

Mapping Cassell Cave, WV

A survey trip with the Gangsta Mappers

February 17, 2001 (part 3)

 The cold rain of a friday afternoon in Baltimore translated to a cold flurry of a friday evening in Durbin, WV. Tom Kornack and I rolled into that worthy borough (population 75) at about 7:30 pm and located the new home of the [Gangsta Mappers](#), the Durbin Depot. Only a few other people had arrived so, after an entertaining incident involving getting the car stuck in a surprisingly deep puddle, we settled in for the long wait to find out what we would be doing this weekend.

Having spent the past two surveys working in the region between the Window Climb and the 0-0 Point (a wide, dusty area which I will henceforth dub The Belfrey), I hankered to get farther into the cave. According to the rather speculative



maps drawn back in the 1960's, the cave is ferociously complicated around the Windy and Ballroom entrances then stretching back in two long series of corridors to the south-west. These branches (dubbed the north and south branches) appear fairly simple topologically, though there are passages on at least three levels which usually parallel each other.

At last the rest of the crew arrived and we set about consulting maps and planning the morrow's assault. Given the amount of rain we'd had recently, the pit would most likely be impassible due to waterfall. One team composed of very small folks (Miles, Karen and Rick) would enter the narrow Ballroom entrance and work on surveying the rats-nest of passages which lie above the Windy entrance. A second team composed of folks who either had time constraints or didn't want to do a long trip would enter the Windy Entrance early and work on some leads near there. The remaining three teams would follow them and head as quickly as possible for the unsurveyed end of the south branch. Tom and I joined [Ralph Hartley](#), Bob Zimmerman, Pat Bingham, Rafi Reyes, Bob Alderson, Barry Horner and Gordon Birkhimer in the South Branch Fellowship.

Quickly checking out the Pit entrance, we discovered that there was no way without dry suits and possibly scuba gear we would be going that direction. While there is normally a small waterfall dripping down the hole from about two thirds of the way up its 96-foot extent, a frothing river ran along the valley and disappeared down the normally dry mouth of the hole. Perhaps two feet of non-waterfall space were available to rapell through, but it would me a very wet time in any case and the chances of hypothermia and death was large. We'd have to take the long way 'round.

