoming Events	31	Meeting Minutes
5	Announcements	32	Grotto Information

[Cover] **Dynamited.** [Justen Despain, October 2018]

[Back Cover] **Lost Creek Cave, TN (2019 NSS Convention)** [Wilmer Perez]

Update

Hello cavers! I present: *The Cascade Caver, Volume 59 Number 1*.

Thank you so much for supporting the Cascade Grotto. It takes everyone of us and all of our diversity and strengths to make this spelunking club what it is. We have a lot of exciting plans for 2020!

As you are likely aware, the grotto has canceled all activities for the month of March due to the worldwide COVID-19 pandemic. Most of our members reside in Snohomish, King, and Pierce counties, the epicenter of the US outbreak. We owe it to our elderly and immunocompromised neighbors to do everything we can to stem the spread of this novel coronavirus.



Daryl Greaser, Cascade Grotto Chair

In the context of archival information, I will add that the state of Washington has canceled all public schools for six weeks, all major sporting events including March Madness, the NBA season, MLB spring training, concerts like SXSW in Austin, local theaters such as PNB, 5th Avenue, and more have canceled or postponed their events, and several cities have “shelter in place” orders. . These are unprecedented times for most of us.

At the next grotto meeting (hopefully in April), we will start with our “Caving 101” series. This year, we are planning to provide basic through advanced Single-Rope Technique (SRT) training to members in a programmatic format, alternating classroom learning at our monthly meetings with field sessions in between. Classroom learning will take place at every regular grotto meeting, providing a source of consistent programs throughout the year, which is challenge for most grottos. Following skills checks, members will progress on more advanced trips to caves such as Dynamited, Papoose, and/or Newton.

This year we will also focus on publishing the newsletter on a regular basis, and Eric Jorgenson has graciously volunteered to take on this role (starting with the next newsletter!). Please support this publication by sending a photo or two and a short description of what you did and where you went. Details to come.

Cordially, Daryl Greaser, Grotto Chair, NSS#45614

2020 Upcoming Events

Trips will be added continuously; all dates and times subject to change at any time; check website for current listings: cascadegrotto.org/events or email cascade_grotto@caves.org at any time for more information.

APRIL 17, 2020 – (presumptive) **Grotto Business Meeting @7PM and Training Program @8PM: Caving 101: Cave Clothing, Helmets, Headlamps, and Packs.** Participants will learn about basic caving principles, best practices, how to protect bats, and more. Free and open to the public. 7pm-9pm, Tukwila Community Center, Meeting Room B, Tukwila, WA

APRIL 25 – (presumptive) **Annual Beginner's Trip** at Mount St. Helens – details TBD – This is typically the first Grotto trip of the season due to winter snowpack. Difficulty: horizontal; beginner

APRIL 26 – **APE CAVE CLEAN UP TRIP** details TBD. horizontal; beginner

MAY 2 - Basic Single-Rope Technique (SRT) training - Ravenna Park Bridge or The Mountaineers Program Center depending on weather - details TBD see website

MAY 15, 2020 – **Grotto Meeting @7pm and Training @8pm: Knots and Basic Rigging;** Tukwila Community Center, Meeting Room B, Tukwila, WA. Participants will learn how to tie knots (and hitches and bends and bights) and learn basic rigging techniques. No experience necessary, free and open to the public. 7pm-9pm, Tukwila Community Center, Meeting Room B, Tukwila, WA

MAY 16 – **Cave Trip: DEADHORSE CAVE** – led by Brad Hutichinson, horizontal; intermediate

JUNE 19, 2020 – **Grotto Meeting @7pm and Training @8pm: Advanced SRT** 7pm-9pm, Tukwila Community Center, Meeting Room B, Tukwila, WA

JUNE – (TBD) – Annual Papoose and T'ac Wees circus, northern Idaho, contact Daryl Greaser for details vertical; advanced/expert

JULY 17, 2020 – **Grotto Meeting @7pm and Training @8pm: Basic Cave Survey** 7pm-9pm, Tukwila Community Center, Meeting Room B, Tukwila, WA

WINDY CREEK CAVE – WA's longest limestone cave 3047' – recon trips begin horizontal; intermediate; long approach

JULY 27-31, 2020 – NSS Annual Convention: Elkins, West Virginia. Details are available on the convention website at <https://caves.regfox.com/nss-convention-2020>

AUGUST – business meeting currently not scheduled; go caving

AUGUST – Scapegoat Wilderness Caving Expedition, Montana – 9 days, Dates TBD, contact Daryl Greaser for details

SEPTEMBER 18, 2020 – **Grotto Meeting @7pm and Training @8pm:** date firm, details TBD

OCTOBER 16, 2020 – **Grotto Meeting @7pm and Training @8pm:** date firm, details TBD

NOVEMBER 20, 2020 – **Grotto Meeting @7pm and Training @8pm:** date firm, details TBD

NOVEMBER (TBD) – Dynamited Cave – Graduation Trip for beginner Vertical Cavers, contact Daryl Greaser for details. This is the last regularly scheduled trip of the season, due to impending snowpocalypses - vertical; beginner

DECEMBER 2020 – ANNUAL HOLIDAYS PARTY, Date/Loc TBD

Remember, these dates and events are updated on a continuous basis - for current listings, please visit our website at: <http://cascadegrotto.org/events>

Announcements:

The Grotto Post Office Box is being discontinued this year. Checks and any other future correspondence should now be sent to:

Cascade Grotto
c/o Talon Swanson
518 Seneca Ave NW
Renton, WA 98057

Grotto stickers and magnets of all sizes are all just \$1.00 and shipping for any amount is just \$1.00! Email Daryl at dgreaser@gmail.com with your order and shipping info.



SRT training

February 1, 2020

This was the first SRT (Single-Rope Technique) training of the year, led by Karl “Dusty” Goldscheider at Ravenna Park bridge in Seattle. The bridge provides an excellent location and is mostly dry except for in heavy rainfall.

NEXT TRAINING: Saturday March 14th at either the Ravenna Park bridge (north side) or the Mountaineers Program Center at Magnuson Park in Seattle depending on weather. No experience required, hours and final details will be posted here: <http://cascadegrotto.org/events>

[Above and next page except upper right] **SRT training at the Ravenna Park Bridge on Feb 1st**
[photos by Mark Garnick] [Next Page, upper right photo by Choice Meyer]





