

The 1953 Exploration of Cave Hill Saltpetre Pit by Nashville Cavers: What Really Happened

On Feb. 28, 1953, eleven Nashville spelunkers (and yes, they proudly claimed that appellation) climbed to the top of Cave Hill in the Calfkiller Valley of White Co., TN. They laboriously carried with them all the equipment they needed to descend the 100 foot deep vertical entrance to Cave Hill Saltpetre Pit (CHSP), that is: two long and stout ropes, their flashlights, several carbide lamps and at least one Coleman lantern. At the top of the hill they located the shaft entrance to CHSP, rigged up and proceeded to descend the pit, explore the cave, and return to the surface. This was the first exploration of CHSP by Nashville cavers, and the successful expedition was written up by Roy Davis who submitted the trip report to the NSS News, where it was published in the June 1953 issue. (Trip report reproduced on the following page.)

From Roy's write-up we learn that the eleven participants were Tank Gorin, Roy Davis, Kenneth Bunting, Charlie Adams, David Westmoreland, Joe Anderson, Albert Wyatt, Mary Jo and Dale Smith, Bob Claxton, and Kenneth McDaniel. Several members of this group were already NSS members; when the 1954 NSS membership list was published all eleven were, with numbers ranging from 478 to 2443.

Roy's trip report goes on to say that "The chief attraction and obstacle of the cave was, of course, the 119' vertical entrance which required strong ropes and good teamwork, to make a safe and speedy exploration of the cavern." Except for overstating the depth of the entrance drop, Roy's article is accurate enough, but succinct to the point of leaving out the most interesting aspects of the vertical operations. An oversight on Roy's part? Maybe, maybe not....

The short version of how they descended and ascended the pit is this: They tied a rope to the first spelunker ready to enter the cave, and lowered him down. Then they pulled the rope up and lowered the next caver down. And so on. When the explorers were finished, the haul team remaining topside pulled them back up, one by one. If this sounds like a hair-raising and hare-brained way of doing vertical work, today's readers must bear in mind that this exploration took place at a time when most cavers had never heard the word "rappel", and some months before "Vertical Bill" Cuddington began to popularize SRT (single rope technique) work in caves. Furthermore, this bold and determined band of spelunkers safely accomplished their exploration goals.

TENNESSEE SALTPETER PITS EXPLORED . . .

by ROY DAVIS

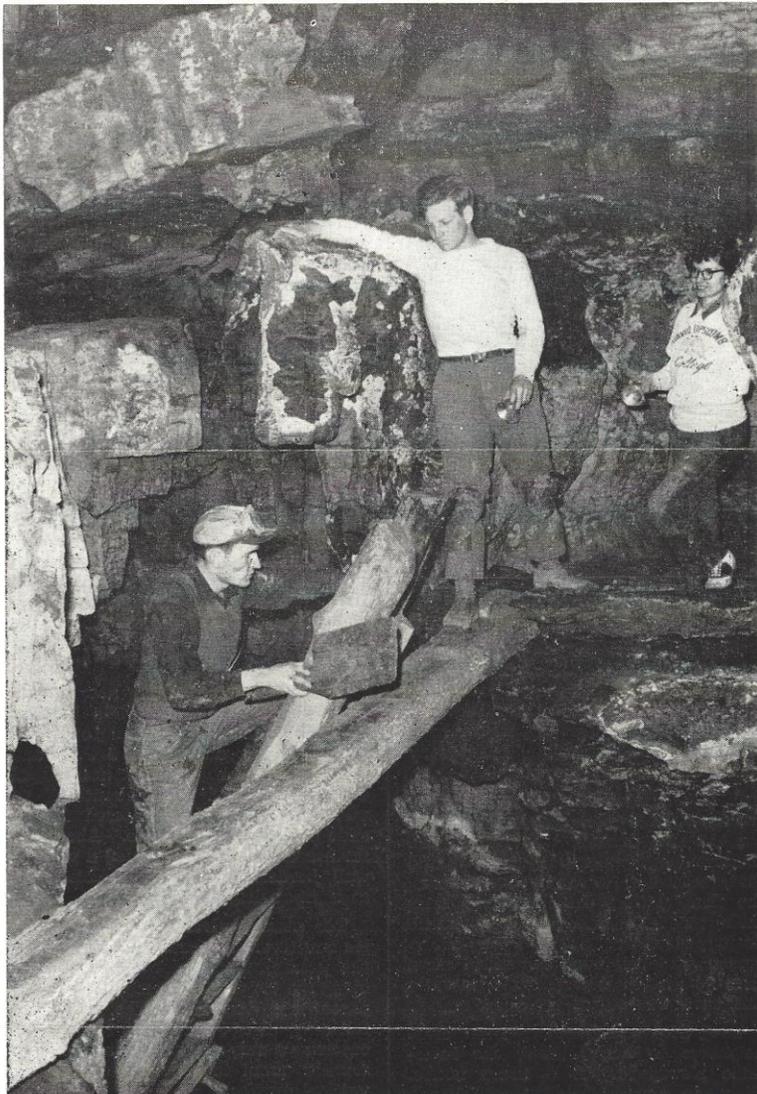
A most unusual and interesting exploration trip was experienced by the cavers of the Nashville area, on Saturday, February 28th, when Tank Gorin, Roy Davis, Kenneth Bunting, Charlie Adams, David Westmoreland, Joe Anderson, Albert Wyatt, Mary Jo and Dale Smith, Bob Claxton, and Kenneth McDaniel arrived at the entrance of Saltpeter Pit, atop Cave Hill, near Calfkiller, Tennessee. This cave was briefly mentioned in a "Report on the Caves of the Eastern Highland Rim and Cumberland Mountains," written by Thomas L. Bailey in 1918, and was referred to, by Mr. Bailey, as an enormous cave having been worked during the Civil War for Saltpeter. In November, of 1945, Dr. Edward McCrady of the University of the South, Sewanee, Tenn. explored the cave quite thoroughly. Supposedly, Dr. McCrady and his party were the first people to be in the cave since it was worked for Saltpeter during the Civil War — and, apparently no one has visited the cave since Dr. McCrady's trip.