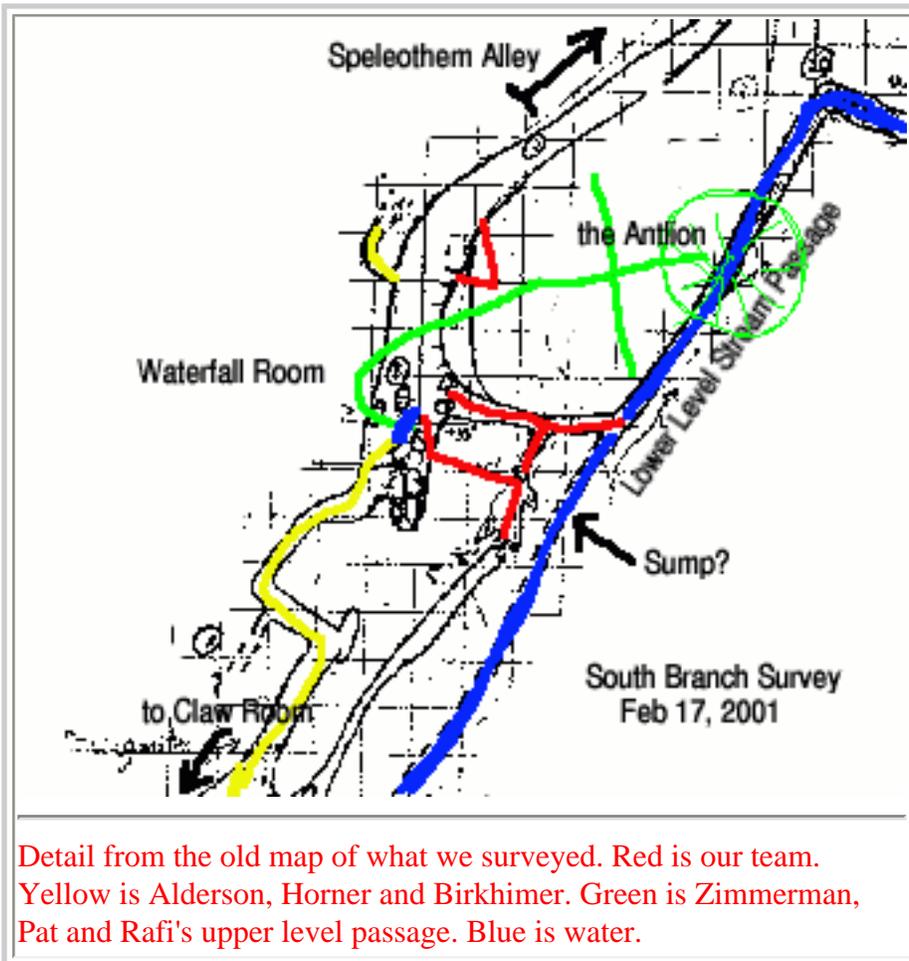
Slipping through the Windy entrance at 10:30, we travelled quite quickly through the well-remembered maze of passages we had traversed [back in September](#). It is a long bit of fairly rigorous caving, but we reached the Window climb without much trouble. My new headlamp (a Petzl Duo) was behaving nicely and provided ample illumination on the lower setting. In my roll as official Monkey Boy, I had volunteered to bring vertical gear and set up the cable ladder for the rest of the crew. The bolt at the top of the climb looked much the same as when we installed it, and I quickly set to work installing the ladder. Ralph and Tom were bellayed up and I passed off bellay duties to Ralph for the rest.

Much waiting ensued while everyone climbed the ladder from the bottom. For a lark, I sent Tom and Bob down the hole I'd explored the first time in dubbed Danforth's Misery (Mystery?) Hole. Soon, I had crammed myself in there too and Pat was convinced to join us. Good, stupid fun was had getting in and out of a volume about the size of an airplane lavatory but covered with sharp rock fins on all sides.

Together again in the Belfry, we scooted through the dusty, wide passages and dropped down to the 0-0 point in the lower stream passage. Technically, we'd just changed caves and were now in Cassell's rather than Windy, but the distinction is somewhat academic at this distance from the entrances. A hundred feet of sloshing upstream through shin-deep water (except for those masochists who worked very hard keeping their feet dry by staying up on the walls) brought us to a small beach and a three-part climb back up to the middle level of Windy. This climb was a bit sketchy and could be greatly improved by adding a hand line.

From here on I was in new territory. First came an arduous avoidance of a small but extremely deep pool of stagnant water and the beginnings of a 1000' long crawl that had been surveyed in November by Karen, Ken and Ralph. I don't know if this passage has been labelled yet, but it is significant and deserves a name. I'd like to propose *Speleothem Alley*. The passage varies from belley crawl to occasional walking passage with the majority being hands-and-knees work for about a thousand feet. Vast forests of soda straws hang from the ceilings and numerous

other formations, all of them fragile, adorn the floor on one side or another. We longer folks had to take great care not to snap off the ceiling formations and my shoulders or helmet claimed, I'm sad to say, more than a few. With all the traffic and heavy breathing, visibility was limited to a few yards through the fog and dust.



Detail from the old map of what we surveyed. Red is our team. Yellow is Alderson, Horner and Birkhimer. Green is Zimmerman, Pat and Rafi's upper level passage. Blue is water.