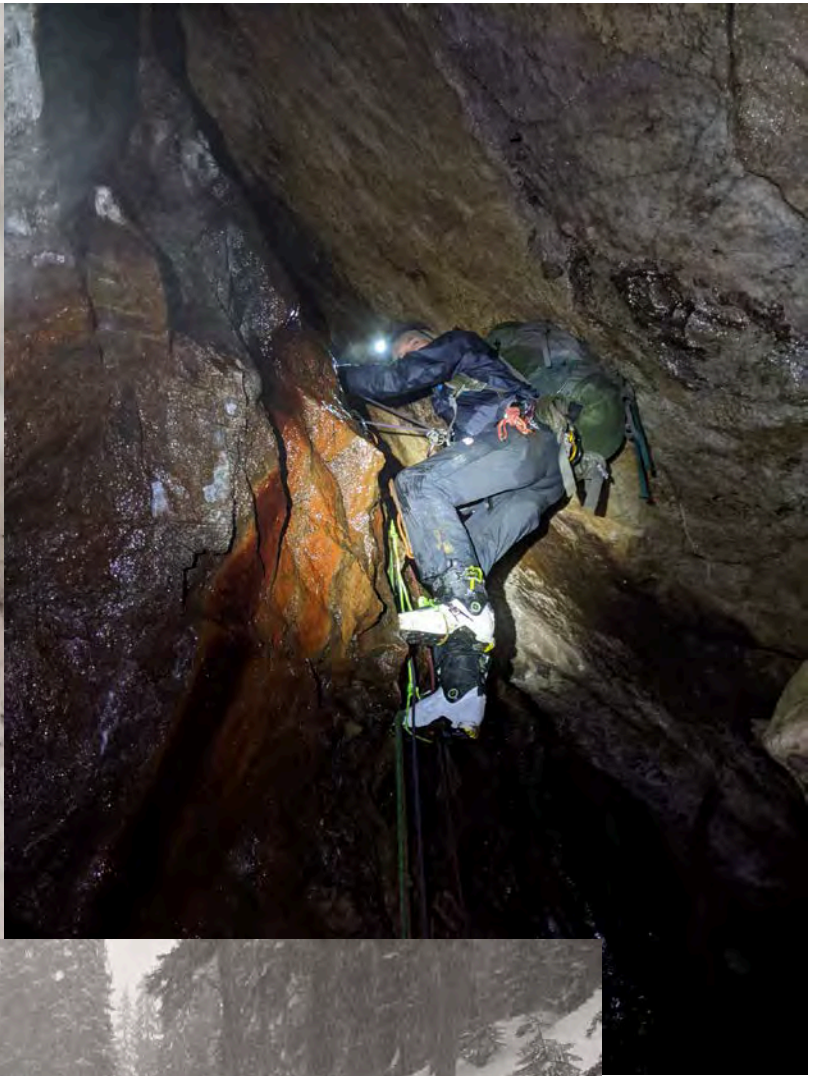
Newton Cave

February 20, 2020

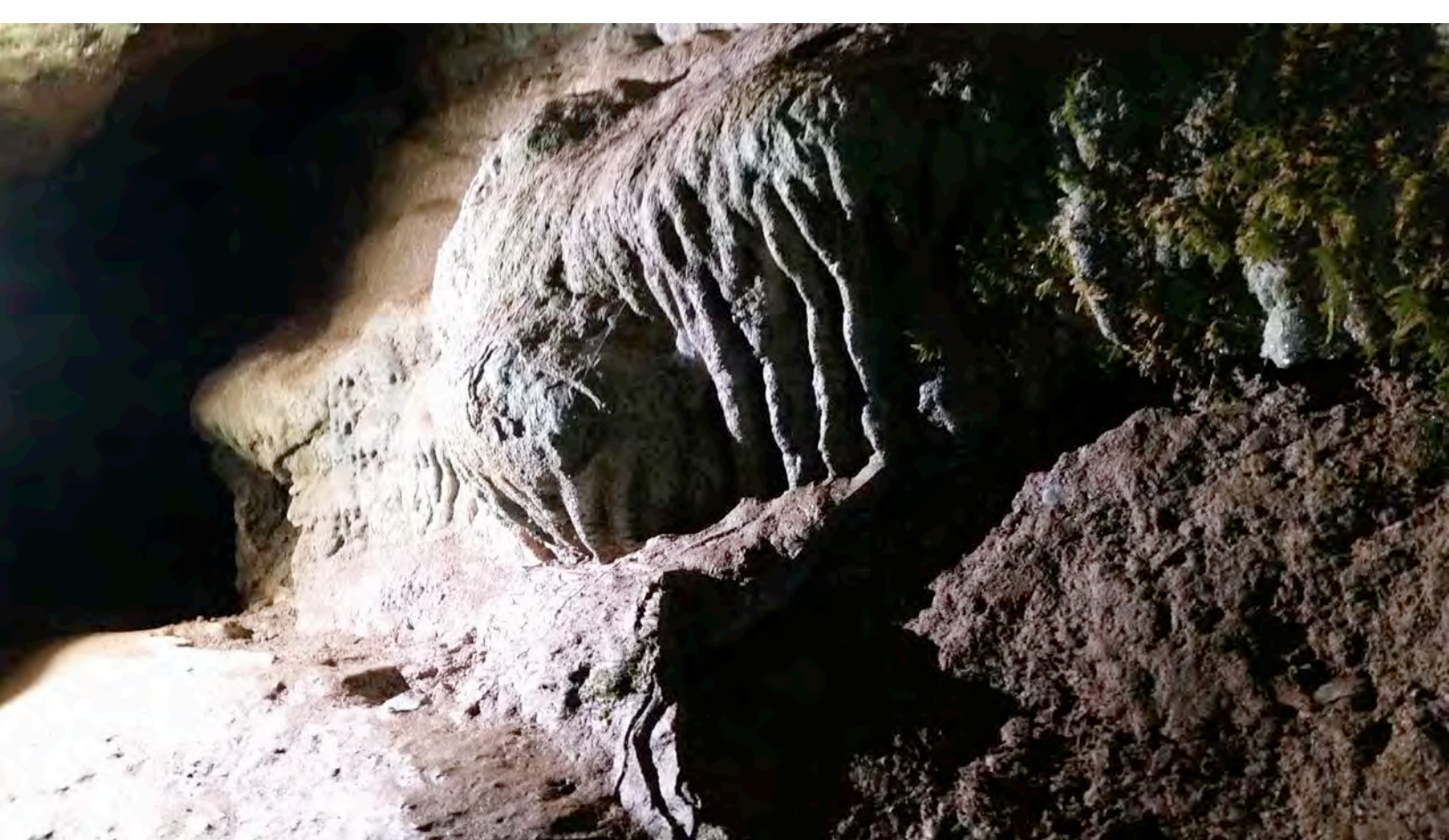
Photos and text by Tyler Christensen

I always like a few goofy ski trips a year, and this did not disappoint. We skinned up to Cave Ridge and spent 3.5 hours with three people continuously digging to access Newton Cave, with the entrance 22 feet below the snow surface. By far the deepest hole I have ever dug. The first 15 feet was a true vertical dig, with the last 7 feet conveniently being able to be shoveled into the cave.

We ended up only going a very short ways into the cave, it was getting late and didn't feel like getting setup for going deep. I don't know that I'd recommend this trip, but it might become an annual tradition for me! Much fun and laughter for all.



[Clockwise from top left] **Newton's entrance, Matt Smolinski in ski boots in Newton, and the ski approach** [Tyler Christensen]



Speleothems [Laina McNichols]

Jackman Creek Cave

and nearby sink exploration trip
November 10, 2019 by Laina McNichols

Attendees: Mark Garnick
Dick Garnick
Carver Garnick
Jacob Earl
Larry McTigue
Laina McNichols

I got to Concrete, WA and put in the coordinates to the cave entrance. My phone GPS promptly directed me onto a road that hadn't had vehicle traffic for quite a while, and it sported a sign that said no motorized vehicles allowed. I fiddled a bit and managed to get my phone GPS to direct me to Jackman Ridge Road via existing roads. About a mile in, my phone said I had arrived. As I was nowhere near the cave entrance, I don't know where my phone thought I had arrived. I eventually made it to the string of pickups parked alongside the road. So much for technology!

Everyone had already explored the cave and were just finishing lunch when I pulled up. Mark graciously offered me a tour of the cave while the others headed up the road a mile or so to check out some possible sinks that might turn into cave entrances with a little (or a lot) of work. Mark and I suited up. The cave has some muddy floor and a couple of puddles. I put my phone in a plastic bag and placed that in my little cave pack so I could take pictures along the way. Mark led, stopping just inside the entrance. He showed me a dead flowstone feature, complete with empty pool, and had me look toward the exit to see the original opening shelf. It looks like the bottom fell out of the opening, making it considerably larger.

Most of the cave is big enough for hands and knees crawling. There were a couple places we could stoop walk, a couple of places to slither on our bellies, and one glorious stand-up chamber! I noted that sometimes there's enough water in the cave to contribute to the stream that pours out under the cave entrance, and I saw several little streamlet beds with a bit of gravel disappearing into small holes. These were all mostly dry. Today there was one puddle midfoot deep to crabwalk through, but there were definite lines on the wall where water has stood much deeper in the past.

Mark pointed out a couple small side passages that we didn't squiggle into. He said they tightened down rapidly, and we would end up backing out, unable to turn around. I poked my head into a couple of them. One pocket sized space had beautiful limestone, sort of bluish and shiny, without any mud. I took a picture of it, and while the result lacks perspective, it shows the bluish color nicely.

Just before getting to the stand-up room, Mark laid down in a small valley so I could go first. I climbed over the top of him on a partial shelf. He directed me to crawl to the small puddle and turn right. Apparently straight narrows to impossible proportions. Anyway, after turning at the puddle, I slithered through the cockeyed oval opening. Once inside, I could stand straight up! It looks like a crack that narrows as it goes up. The walls are bluish limestone with some other kind of stone in sort of vertical striations. Absolutely beautiful! Mark slithered in, too, and I asked him if anyone had climbed up to see if the cave kept going. He said Larry had at some point in the past, and all the leads peter out.



[Photo by Laina McNichols]

As we made our way back out of the cave, Mark stopped to highlight some cave bacon, and I got a rather nice picture of him and the bacon. He told me that there used to be a small column somewhere in the cave, but someone broke it off and removed it from the cave. A long soda straw disappeared as well, although there are still some very short soda straws. We packed out some garbage, and Mark erased some idiot's name. Seriously, people, graffiti is not respectful!