The entrance of the cave is a 119' vertical shaft, at the bottom of which is a large and historical cave. Having been mined during the Civil War, the cave still contains the old workings, in a good state of preservation. Ladders, bridges, hoppers, paddles, troughs, etc. were found in the cave in a fair state of condition. Dates as far back as 1813 were found on the walls, along with names of the workers, and the tally marks they left on the rock, apparently constituting the number of bags of saltpeter removed from the cave.

Many deep pits and high domes were found in the cave, and several crawlways which were not thoroughly explored, due to the lack of time. A great breakdown in the back of the cave indicated possibilities of an even larger passage beyond the barrier.

The chief attraction and obstacle of the cave was, of course, the 119' vertical entrance which required strong ropes and good teamwork, to make a safe and speedy exploration of the cavern. This pit is approximately 10 or 15' in diameter at the top, and 8 or 10' in diameter at the bottom, being very rugged and absolutely vertical.

Approximately 150' west of this pit, another, similar pit was found extending vertically downward for 70 or 80' into another cavern, which was also mined for Saltpeter during the Civil War. This cave is of much smaller size than



(Left to right) Dale Smith, Albert Wyatt and Mary Jo Smith ascending one of the old ladders in Saltpeter Pit. Mr. Smith holds a paddle evidently used for stirring liquids in process of recovering the saltpeter.

(photo by Tank Gorin)

the first Saltpeter Pit entered, but does contain a ladder, two troughs, and a log bridge, which are of notable interest. Although the passages of the two caves obviously pass within a few feet of one another, there seems to be no connection between the two whatever.

All in all, the trip was one of rare adventure and the discoveries made were quite gratifying. Plans are underway to return to the Saltpeter Pits in the near future.

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I was first told about this 1953 CHSP trip sometime in the 60s or 70s by Tank and Roy, and their descriptions were memorable. As told to me, the first caver to be pulled up and out of the cave by the haul team went up rather sedately, walking the wall of the pit as he was lifted upwards. Upon exiting he then added his muscle to the haul team, and the 2nd explorer up came up easier, and a bit faster. And so on until the last spelunker to exit was hauled up too fast, and being unable to walk the side of the pit fast enough he emerged scuffed and scraped from being dragged up the rough limestone wall. An amusing tale, but did it really happen that way?

Recently, while exploring the new NSS website, I stumbled on an untitled historic photo (image 1, below) at the bottom of the page describing conventions. I recognized the pit as CHSP and the activity shown fit what I knew about the 1953 expedition. Curiosity aroused, I set out to confirm that the image was in fact a vignette from the 1953 exploration and to see what more could be learned about this legendary trip.