At great length, sweating and complaining mightily, we emerged into a taller chamber representing the current limit of modern surveys. A loud waterfall appeared and disappeared through the breakdown comprising much of the room. Barry, Bob Alderson and Gordon headed off to survey two leads on the west side of the chamber. Bob Zimmerman, Rafi and Pat headed up into the loose rubble following the waterfall. Ralph, Tom and I checked a very nasty, tight mud-and-breakdown lead on the east and then headed down a short drop into wider, cleaner passage. We surveyed a short distance to a lovely stream passage in a tall canyon forty feet tall and perhaps six wide. Beautiful! Downstream

appeared doable as a hands-and-knees water crawl but upstream appeared to sump. Leaving the water crawl survey to others more inclined toward that sort of thing, we continued on through some nasty high-inclination cramped shots leading back up to the waterfall room. No going leads and nothing terribly exciting there.

Somewhere in there, my low-intensity light ceased to work, briefly worked again and then finally died so I had been operating on halogen power for several hours. As EVERYTHING was encased in a good quarter inch of mud, I opted to not try changing bulbs then and there and changed batteries more frequently. But I had no shortage of light... Grrr!

Next we headed up to assist Bob's team above the waterfall. The passage wound upward through some extremely loose, large blocks. Somewhere in there I dropped a large rock on Ralph which narrowly avoided breaking his arm. Much more carefully, we left the loose rock and emerged into dry, dusty passage where we found the other survey team.

Beyond them was a large pit which appeared to go at the bottom. Ralph climbed down into it and we ran a shot across. Then I joined him climbing down a very unpleasant, muddy slope. From below things were much easier to understand. We were in the bottom of a 20' deep, conical pit with loose sandy, muddy walls and no apparent exits. Below us a narrow vertical fissure

revealed rushing water 20' below. Chunks of dirt and mud ricocheted off the walls and into the water at our slightest move. Ralph bravely shimmied down the fissure while Tom lowered a tape from the survey station above. I stood rooted in place not wanting to drop anything further into the hole. Ralph reported that the stream passage was a few feet wide and perhaps four feet tall including about 18" of water. The total drop put the water at about 70' below the cave entrance which is about the level of the stream passage in other parts of the cave. Very exciting!

There is a carnivorous insect called an antlion which burrows into the ground and creates a conical pit in loose sand. It then waits for ants to wander through the pit. The slopes are steep enough and loose enough that the struggling insect can't help but slide downward to be consumed. It was thoughts like this that occupied my frantic mind as I very gingerly clawed my way back up the slope to where Tom and the others waited. With absolutely no rock to hold on to, this was a very frightening process. But eventually we escaped this giant Antlion and, at 7pm, started out for dinner and bed.

The trip out was much like the trip in only with more fatigue. The crawl through the Speleothem Alley was not as bad this time around and we descended to the stream, traversed and ascended again up to the Belfry from the 0-0 Point. I donned vertical gear while everyone else climbed down the ladder. Finally, I took down the ladder, re-rigged the rope and rapped off. There then followed a few hours of retracing our steps past the Shazam Chute, Times Square and countless other junctions and branchings. Finally we went up the cable ladder, through the delightful maze of passages and arrived at the final drop. Again, I waited while everyone else used the ladder. Then I scrambled down the very exposed face and everyone exited the cave.

Outside it was snowing, 18 degrees and very dark. The time was 11pm and my gear was freezing solid as I walked. Awkwardly, everyone stripped it off and climbed into the waiting cars. Soon enough we were revived and eating Rafi's amazing chile back in Durbin.

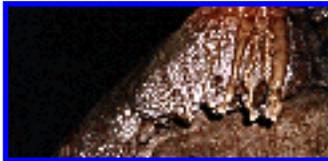




Fortunately, Tom and I got to horse around with vertical gear once we got back to Baltimore on Sunday night.

A good trip though I didn't get to survey as much as I would have liked. It's becoming increasingly clear that the farther portions of the cave were only very marginally mapped back in the 60's and we are going to discover a lot of structure not seen on the old map. Furthermore, unless a back entrance is discovered, it is going to take a very long time to get all these distant passages fully mapped. The Waterfall room where we began surveying on this trip is only half way from the entrance to the rear of the cave and that trip took four hours to accomplish. We have a lot of work ahead of us, there is no doubt!

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