After we took off our wet, muddy layers, Mark and I drove up the road a bit and walked up one of the gated side roads. As I stopped to catch up my breathing, I noticed a bird sitting on top of a Douglas fir leader, sort of bobbing on the very tippy top. Mark said it was an owl! We identified it as a saw whet owl about the size of Mark's fist. We watched it turn its head in impossible owlsh directions while staying upright on the little top.

At the top of the road, we joined Jacob and Larry and headed into a clearcut to some GPS coordinates Mark had noted when studying LIDAR data from the internet. We found some interesting limestone amid the logging slash, and some sinks, but nothing that looked like a real cave entrance. Larry has been a digger for years, so we sent him into the bottom of a muddy sink that had water pouring into it from rodent holes for his professional opinion. Mark commented that it was good to finally find someplace that Larry hadn't already dug and discarded!

Larry and Jacob stayed to check out more features while Mark and I headed back down to the vehicles where we met up with Mark's son, Carver, and dad, Dick. We chatted a few minutes, then Mark and Carver left. I took pictures of Jackman cave entrance, and Dick also showed me the stream where the cave called Cave What Cave is located. Dick has caved for around 30 years, and I suggested he put together a slide show pub night. He was very interesting to listen to, and I bet he has lots more stories to share.



Jackman Creek Cave [Laina McNichols]

Dynamited

near Trout Lake, WA
September 14-15, 2019
by Laina McNichols

Dee Bowers
Rachel Brendle
Tom Peterson
Choice Meyer
Brad Hutchinson
Dusty Goldscheider
Laina McNichols

Dusty and I left Friday evening, arriving at the camping spot close to 1am Saturday. There was an LDS youth group from Yakima in our normal camp spot closest to the cave entrance; Dusty chatted with one of their leaders briefly, learning the group intended to be underground by 8am and out by 3pm. Dusty and I drove to the next camp spot and set up. I was asleep by 1:30am.



Brad Hutchinson on rope! [Choice Meyer]

Dee Bowers and Tom Peterson arrived about the same time around 8am. I woke up when they greeted one another. Tom started refreshing Dee on the basics of single rope technique. I got up, zombied around for a while, had breakfast and tea, sat like a lump in my camp chair, and then went back to bed and slept until around 10am.

Meanwhile, Dusty, Dee, and Tom were happily engaged in hanging ropes from the trees and playing in gear piles. I got up again and was more functional. Rachel Brendle drove in around 11am, and she joined the impromptu ropes practice. We heard that Brad and Choice lost their alternator and would be in around noon, so we decided to wait for them.

When Brad and Choice still hadn't arrived by 1:05pm, we geared up and got ready to go to the cave. Just as we were departing for the entrance at 1:30pm, Brad and Choice drove in. They geared up in a hurry, and we made it in the cave by 2:30pm...only about 3 hours later than planned.



Frozen in time [Justen Despain, from a June 2019 trip.]

As I was bringing up the rear of our group with Brad and Choice, the LDS youth group from Yakima was straggling out of the cave, each kid about 5-7 minutes apart. One girl's headlamp was about to go out. When we questioned her, it was her only light source. She insisted on continuing without our support, though, even though we offered to travel out with her. Thinking back, I am kicking myself for at least not getting her fresh batteries! Another boy had a nasty looking avulsion on his knee with his skin flapping open. We asked if any of his leaders knew about the injury, how long he had been walking with it, and how he was doing. He was coherent and walking reasonably well, and he refused Brad's offer of escort out of the cave.

Brad, Choice, and I caught up at the nuisance drop where everyone was lined up waiting to go down. I had just gotten there and heard a girl crying in panic below. It was quickly obvious she was not capable of moving either up or down on the cable ladder her group had installed; she was frozen in terror midway. I dropped my packs, laid on my belly on the lip to talk with her and help her calm down.



Laina helps a child from another group
[Choice Meyer]

She was on belay from above and across the lip, out of sight of her belayer, and the rope was pulling her into the wall rather than helping her advance. There were 2 helpers below her, trying to stabilize the cable ladder. I kept talking to her, saying it was okay to be afraid, but it was important to focus on her breathing. She was hyperventilating and hiccupping. I don't remember everything that I said, but I could see she tried hard to focus on her breathing. As she calmed, she was able to move her hands and feet up the next couple of rungs of the ladder. By this time, Dusty had a rope rigged directly above her, and he managed to get that clipped into her chest strap carabiner in addition to her belay rope. Dusty's rope helped her upward movement, giving her enough confidence to continue up and over the lip.

I confess to being frustrated with the youth group's leadership. It was obvious the leaders hadn't had the kids practice using a swinging cable ladder before they arrived in the cave, none of the kids I saw had knee pads, and the panicky girl wasn't wearing gloves. There weren't enough leaders and the kids were not traveling in pairs or groups. If that poor girl ever goes caving again, I would be most surprised.

Off my soapbox...

I was first down the nuisance drop so I could bottom belay Dee, Rachel, Brad, and Choice. This was their first vertical cave! They did well, had good form, and responded well to encouragement and tips. We moved across the rocky breakdown toward the 2nd rappel, the Lava Falls. I brought up the rear. I was carrying a heavier than normal pack in addition to my regular cave pack, and my neck was hurting badly from the weight of it



Brad admires the formations [Tom Peterson]

pulling back. Brad took my pack and I felt a little better, but I was still moving slowly, even for me.

Tom and I were at the top of the Lava Falls; everyone else had descended. I started getting on rope to begin my descent, and was looking in confusion at my rack, decided to switch to my stop, and got my stop on upside down. Bless Tom! He pointed out I had both descenders on, and I realized I was in too much pain to function. WHAT on earth was I doing on rope in that kind of pain?! I got my confused grouping of descenders off the rope and told Tom to go down. It was 4:30pm.

Tom went down the Lava Falls and told the group I was going to wait for them. They planned to turn around at 5:30pm anyway. I took 2 more Aleve, put on all my layers, got my butt pad under my hips, my cave pack under my head, and had a nap. I slept most of the hour. I woke up starting to feel chilly but not cold, so I did deep squats and walked around the room moving my big muscle groups. The nausea from the headache had abated, so I had a snack and some water. My head and neck still hurt badly, but I didn't have migraine symptoms anymore.

I heard the group at the bottom of Lava Falls at 5:40pm.

Dusty sent Rachel and Dee up the rope first so the three of us could go out together. Both Rachel and Dee did really well ascending the final nuisance drop, and we were out of the cave by 6:30pm. Rachel took off quickly to go see if she could find her Airbnb bus

by check in time. Dee and I sat at the entrance talking for maybe half an hour. We checked the entrance, but it was black and silent. Dee and I went back to camp and met up with Claude. He reported he had been digging all day, and opened a 4th entrance to Lilliputian Cave, otherwise known as Vine Maple Cave.

Dee left for home, Claude made a fire, and I resumed my bump in a chair posture next to the fire. I had less pain if I didn't move. Around 7:45pm, Dusty, Tom, Brad, and Choice walked into camp. Everyone fixed food, shared drinks, enjoyed the fire, and talked all things caving. Tom fell asleep in his chair. I didn't bother to look at the time, but when Tom started snoring, I decided it was bedtime for Laina. I fell asleep quickly and slept like a log until around 8am or so when I heard pouring rain. As I had no desire to get out of my comfy sleeping bag, I read for a little while, fell asleep again, and woke around 11am feeling mostly decent.



Nuisance drop in Dynamited [Justen Despain]

Everyone left and we slept through it! Dusty and I had breakfast and coffee as the rain did some final dripping. He packed gear while I did litter patrol. It's important to me to leave campsites in better condition than I find them. By the amount of garbage I found, I am in the minority! We were packed and in the car by 1pm.

Deadhorse Cave Trip

May 10-12, 2019

by Laina McNichols

Richard Metawi met me and Dusty at our house in Mount Vernon, WA Friday morning around 10:30. We caravanned south to Battle Ground, WA where Dusty dropped off some loaner gear for Tom Peterson's grandson (to try out different descending devices for Single Rope Technique). We continued to Trout Lake, WA and arrived in the late afternoon. Dusty and I had a quick sandwich on a picnic table across from the Trout Lake Grocery Store while we waited for Richard to catch up. He had stopped to stretch his legs at Beacon Rock State Park.