Using Roy's trip report, additional historic images supplied by Nashville Grotto's Jody Bailey, and probing the memories of original trip member Dale Smith --a most active and mentally sharp as a tack nonagenarian-- I have reconstructed some of the details of this adventure.

- 1) The group used two ropes. The bigger diameter rope was the main haul rope used to lower and raise the cavers. The smaller diameter rope apparently was used by the caver being raised to add his own pull to that of the haul team lifting him. This rope may also have been used during lowering as a sort of safety should the main rope get hung up or any other problem occur.
- 2) Dale was the group's ropemaster. He knew some knots from his Boy Scout days and his father had taught him the bowline-on-a-bight. At the end of the main haul rope Dale created a harness that featured leg loops and a chest loop. The two leg loops were each made with a non-tightening bowline-on-a-bight, and connected upwards to the chest loop – which was a double loop, also made with a bowline-on-a-bight. See image 1.

The spelunker would enter the harness by stepping into the leg loops and pulling them up as high as possible into his groin. Then he would don the upper half of the harness by holding his arms over his head and pulling the double chest loop down until he could lower his arms and have the loops securely caught in his armpits. Once securely in this harness he could safely lean back without fear of flipping upside down. Then, as the haul team lowered him into the pit, the caver walked down the side of the pit, using the second rope as an aid if needed, or not. And by the way, though the above

is written using masculine pronouns, be it known that Mary Jo Smith participated fully in this exploration, both serving on the haul team and entering and exploring the cave, too.



Image 1: Unidentified spelunker being lowered into Cave Hill Saltpetre Pit, Feb. 28, 1953. Image published on NSS website: <https://caves.org/convention/>

- 3) How many people, minimum, were needed for the haul team? Image 2 shows four people on the haul team: Mary Jo, Ken Bunting, Dale Smith and Albert Wyatt. A fifth spelunker, probably Charlie Adams, is seen in this image roped to a tree, looking down the pit, likely serving as a lookout and communications man with the cavers in the pit. And obviously a 6th caver was topside and took the photo; this image was found in Tank's collection of caving photos and he was almost certainly the photographer. With six at the surface, only five of the 11 participants could have been in the cave at the time this image was taken.



Image 2: Haul team consisting of (back to front) Mary Jo Smith, Ken Bunting, Dale Smith and Albert Wyatt. Look out/communications man roped to tree is probably Charlie Adams. Image from the Tank Gorin collection, Nashville Grotto 50th Anniversary DVD, collected and scanned by Ian Jones and Jody Bailey of the Nashville Grotto, 2003.

- 4) How many spelunkers actually went down and explored CHSP and who were they? According to Dale, by taking turns going down the pit and serving on the haul team, all members of the group were able to explore the cave.
- 5) The first caver down was –no surprise here—Roy. After perhaps five had been lowered into the cave and given an adequate amount of time to explore, they began to be hauled back to the surface. Once one was up, a member of the first haul team went down. And after the next spelunker reached the surface, another member of the original haul team went down. And so on until all had had an opportunity to explore the cave. Dale, supervising the rope work, was the last to go down, and also the last to be hauled back up to the surface. Roy’s remark in his trip report that they had “good teamwork” was indeed quite accurate.

By the way, Dale notes that although he might have been hauled up a little faster than some of the others, he doesn't remember any problems or getting scuffed up by being dragged along the pit walls. That was just an embellishment to the tale.



Image 3: Roy Davis and Mary Jo Smith by the campfire warming up. In the background: Albert Wyatt on the right, David Westmoreland next to Albert, unidentified spelunker on the left. Image from the Tank Gorin collection, Nashville Grotto 50th Anniversary DVD, collected and scanned by Ian Jones and Jody Bailey of the Nashville Grotto, 2003.

- 6) Obviously, getting 11 covers in and out by this technique was time consuming, and it was getting dark, and probably cold, by the time Dale arrived back topside, hence the campfire near the pit seen in image 3.

Now fast forward to Oct. 10, 1953, just a little over seven months after this heroic, if somewhat primitive, exploration of CHSP. Using SRT, Bill Cuddington and Roy Davis dropped and explored a 254 ft deep virgin pit, which they christened The Gouffre. The modern era of vertical caving was underway.

--Richard C. Finch, NSS 5560 CL, FE