

Posse Cave, GBR 1242

By Aaron Bird

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Entrance UTM removed...

Posse Cave is one of nearly a dozen new caves found in lower Rader's Valley, Greenbrier County over the past two years. It was discovered after the 2003 Young Timer's Reunion weekend at the WVACS Fieldstation during a ridge walk by myself and Don Ferguson. Don was actually the first to see it, and said, "Hey, here's a hole that might do something." A dig was started immediately that opened the entrance enough to drop in large rocks, which were heard to roll for many seconds down a steep slope. We were excited by the sounds, however, lack of time and tools precluded entry on that day.

A week or so later, I saw Mark Botkin at WVACS and he asked if there was any work that needed to be done in Rader's Valley. He said that he and his "posse," which consisted of Rebecca Chadwick and Lee Workman, were anxious to get out and do something. He also wanted to know if there were any good creek beds where they could go fossil hunting. Having seen some nice fossils in the stream bed leading up to the entrance of Middle Earth Cave, that area was recommended. I also suggested that Mark and his posse go check out the dig, which happened to be on the way to the fossil hunting stream. So armed with digging tools, they took off to find booty.

Later in the evening, they returned to WVACS with the exciting news that they had broken into a cave that they explored for a couple hundred feet to the bitter end. It was short, but they were very happy they had found virgin cave. Rebecca had brought her daughter along –who had never been caving before- so she had a "virgin" cave as her first underground experience. This was the 4th time over the past few years in Rader's Valley that someone's first cave trip was in virgin cave. Since then, there has been a fifth, but that's another story for others to tell. They named the cave Posse Cave after their rag-tag group and returned a week later to survey it.

Mark diligently sent me the notes so I could do something with them, but they sat on my desk for about a year before I was able to get around to doing anything with them. During this time, I got more experience with Illustrator and also several cave-survey software programs, including Walls. I learned from Mark Passerby that Walls would "roundtrip" with Illustrator. He said this and I thought he was crazy. "Roundtrip? What's that all about? Why do I need to do a through trip for a cave map?"

"No, not through trip. Roundtrip." He explained that Walls can export data in an SVG graphics file in the form of a line plot with labeled stations. The SVG file can then be opened directly in Illustrator where the cave map and symbols can be drawn in around the line plot. "Sounds great!" I said, "export the line plot, draw around it. That's how cave survey software is supposed to work. So what does this have to do with roundtripping?"

Mark said that after the cave map has been updated, it can be saved in Illustrator as an SVG file then re-imported into Walls where it becomes part of the survey data. Later when more data are added from future cave surveys, a new SVG is exported with the new data, old data, and the old drawing into Illustrator where the new data gets its cave symbols and the map is updated. Using this method, the SVG file is “roundtripped” between Walls and Illustrator until the cave is completely surveyed and the cave map is drawn. Essentially, a map with finished product quality is the working map from the first survey trip to the last.

Mark was pretty excited about it, but I was thinking, “I don’t have time to learn how to do this. It sounds hard.” However, I did find some time, sat down, shared some e-mails with David McKenzie (creator of Walls), and figured out the roundtripping method by applying it to the Posse Cave map.

At the beginning there was a relatively steep learning curve for Illustrator, but Greg Springer helped me through that with example cave symbols. Greg has used Illustrator to do several cave maps including Druid (published in the NSS News) and Cass. Walls also has a steep learning curve, but David’s examples are relatively easy to work through and he was very helpful in talking me through problem spots, such as which version of the SVG file I should export and how many “advanced features” should I include with it.

The end result is the Posse Cave map published in this issue of the WVC. It’s a small cave, but its given me the chance to learn Walls, how to use Illustrator for cave maps, and how to “roundtrip” between the two. Once the method has been practiced enough, it becomes very easy. Mark Passerby got very comfortable with roundtripping while working on the Zicafoose Blowhole map and even took a ruggedized waterproof laptop computer into the cave with him and sketched right on it! The survey data were entered directly into the computer and the cave map was drawn on the screen. Talk about instant cave map. But that’s a story for him to tell...

So, for those interested in Walls, its available for free on the Texas Speleological Survey’s website (<http://www.utexas.edu/depts/tnhc/.www/tss/Walls/tsswalls.htm>). Illustrator is an Adobe drawing product. To use Illustrator with Walls, you’ll need at least version 10.0.3.; Version 11 is also compatible.

This article and the Posse Cave map are the result of contributions from many people, most of whom are mentioned in the article. Thanks to everyone who contributed – mentioned or not, and I apologize if I left out any names. Happy caving!