After Richard rejoined us, we tried to drive up to Dynamited Cave to check the access, but the main road was snowed over, so we turned around and headed toward Dead Horse Cave instead. We were looking for the proper stream crossing so we could camp near the entrance, but fortuitously ended up overshooting it, and finding a fabulous campsite on the intersection of Little Goose Creek and Smoky Creek. We found a lovely fire ring and a good pile of firewood, and the ground was covered with straw. There was even a homemade built-in toilet complete with seat! The sound of the rushing water was soothing to me.

We immediately made ourselves at home. Richard put some beer in the remaining snow and walked the streambeds, and Dusty made a fire and pattered around camp adding to the firewood pile. After putting up my tent, I went poking around in the woods looking for holes in the ground. Richard found a scenic trail winding along the top of the canyon downstream from our camp. After a bit, we all ended up at the campfire. I went to bed around 10pm.



Peek-a-boo! [Brad Hutchinson]

The next morning, Richard was up early and went for a bracing swim in the pool of Smoky Creek! Dusty and I slept in a little bit, and were mostly ready for caving by 10am. Brad Hutchinson from Cascade Grotto and Claude Koch and Doug ?? from the Willamette Grotto came to our campsite around 10:30am, and we set off for Dead Horse Cave. By the way, Dead Horse Cave is named for the creek next to it, not because there was a dead horse in it. Claude, Doug, and Brad all had a hand in creating several of the openings to Dead Horse Cave.



No crawling whatsoever! Choice doesn't mind!
[Brad Hutchinson]

After checking out Claude and Doug's current dig, Brad took Richard, Dusty, and I through the woods briefly. We stopped at a hole in the ground resembling an opened gopher hole.

We could not enter using either the main entrance or the Creekside entrance because they are both flooded this time of year, so Brad decided we would enter via the Masochistic Maze (although he neglected to tell us this in advance).

I totally had second thoughts when I saw the size of the hole we would slither into, but I bucked up my courage and followed Dusty into the hole. The easiest way was to lie on my belly and slide feet-first down the gentle slope and turn around once I was underground. The four of us convened in the first area there was room to sit up.

Let me say now that the description of the cave I had been given was "30 feet of crawling and then walking passage." Let me also disabuse you of that notion. Via the Masochistic Maze, there is belly crawling, elbow crawling, and hands and knees crawling. There is spider crawling where your feet and hands are on the ground and the rest of you is in various funky plank positions so belly parts don't drag in the puddles.

There is gorilla walking, hunched walking, bent walking, and tipping your head walking. There is a tiny bit of actual walking walking when you finally arrive at the stream passage.



[Photo by Justen Despain, October 2019]

Anyway, back to the trip report. This was Richard's first cave, and he got quite the introduction to caving. I thought he did really well considering the kind of cave Dead Horse is! He said he had an anxiety attack in the first little room where we convened, and he was anxious to be doing something rather than sitting there thinking about the size of the tunnels and the multitude of passage choices, so we didn't linger long. Our first objective was to find the "Bathtub Room" which is an odd feature in a tunnel of puddles. While that particular passage is quite wet with a variety of puddles, the bathtub feature, which is shaped like it sounds, is absolutely dry. We convened for a group photo sitting together in the bathtub, and then turned back and went in a different tunnel. I cannot begin to tell you which passages of the Masochistic Maze we took. I do know we did not go into the lower maze. I found out afterwards that Brad led us through a tunnel called Misery Crawl because there are some nice volcanic features he wanted us to see.

The features were quite interesting. Some look like roses made of lava, or maybe cabbages, and there are drip candles, which resemble their name as well, although there is nothing waxy about their texture. The ceilings often had wonderful drip or melted

lava formations and lots of spikes. I didn't crawl low enough once, and a ceiling spike poked me in the back on my rib cage. That hurt! The floors were hard and sharp lava. Did I mention that we crawled a bunch? We fell into a general pattern of Brad scampering ahead and Richard hard on his heels while Dusty and I took turns bringing up the rear. I would recognize Richard anywhere as long as I saw the bottoms of his boots!

We finally arrived at the stream passage. What a pretty surprise! Our crawling maze popped right out on the bank of a flowing stream, and we could fully stand. What relief! I don't know how the water fluctuates during the course of the year, but it was bubbling, splashing, and flowing beautifully, a full stream in the midst of a lava cave. The water was super clear, and the floor of the cave was magnified by the water clarity. We heard gurgling under and around us, which was a new sound to me, and there were several



The Rat Hole [Photo by Justen Despain October 2019]

seams where water was spraying out and adding to the stream. We gorilla walked up a small sloping waterfall heading for the "Rat Hole." I had been apprised this feature exists, and I was interested in inspecting it from a certain distance. I wasn't all that keen on going through it. Dusty crawled up there to investigate, and while he was slithering around in those even tighter spaces, I suddenly had to go the bathroom.

Always bring a potty kit while caving. You never know when or whom might need it for what. Mine consists of toilet paper, hand sanitizer, and an opened tall kitchen garbage

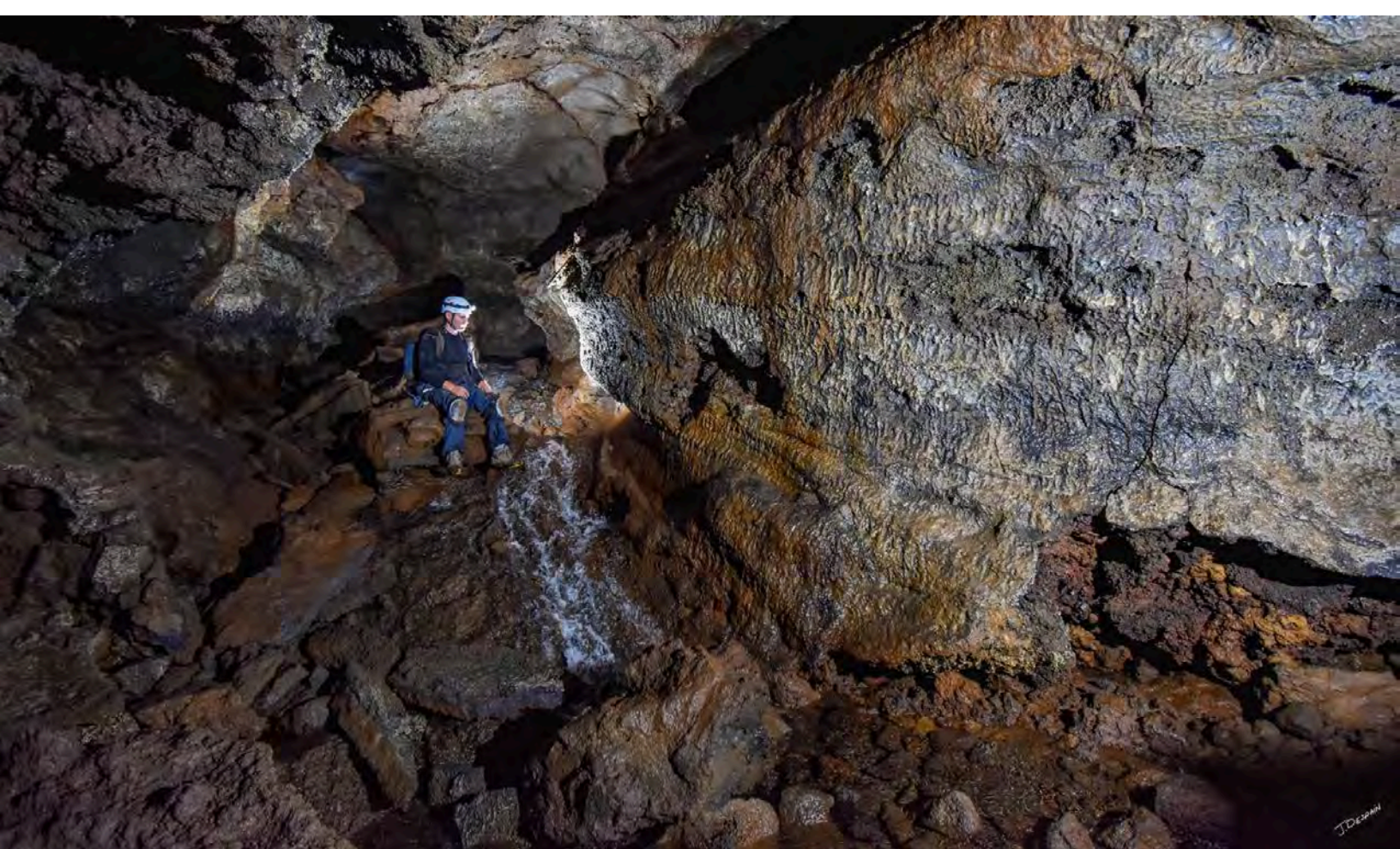


Lots of choices in Deadhorse [Photo by Justen Despain October 2019]

bag as the primary target. Once completed, twist closed, including any toilet paper/wipes, and tuck into a gallon zippered freezer bag. Let the air out, and seal tightly. Put that in a second gallon zippered freezer bag, and seal tightly. Then put that in something that's not see through. Dog waste bags are great. I put the whole thing in a waterproof stuff sack. Pack that tidy, dry, clean, non-see through, scent-free work of art into your cave bag, and continue caving.

