

# Fort Stanton Cave

## The Second Attempt To Survey Hoeman's Passage

BY DONALD G. DAVIS

**D**uring the May 2010 Fort Stanton Cave, New Mexico expedition (during which no Snowy River exploration was possible, because SR had been flooded since April 22), I was asked by John Corcoran to lead a team including Pete Lindsley and Jennifer Foote on May 8, 2010 to repeat the attempt to finish the survey of Russell's Crawl and Hoeman's Passage, which Roger Harris, Pete Lindsley and I had tried on October 3, 2009, but had not completed because we found that we could not sight our Suunto instruments in the extremely low crawl starting beyond station R43 (see *Rocky Mountain Caving*, Winter 2010). Pete was confident that he could sight there with his Brunton (the instrument type that had done the original survey), and also brought a folding trowel in case of need to deepen passage to fit through. Photography was done by Jennifer and Pete.

We noted upon starting into Russell's that the sandy chamber not far inside, where epsomite or mirabilite has been seen in the floor sand, had somewhat more glints of evaporite crystals than were noticed last October. However, it was still not really well grown with the evanescent hairs. We noted and photographed an evaporite beard about five inches long draping from a knob on the east wall about a foot above the floor. We tried to minimize crushing the floss in the sand by stepping where possible on a path of rocks near this wall.

We observed much the same features as were reported by Roger and myself in October 2009. I felt faint incoming airflow at the first tight belly-crawl duckunder. In and near the Twin Rooms were two live bats, one roosting on a ceiling, the other in flight (the same ones seen in October?). Jennifer identified them as Townsend's Big-eared. Also photographed in this area were a live and a dead white millipede, and a live dipluran. In one section of the hands-and-knees passage beyond the Twin Rooms was a wall on the left

side that showed rudimentary scalloping, the scallops being about 3/4 inch long.

Upon reaching station R41 at the end of the easy crawling, we ate some lunch there. I then tried to lead the team beyond R43, where only Roger had scouted through to R46 last year. Moving feet first on my back, I found that my chest (in only T-shirt and coveralls) jammed against the ceiling not many feet beyond R43. I came back out, and Jennifer (the smallest of us) tried. She also couldn't get through. Pete then went to work with his trowel, deepening some yards of the continuing squeeze by an inch or two (there was just enough room along the sides to move the semi-dry diggings out of the way). He dug for about an hour, and made it into the three- to four-foot-high "latrine" room (so called in 1964-65 articles in *Southwestern Cavers*) where station R46, the last in the early survey, had been noted by Roger. Jennifer and I were then able to follow without squeezing, though it's still hard work.

We then began to extend the survey, with Pete keeping book, me setting stations and backsighting, and Jennifer doing foresights and inventory. In the latrine room we had no problem using our Suuntos, and made one 24.3-foot side shot (R46-R46A) into the latrine crawl that diverged about 45 degrees from the entering trend. Beyond that it was possible to see about five feet to a near-meeting between floor and ceiling. A distinct old stream channel about two feet wide

comes from the end, with silt chunks and pebbles about an inch wide on the surface. No distinct airflow was felt there, but it is definitely possible that digging could extend this side passage.

We then shot from R46 15.6 feet ahead to R47, then left and down 11.6 feet to R48 to start into the crawl leading toward Hoeman's Passage. Again, Pete and I could barely fit under the first low pinch beginning the crawl, and not beyond. Jennifer made it about 30 feet into a tiny room where she could barely turn around. The continuing crawl tube went down and was even smaller, so she turned back, knowing that neither I nor Pete could get to her if she got stuck. At this time, having too little time left to deepen the ongoing crawl far enough to help much, we quit with only 51.5 feet of survey. There was a faint but perceptible outflowing breeze from the Hoeman's direction.

The most interesting feature we noticed in the latrine room was clusters of tiny empty land-snail shells, 1 to 2 mm long, in ceiling pockets where they had evidently been



Snail shells and clusters of rods on ceiling of the "Latrine Room" in Russell's Crawl.

Photo by Jennifer Foote.

stranded when surface-source floodwater had filled the room to the ceiling at some past time. At least two genera are represented: the egg-shaped ones are probably *Pupilla*, the discoidal ones another genus of which I am not sure. These are snails that live in leaf litter and soil, not in the cave. I had previously seen such snail-shell pockets at the inner end of the Hell of a Thousand Pinches crawl that parallels Russell's and ends about 200 feet SW of R48 (and also in the ceiling of the North Metro in the Snowy River complex). R48 plots only 8.2 feet higher than WT-35, the terminal station in HoaTP (most of Russell's Crawl plots around 15 feet higher than HoaTP), and a digging connection between HoaTP and Russell's seems possible.

Later examination of Jennifer's and Pete's close-up photos of the snail pockets shows another interesting feature that we did not notice with the naked eye: parallel clusters of tiny, short rods much smaller than the snail shells themselves. If these were microscopic, they would resemble clusters of microbial rods, but they are much too large for that. My best guess is that these are snail fecal pellets (not necessarily from the individuals nearby, which may have been dead when deposited, but sorted out from the soil and leaf litter in

which the snails lived when flushed into the cave).

Before we left the latrine room, Jennifer cleaned up the fragments of a very decomposed AA (?) battery or batteries found there. Our team took about 1 1/4 hours to return from the latrine room to the Main Corridor. I am not sure why I could no longer fit through to Hoeman's Passage, since I led the original discovery dig there with Vin Hoeman in 1964, and did not expect my chest size to be larger than it was then. In any case, further survey will require either smaller people (e.g., John Lyles and possibly Roger Harris), or time and tools enough to enlarge the crawl to our own size.

Historical trip reports for Russell's Crawl can be found in the *Southwestern Cavers* issues of January 1964, June 1965, August 1965, and September 1965. The article by Doug Rhodes in the January 1964 issue describes the route from the latrine room to Hoeman's Passage as "40 or 50 feet of belly crawl, with one very tight place in it," leading to a room "barely large enough for three people," followed by "75 feet of low and very narrow crawling, then Hoeman's." My own recollection is blurry, but consistent with this description.

The history of survey in Russell's Crawl is confusing. I noticed carbide-lamp soot on a 3/4 inch stalactite about 2 1/2 feet north of our new station R47, as if the stalactite might be a previous station; however, the survey in John Corcoran's database has no station beyond R46. This existing survey, used for the present map, is from 1967 and 1969, although Art Dunham's article (from September 1965) refers to arriving "at the entrance to Hoeman's Passage, where the register is located, after surveying all but about 50 ft. of the way in from camp" (before the present station R41). This soot mark could have been a 1965 station, but the 1965 survey data appear to have been lost.

A note about the Russell's Crawl name: published references have spelled it both "Russell's" and "Russet's." My e-mail inquiry to Chuck Carrara (Charles.Carrara@state.nm.us) brought the following reply dated 14 December 2009: "There was only one I in the name, however we all called it Russell's crawl anyway, including Russel. It just looked and sounded better." In addition: "His first name was Robert, but he liked to be called Bob." In view of the discoverers' own usage, I have spelled it "Russell's" here. ■