Posse Cave

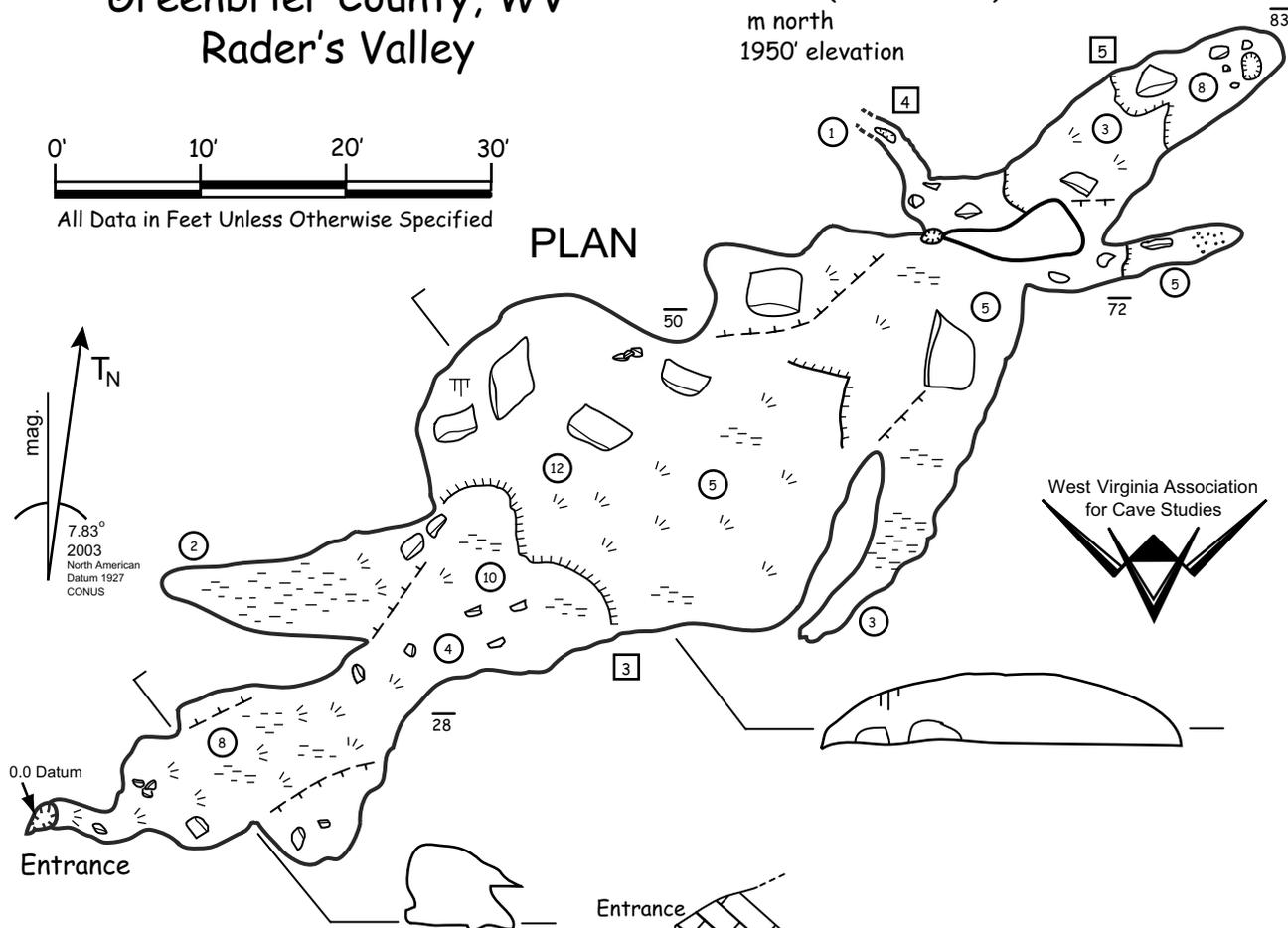
Greenbrier County, WV
Rader's Valley

GBR# 1242
m east (UTM removed)
m north
1950' elevation



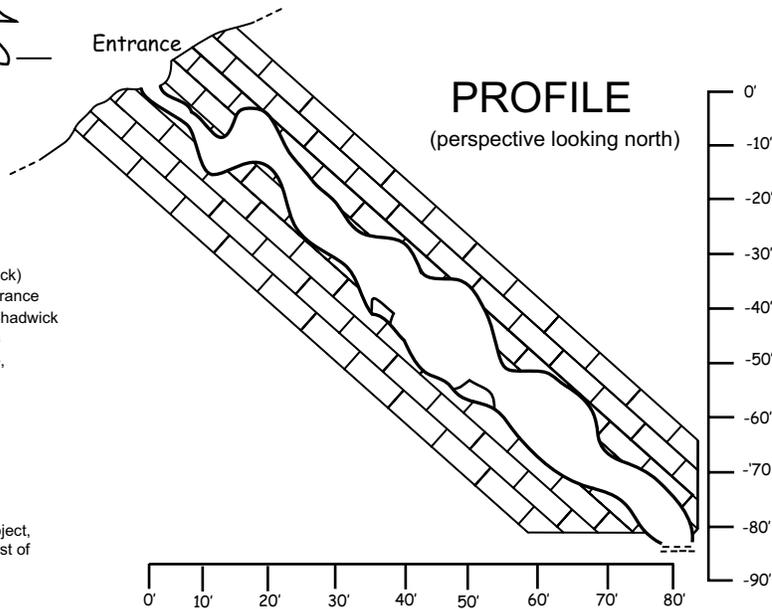
All Data in Feet Unless Otherwise Specified

PLAN



PROFILE

(perspective looking north)



Posse Cave History and Info

- *small hole discovered April 4, 2003 by Don Ferguson and Aaron Bird -- dig was started immediately
- *Mark Botkin and his "posse" (Lee Workman and Rebecca Chadwick) were notified of the hole, and they proceeded to dig open an entrance
- *cave was surveyed April 23, 2003 by Mark Botkin and Rebecca Chadwick
- *data were compiled and map drawn by Aaron Bird in May of 2004
- *cave is developed in steeply dipping beds of the Union Limestone, Greenbrier Group, which is of Mississippian Age
- *cave terminates in a mud plug
- *there is very little airflow in the cave
- *a handline is helpful for exploring the cave
- *cave length is 263', cave depth is 83'
- *symbols used to describe cave are based on those presented in NSS Bulletin, Vol. 41, #2, April 1979
- *this cave map is part of WVACS' and WVASS' Western Slope Project, which is an effort to explore, map, and study the caves and karst of the south-west limestones of Greenbrier County, WV