While everyone waited for me, Dusty finished investigating the “Rat Hole,” and Brad found an upper passage of cave he’s looking forward to exploring further. We decided not to exit using the “Rat Hole.”

We went back downstream, and I was surprised that the whole stream just sort of swirls into a small hole and basically just disappears. In looking for the exit, we discussed crawling back through the maze. I unequivocally voted for either “Rat Hole” or the exit we were looking for. I was over crawling. We crawled through some unassuming rock pile holes into an exit that required worming, contorting, grunting, and cuss words to get out. I exited last, and I was happy to be on the surface. I have now accomplished



[Photo by Justen Despain October 2019]

Dead Horse Cave. And if anyone tells you it's just "30 feet of crawling and then walking passage," make sure to clarify the definition of both crawling and how long 30 feet is!

Upon completion of Dead Horse crawling trip, oops, caving trip, we laid around on the surface in various states of repose. We visited with Claude and Doug a while and discussed another dig they were working on that had "going passage," so Brad retrieved a crowbar and hammer from their dig entrance at Dead Horse, and we caravanned to check out the "going passage." It was not "going passage." It was muddy and tight and not ready for exploration. Dusty, Brad, and Claude went in, but Dusty and Brad came out almost immediately.

Richard, Dusty, and I drove back to our lovely campsite and shared a great dinner of hamburgers and vegetables. The three of us then ambled down canyon along the trail Richard had found the night before, discussing logistics of canyoneering down the canyon as we walked and peered over the edge. We took an immodest number of pictures of the canyon and waterfalls. Walking in a slow fashion is much easier than crawling.

On returning to our campsite, we found Brad and Claude at our campfire. We shared stories of all kinds and thoroughly enjoyed the evening. We also discussed non-crawling caves to explore Sunday and settled on Cheese. Cheese Cave was new to Dusty, Richard,

and me, so Brad agreed to be our tour guide. The next morning, we passed Claude working on the dig at Dead Horse on our way into town where we met Brad at the Trout Lake store.

Once in town, we verified through various means that there really is no crawling in Cheese Cave, and happily went to the road near its entrance. Brad told us how the road was closed to driving because when it was open to the public, people were cutting firewood, having campfires, tearing up the forest, littering, and generally misbehaving on the landowners' private property. Once we parked next to the road, we saw someone had tagged the private property sign. I was incensed. People can be so rude! Who cares if Shawn is Mikey's, and why write it on someone else's sign?!

Anyway, we walked through the Ponderosa pine forest and enjoyed the flowers, trees, and sunlight. On arriving at the entrance to Cheese, I breathed a sigh of relief. There were no oversized gopher holes in sight, just a low roof with a big hole underneath and a handy, well built ladder for ease of entry. We moseyed through Cheese, noting the historical remnants of cheese storage (and potatoes before that). We commented on the amount of burned wood throughout the cave, discussing how fire in the cave changed biological and physical aspects of the cave. On this half of the tour, we had to look hard to find various lava features due to the damage sustained through the years. We enjoyed its huge walking passage, though. I had a bad headache, and was happy to be able to keep my head in a normal upright position.

We climbed the stairs under the house that sits on the other Cheese entrance just to see the view from there. We went to the very end just beyond the house, where the lava plugged its own flow. At the obvious end, Richard pulled out a surprise! Back at Trout Lake store, he had thoughtfully bought local cheese aged in another local cave along with some crackers. How very apropos to have a cave cheese snack in Cheese Cave. (We carefully didn't leave crumbs.)

We walked back the way we came, took a potty break outside the cave, and then came back in and walked the other direction. Glorious ladder! We "found" passage Brad didn't know existed, and I even endured a bit of stoop walking. There were more interesting formations in this direction of the cave than the other, and I took some photos trying to do justice to the odd beauty found in lava tubes.

Upon exiting, we walked back along the beautiful forested road, and I hung back taking pictures of wildflowers. Chocolate lily! Lupine! Balsam flower! Phlox! As we changed out of caving clothing, we noticed Claude waving at us, and he said he had a dig nearby with "going passage," but we didn't bite. Dusty climbed up to the sign to eradicate the Shawn is Mikey's graffiti, we had a snack, and we parted ways for home. Richard had plans to check out the Klickitat River and maybe camp another night, and Dusty and I drove home via the east side and I-90 (instead of I-5.)

Mysteries of The Bobbin

Tips and tricks for using the Petzl SIMPLE and STOP

text and photos by Stephen Gladieux, with contributions from Derek Bristol



Petzl STOP, open

Bobbin style descenders are some of the most commonly used. A valid argument can be made that the SIMPLE is the most common caving-specific descender worldwide, and yet they are not that familiar to American cavers. Much of this is rooted in several high-profile accidents in the earlier years of bobbin introduction, which has resulted in regional dislike of bobbins. These accidents implicated the direct application of rappel rack techniques to bobbins and are discussed in depth elsewhere.

There are many advantages to bobbins in terms of versatility, safety, and speed of use. Unfortunately, these can't be realized without the proper complimentary gear, i.e. attachment carabiner and braking carabiner. Additionally, lack of locally available usage experts and training has caused a lot of interested cavers to abandon adoption. It is common to see a STOP or SIMPLE for sale at grotto auctions throughout the US

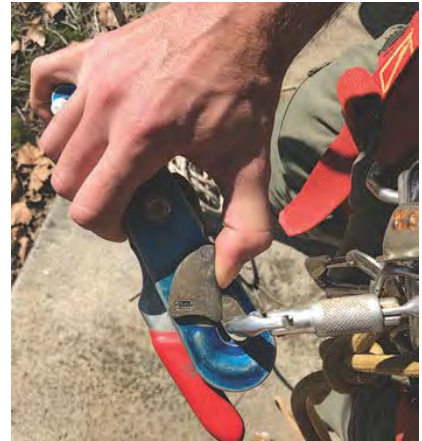
at a deep discount and barely used: someone heard of the benefits, invested in the descender, but then was never able to realize the benefits.

My purpose in writing this is to present the information in a durable, quality form that can be referenced for many years. I hope to clear up some common misconceptions and enable those interested to use bobbins to their full potential, safely—particularly those who do not have local access to experienced bobbin users. In concert with this article, Derek Bristol has made a very good video covering basic bobbin usage called "Vertical Caving - Bobbin Descenders". It is readily found on Youtube.

The earlier version of both the STOP and SIMPLE had a metal gate instead of the black plastic one on the current version. That gate was thin, and did not track the side plate to ensure that it stayed lined up. The old metal gate could be tweaked to the side allowing a slight gap. On its own that gap wasn't dangerous. The spring was also more exposed to mud packing than the current one, which conceals the spring regardless of the position of the gate.

Attachment

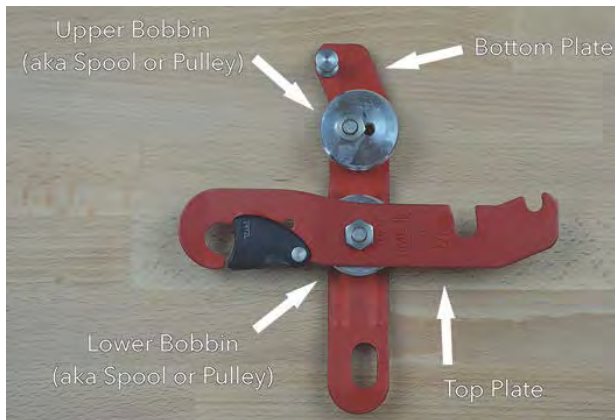
The SIMPLE and STOP were designed to be attached to the central maillon with a carabiner and NOT a quick-link. The practice of using a quick-link, such as is common for a rack, is not advised with these devices. The thin wire diameter of a quicklink versus an aluminum carabiner has contributed to at least one accident by being easier to slip past a tweaked, first-generation gate. An oval locking carabiner is ideal for this as it is much less likely to shift when weighted. The Petzl



Tilting to open the STOP easily. Push it downward so the carabiner moves into the space left by the open gate.

OK carabiner has a tall cross-section that interacts with the current gate such that the side plate is inhibited from opening while the device is vertically oriented, i.e. right before loading or when loaded. When the device is loaded it can't come open anyway due to the design of the hook at the bottom of the front plate slot. To open or close the device pull it toward you off to the side so that the carabiner tilts relative to the device; that angle will make the carabiner profile rotate out of the scoop in the bottom of the gate and will allow it to open easily.

Many people struggle, at first, to easily open and close these devices. That is typically because they forget that the carabiner goes through a slot in both face plates. The front plate will never swing open or closed if the carabiner is in the bottom of the slot, and



Petzl SIMPLE, open.



Tilting and squeezing to close the descender.

the carabiner cannot be moved up in the slot while the gate is closed. After opening the gate, push the device toward you to move the carabiner up the slot so that the front plate can swing open. So, the order of opening is to move the bobbin to the side and in a little to allow the gate to open; then once open, push in harder to bump the carabiner up in the slot; the top plate should be pushed out a little. To close, squeeze the plates together with one hand, push toward you to line the gate up with the carabiner, then pull out so that the carabiner slides farther down the slot and the gate clicks closed.

The STOP is equipped with a lever that your body weight on the rope rotates and pinches against the top bobbin. There is a steel dowel inserted into the top bobbin to guarantee that the pinch point will wear down much more slowly than the rest of the bobbin. The lever is NOT for speed control. It should always be pulled in fully. If it is used to modulate speed it will wear both sides of the pinch point and it will turn into a SLOW not a STOP. The lever serves numerous purposes:

It makes it so that when rappelling and reaching a rebelay no soft lock off is needed to maintain position. It is acceptable to just let go since the descender is captive in the rebelay loop. You won't slide and you can easily pull over, if necessary, and clip the anchors;

When passing a rebelay downward with poor foot holds instead of a big ledge it allows grabbing the rope between the brake carabiner and the STOP and pulling up. This will pull rope through the STOP and thus transfer your weight to it. The cowstails will then be slack, making some rebelay much faster and not necessitating use of the foot-loop (illustrated below left).

The STOP can use this feature to act as a replacement chest ascender in case of a damaged or lost ascender. It requires pulling rope through, but is much more efficient than many other choices. If a hand ascender is lost, the Croll can be moved to the cowstail,

and the STOP used as a Croll;

When belaying a lead climber there is extra security in the auto block similar to belaying with a Grigri – this is typically done without a braking carabiner. (Note: there are differing opinions on the use of bobbin descenders being used as belay devices);

If a rappelling caver is injured mid-rappel, the blocking action can arrest a fall.

Braking 'Biners

A braking carabiner is always advised with a bobbin descender. It should not be used without one, even if the rope is fat and the descent slow. There are other, approved techniques for that situation. Using one in all instances will keep the braking direction consistent. The brake carabiner selection is pretty important for wear rate. I have routinely destroyed aluminum carabiners on a single day trip bouncing down to -700m and back. Steel rescue carabiners will last longer, but tend to be expensive and rust will contribute to wear. In all cases, the braking carabiner does not need to be locking, and is best if it has a wire gate to make it immune from mud clogging the spring and hinge.

For reasons described farther below it is best if the braking carabiner is load bearing and ideally it would be retired when its strength is compromised by wear.

The Freino is a dual opening carabiner, made by Petzl, that incorporates a braking carabiner and attachment carabiner into one. It is expensive because it cannot be made by a standard wire forging process. The two carabiners share a single spine. It is still an aluminum alloy and as such is subject to pretty rapid wear. It is very important that the brake line is clipped into the braking carabiner so that it exits to the side where the rope hangs. If done the opposite way it could conceivably unclip itself from laying across the gate with rope weight. Additionally, the fixed, sideways angle of the brake carabiner gate causes the rope to wear the side plate of the bobbin—which is the only piece for

which there is not a replacement part. The Freino seems optimized with canyoneering devices in mind, not bobbins.

The Handy braking carabiner is specifically designed for use with bobbins. It is 304 stainless steel (wire gate as well) and is still less expensive than the Freino or a steel rescue carabiner. It will also wear substantially longer than both. One of mine has seen nine years of use and many deep expeditions and the wear is barely detectable. It has a very narrow body, which will prevent bights of the rope from passing itself, which is necessary for the Swiss lock off (described below). The top of the carabiner is wedge shaped to guarantee control/friction on all diameters of rope. The gate is a stiff wire gate that cannot be blocked by mud, and will not come open on its own. The Handy is one of the only devices called out by name in Alpine Caving Techniques.

The Handy comes with a welded “squiggle”. This is an invaluable little device that adds a little more length and a lot more play in the rotation of the Handy. The correct place for this to attach to the right of the descender on the central maillon. It should not be connected to the OK carabiner to which the descender is attached. That would put the top of the Handy essentially at the exit point for the rope and would mean no friction control.

On Fat Ropes

Bobbin descenders are made to work on all diameters of rope commonly used in caving. Petzl officially says 9-12mm ropes. The reality is that an American 12mm diameter rope is not going to work well as we tend to encounter stiffer ropes stateside with a much tighter sheath. More practically, these descenders work well on 8mm to 11mm. Note that 8mm single caving ropes are meant for expert teams only and that caution should be used in their use. There is no need to own multiple size racks for different diameters of rope, or length of



Pulling slack through between the descender and the braking carabiner

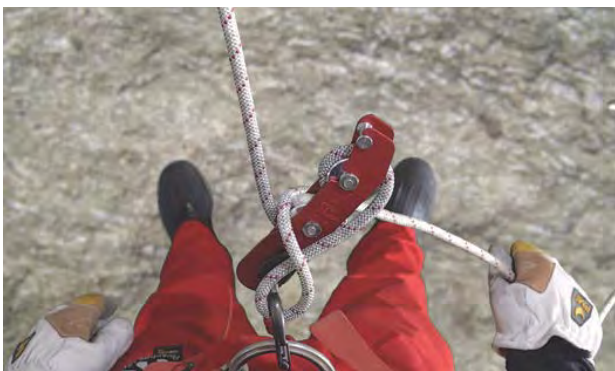


The Handy brake carabiner from Raumer with the essential “squiggle”.



A properly done "C" rig with a Handy

drops. This is accomplished using several techniques. The first is selecting between the diagrammed way to weave a rope through the device, which takes the shape of an "S", or a "C" rig which reduces the friction. Regardless of which way the rope is threaded a braking carabiner must be used. The "C" rig works fine on 11mm PMI Max Wear. There are two main ways to do the standard "C" rig. The preferred method is dependent on the type of braking carabiner. For standard carabiners and the Handy the rope should exit the device behind the taut line, i.e. farther away from the chest. For the Freino it should exit in front. If the brake line is between the taut line and the chest it will result in rope-rope abrasion. The reason for the difference if using a Freino is because the brake line must be clipped into the brake side of the Freino in a particular orientation (see above) and this would make worse rope rub if done the other way. In general, with a Freino and a "C" rig it is impossible to eliminate all rope on rope rub. Another reason why the Handy is superior.



Soft-locking a SIMPLE to arrest the descent. Your hand *must* stay on the brake line.

Alternate "C" Rigs

There are, in theory, several other ways to weave the rope that look like a "C". Generally, these are not used. All of the other methods involve the rope going around only one bobbin, which reduces the number of steel bolts supporting your weight. Why do that? The only persuasive argument I've heard is that the small "C" going around only the lower bobbin (and facing the opposite direction of a proper "C") maintains the pinch point in a STOP and the handle stays in play. (Note: this was from a level III IRATA instructor). I don't endorse this because: the rope now exits on the wrong side of the descender; the brake 'biner must be moved; there is potential for bad rope on device wear; you're now training two different braking positions in muscle memory; and the reducing of bobbin spools supporting your weight from two to one.

2nd brake 'biner (I've only used for rescue rappels)

On extremely thin ropes, such as the "7.5mm" we used in Yan Tan Ping, or brand new, slippery 8mm, or when rappelling with two people on a single bobbin (such as in a rescue), an additional carabiner can be clipped to the rope above the bobbin and act as a second braking carabiner which is clipped after the primary one, thus making the braking direction downward instead of upward. [note: I have only ever had to use this when rappelling in a rescue with a second person, the Handy has always given me enough friction otherwise].

The Soft lock on SIMPLE

A soft lock is a technique that prevents downward motion, but does not allow letting go of the brake rope. This is used frequently before starting to rappel, or when passing a redirect (deviation) or pausing to clip anchors. It is achieved on a SIMPLE by hanging the brake rope (downstream of the brake carabiner) over the top of the descender, so that it is wedged between the SIMPLE's

body and the taut rope from above. This is not needed on a STOP because it is built in via the lever. **Remember, a soft lock does not free the brake hand.**

Worn bobbins or thin rope on STOP

If the pinch point on a STOP is worn, or if the STOP was previously used on much thicker rope, it may creep slowly down the rope even when the lever is engaged. In this case often all that is needed is a slight upward tug on the lever to really engage it. In other cases, especially with new, thin ropes, or a STOP near the end of its life. It may be necessary to hang the rope over as with the soft lock for a SIMPLE.

When is a soft lock needed?

Note that it is not necessary to hard lock a bobbin in a belay loop. The devices cannot detach from the rope the way a rack can. It is captive in the loop and the soft lock is only for positioning during a maneuver. In the case of a very offset rebelay it may be useful to do a hard lock, especially on a SIMPLE or worn STOP.

The Traditional hard lock

The traditional hard lock on a SIMPLE is fairly similar to on a rack. It begins with a soft lock (as described above) and then a bight of rope is pushed through the attachment carabiner and then pulled up and over the descender body. Note that a half twist, as is common in locking off a rack, is not necessary. This lock takes a similar amount of rope to locking off a rack, and is almost never used by any bobbin user.

The Swiss Lock-off

The hard lock method of choice is often referred to as the Swiss lock-off in English speaking circles. In order to use this the braking carabiner must be of narrow body so the rope cannot pass itself. To effect it the brake line is wrapped around the body of the descender and clipped back into the brake carabiner a second time. In the case of extremely thin or new rope it is easy to wrap twice and clip through the Handy twice. It is easily done one handed. It takes no more than 5 seconds, and uses 4-5 inches of rope. It is easy to undo. This is useful when passing joined ropes where the hard lock off on a rack means you have to be particularly precise on distance of ascenders and distance above the knot—there is a huge window for successfully passing knots quickly with a bobbin. It is useful when starting a rappel, and when self-belaying while rigging a traverse, etc. It is one of the main reasons that bobbins are so fast. It also contributes to safety because it is easy to do – I've seen a lot of people undo a hard lock on a rack only to realize they weren't quite ready and



Pulling the loop through after a soft lock for a traditional hard lock-off.



A completed, traditional hard lock-off.

then watched them do something unsafe, hands free, without a hard lock because they didn't want the hassle of doing the lock again. Note that since the Handy faces either the chest or away it is important to pay attention to which direction you wrap the brake line – wrapped one way it will be easy to clip the second time, wrapped the other way it will be difficult.

Pulling rope through on a rebelay

One of the benefits of bobbin style descenders is the ability to pull rope through the device backward. This makes it easy to remove slack if the descender was accidentally put on the rope too low. It can also be very useful right after crossing rebelays with mediocre foot ledges as mentioned above.

Very long ropes – Disengaging the lever

I've heard it said that bobbins cannot be used on long ropes. This is untrue. I've personally used a STOP on a 201m (660') free hang on 9mm. In fact, I used a standard

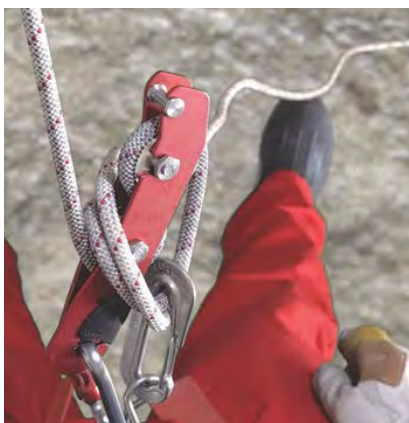
“S” rig and my Handy brake carabiner. With a large amount of rope weight, it can be tiresome to hold the STOP lever for an extended amount of time. In this case a small carabiner can be used to disengage the lever. Of course, if the rope diameter is large, and a “C” rig is used, the lever will already be disengaged. It is true that bobbin style descenders will heat up faster than a full-size rack, and that they generally don't dissipate heat as quickly. Slowing down your rappel a little solves this easily, and it is not a problem on wet pitches anyway.

“C” rigging and adding a 2nd brake

If for some reason the rope weight is unmanageable, perhaps with a new device and a very light caver, it is possible to “C” rig either device and clip a carabiner above it on the taut rope. Then when the rope weight lightens, and the friction is insufficient, the brake line can be clipped into the second brake carabiner as mentioned above.

Fat Rope to thin rope, and back

The STOP and SIMPLE can be used on many diameters of rope interchangeably without problems; however, if they are used for a long time on either thin ropes or thick ropes and then back you may notice changes in performance. If a thin groove is worn in the bobbins, say by 8mm or 9mm, and then larger-diameter rope is used, the device may feel grabby. If a thick groove has been worn, there will be less friction when a thin rope is next used. This only has an effect toward the end of the life of the descender, when there is significant wear. This happens with racks that have aluminum bars as well, and the effect is similarly small. Using a Handy and being adept at putting your finger over it to control its angle will all but eliminate this issue.



The Swiss lock-off with the brake line placed over the descender again.

To testrappel or not?

Because it is possible to rig racks backward, in what is called the suicide rig, it is common practice to test each rappel a short distance before disconnecting the long cowstail. If the rack has been rigged incorrectly the bars will pop open. This test rappel is not typical practice with a bobbin style descender. For one, the bobbin cannot be rigged in such a way that the rope will pop out when loaded. Second, a test rappel does not verify that the gate on the front plate is closed. We should always be looking at our devices before beginning a rappel – the primary verification is always visual. All of these particular issues are easily visually verified – whereas the suicide rig is not. The “safety check” verifies what cannot be easily verified visually. Carabiners should be in the proper orientation, and a grip test (squeeze the carabiner to show that it is locked) can be used as a matter of procedure. A carabiner with a red anodized zone to show when it is unlocked is useful in this application. An autolocker is also potentially useful here, but be aware that it does not remove your responsibility to visually verify! Mud has a history of starting arguments with auto-locking mechanisms. Nothing is gained from a test rappel on a bobbin—it is possible to rappel with an open plate so a short test rappel does not verify that the side plate is closed or that the rope was threaded as intended. The important thing to verify is that the gate is closed. This should be a visual verification, with a quick glance, and not auditory as a variety of clicks can be mistaken for the gate closing. Of course, the test rappel on racks is also used as a last moment to look at your gear; on a bobbin the squeeze check and visual check accomplish this. In all cases it is important to develop a safety check process with which you are comfortable and which has the ability to verify the necessary aspects of your device.



Wear on the top bobbin of a STOP and bolt. If the minimum diameter of the bolt has not been impacted its strength is not diminished.

When do bobbins need replacing?

There are two wear components on both the SIMPLE and the STOP, these are the bobbins. On both devices the bobbins are worn when the threads from the bolt fixing it become visible. So long as the wear doesn't go into the shaft of the bolt the bolt does not need to be replaced; however, the bobbin should be replaced without delay. If you are paying attention, and use a Simple, you can flip the bobbin and begin wearing the other side – this is an intended way to get more wear life out of the bobbin, but must be done before the threads are visible. The STOP top bobbin lasts a lot longer than the SIMPLE bobbins because of the steel insert. This easily compensates for its additional cost. The lower bobbin/lever lasts even longer because it is entirely steel. When it has finally died there will be a small triangle visible where the rope has worn through the bobbin.

Additional functions

Both devices can be used as a wrench – the side plates are 13mm apart. This is the appropriate wrench size for 8mm anchors (including self-drive Spits); however, it is better used to open stuck central maillons



A SIMPLE used as a wrench on a "D" maillon

(D-links) when a caver desperately needs to pee. The amount of flex in the side plates makes it difficult to use on anchors, but it can be used in emergencies. However, it will open many central maillons before showing wear. Close the device and push the top against the maillon gate to act as a wrench.

Releasable Tyrolean

The STOP can be used at one side of a releasable Tyrolean traverse (highline). This method allows easy release and tensioning so a team can quickly install, use, then deconstruct a Tyrolean. The taut Tyrolean line enters the STOP where the rope from above would and is then indirectly tensioned. The STOP is typically tied off with a mule knot.

Progress capture in a rescue haul

The STOP can be used as a progress capture/belay in raising a rescue load. It does not have teeth and so won't tear the rope in case of a haul line failure.

Order of Operations: Let's count clicks! (Leaving a brake 'biner on in the loop)

One good way to look at efficiency in passing obstacles caving is to count clips. When passing a rebelay downward I will first momentarily pause and connect a cowstail. I then rappel so that my cowstail is weighted. I remove by STOP, but leave my Handy in the rebelay loop. Since the Handy is load rated, has a wear ridge, and shows extremely little wear this is a reliable second attachment point. I install the STOP on the new rope, and then move the Handy over while holding the brake line. Then I detach the cowstail. This totals 6 clips and in most cases can take only 30 seconds. Whether or not a hard lock is required will depend on the ledge or lack thereof. If a hard lock is required then the speed difference compared to other descenders is even more significant.

Saving rope in rebelay loops

Since there are no loose bars to come undone, and a hard lock off is not required at rebelays, bobbin style descenders require far less rope in each rebelay loop. That means

never not having enough rope. It also means a deep cave with 100+ rebelays may need ~50m fewer to rig.

Removal from the central maillon while caving

Many people leave their descenders attached to their central maillons while caving and let it hang or clip it to the side while caving. Hard caving often doesn't allow a long device clipped at an angle to the side. The standard practice with a bobbin descender is to take it off and pack it away or clip it to a gear loop at the side while traveling. If it is on the side it is best to clip the STOP such that the handle is against the body. Despite being small, it has an amazing tendency to catch on things (the rubber grips rock) and then lever open, grabbing even more.

Jerky rappels on a new Handy

Some people have complained about jerky rappels on a new STOP when using a new Handy. This will go away quickly with wear. The remedy is simple: place the pointer finger of your brake hand over the Handy and keep it away from the bobbin. The jerkiness comes from a grip-slip-grip oscillation wherein the brand-new handy grabs the rope, which pulls it closer to the descender where it grabs harder, and then finally breaks free. By keeping it at a distance from the descender the cycle is broken and rappels will be smoother until it is broken in. Photo 11

Bobbin Descenders have many advantages. They are another useful tool for cavers to add to their kit. They can increase safety and speed while decreasing size and weight and still adding a huge amount of versatility. Remember that no book or article is a replacement for hands on experience and instruction, but can be an excellent *point du départ*. Keep caving safely!

Author Contact: Please feel free to contact me with questions about bobbin minutia or for fuming and spittle throwing counter points – every point bears discussion. Stephen.gladieux@gmail.com

Using a finger to control the angle of a new Handy for a smooth descent. Keep this angle large by moving your finger.



Treasurer's Report

by Talon Swanson, Grotto Treasurer

As we enter 2020, I am happy to say that the Cascade Grotto starts out the new decade with a strong financial basis. Our current balance sheet highlights this fact and can be fully broken down as follows:

	Cash	Checking	Savings	PayPal	Total
9/30/18 Ledger	\$231.50	\$569.53	\$5,100.42	\$707.58	\$6,609.03
9/30/19 Ledger	\$314.65	\$216.53	\$5,100.89	\$1,530.60	\$7,162.67
Net Gain / (Loss)					\$553.64

Note that this will be the last Treasurer's Report to use 9/30 as the end of the grotto's fiscal year; following a recommendation made at a grotto meeting, the grotto's fiscal year will now coincide with the calendar year. This makes more sense as members are now paying dues at all times of the year instead of just on October 1st. All future Treasurer's reports will reflect 12/31 as the end of the fiscal year.

In other big news, the Cascade Grotto has completed the move from US Bank as our primary financial institution to Boeing Employees' Credit Union (BECU). In making this move we are hoping to make financial administration much easier for all future grotto board members as BECU has so far proven much easier to work with. Gone are the days of all board members having to go to the US Bank branch in the Renton Highlands in order to make any account changes; most account changes can now be handled online and/or at whatever local branch is most convenient. As a result of this change, the old US Bank account is now closed with all funds transferred to BECU.

Looking at the income/expense side of things, the grotto brought in \$1,143.02 in revenues from membership dues and an additional \$45.50 from merchandise sales. There was also a windfall of \$146.65 found in an old banker's box owned by the grotto, which, when combined with \$0.47 in interest earned on the savings account, makes for a net income of \$1,335.64. Expenses included PO Box and room rentals at \$112.00 and \$540.00, respectively, as well as \$70 for a squeeze box, \$30 for trip snacks, and \$30 for merchandise, yielding \$782.00 in total expenses. It should be noted that, purely by happenstance, no holiday party expenses were made in the 2018/2019 fiscal year; this is not an insignificant expense which will appear in future reports.

Looking forward to 2020, we can expect some of these numbers to change as we slowly close out the use of our PO Box and eliminate that expense. As if to compensate, though, our room rental rates have increased for 2020, so this cost will be going up. Thankfully we have a membership currently standing at 118 members to help spread out the cost of this and any other such expense increases, but note that this number might drop as we look to purge non-paying members from the rolls.

Here's to another great year for the Cascade Grotto!

Meeting Minutes February 2020

2/21/20 7pm

1. Introductions

2. Old Business

1. **Treasurers report** – doing well financially due to membership. \$7000 in the bank. Discretionary funds for rentals, PO Box, holiday party, etc.
2. **T shirts** – Chi messed up and didn't bring t shirt info. She will get the shirt info to Daryl and post it on the Cascade Grotto fb. Question – how will people pay for shirts? Maybe the Paypal account?
3. **Reimbursement for Dusty** – language put together. Eric maybe has the verbiage written up? Will need to formalize so people can get reimbursed.
 1. Motion to reimburse dusty for gas the last vertical practice. All in favor.
 1. Dusty will email receipt to grotto email
4. Eric is taking over **newsletter** – yay
5. Renato – last meeting was decided brad dusty and Renato to propose a set of personal gear for vertical practice as loaner gear. Karstsport and ?
 1. Set package (includes carabiner, cow-tail, kroll, mini rack/bobbin, harness, etc and other details, no helmets quoted). If we buy 5, it will be standard price 250-300\$. These will be used for caving trips and training sessions
 2. Is there a liability risk that grottos are loaning vertical gear?
 3. Does grotto also need rope?
 4. Sponsorship for these items? Discount?
 5. Where would the gear reside? Who would be the warden of the gear? Will need an inventory system. Will need to establish and written policy before the gear is purchased (in order to track the gear).
 6. Sizes?

3. New Business

1. Next vertical practice – Mar 14 Ravenna Bridge or Mountaineers depending on weather
2. Beginner trip – April 18. Planning?
3. 27th next Thur science night in shoreline. Mock cave will be set up, volunteers appreciated. Put volunteer events on grotto website?
4. July 1 is dusty 50! Let's party vertical with him! Most likely the last weekend of June!

Adjourned Business portion of meeting at 8 pm.

Cascade Grotto Information

2020 Grotto Officers:

Chair: Daryl Greaser - Seattle - dgreaser@gmail.com

Vice Chair: Eric Jorgensen - Seattle - ejorgenson@live.com

Secretary: Madeline Schaller - Tacoma - mjschaller91@gmail.com

Treasurer: Talon Swanson - Renton - ecotalon@gmail.com

Stay Connected!

All Grotto Events Here: <http://cascadegrotto.org/events/>

Facebook Page (public) <http://facebook.com/cascadegrotto>

Facebook Group (request to join at:) <http://facebook.com/group/cascadegrotto>

Meetings

We host **meetings** *most* months of the year, typically on the 3rd Friday of the month at 7pm at: Tukwila Community Center, 12424 42nd Ave S, Seattle, WA 98168 . Meetings are also held at other places and times; go here for current listings:

<http://cascadegrotto.org/meetings>

Meetings are open to the public and typically consist of a business segment from 7-8pm, and a program from 8-9 pm. Following the meeting from ~9:15 to ~11pm we usually meet at Azteca (Tex-Mex restaurant) in South Center for food, drinks, and tall tales! Join us!

Events

ALL grotto events are published at: <http://cascadegrotto.org/events>

Questions?

Email us at cascade_grotto@caves.org or contact any of the officers above

Newsletter Submissions

Please send all photos, maps, and trip reports to cascade_grotto@caves.org



Three generations of cavers, from Washington state and West Virginia. From left: Eric Rader, Bianca Rader, Carlos Luis Perez, Mirza Perez, Andrea Rader, Maria Alejandra Perez, Carmen Elena Rader. Photographer and Cascade Grotto member: Wilmer Perez. Lost Creek Cave, 2019 NSS Convention, Cookeville, Tennessee