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REMEMBERING JERRY D. VINEYARD: A Personal Tribute

By H. Dwight Weaver

It is difficult to lose a good friend and mentor in your life, but it happened to me on March 31, 2017 when Jerry D. Vineyard passed away after suffering far too long from Parkinson's disease. I am grateful that he was a part of my life in one way or another for 61 years.



Jerry Vineyard (left) and Dwight Weaver work their raft over the frozen cave stream near the entrance of the Devil's icebox in 1957.

I first met Jerry through correspondence in the summer of 1956 after I had become a member of the National Speleological Society (NSS). You could pretty well count on your fingers the number of NSS members in Missouri at that date. The NSS put us in contact with each other. I was fresh out of high school and preparing for my freshman year at the University of Missouri at Columbia where Jerry was beginning his senior year. Just a few days after school started we began caving together, tackling numerous caves in Boone County and making

trips to the Devil's Icebox and further afield to Carroll Cave.

Now many years, caves, newsletters, issues of

Missouri Speleology, Missouri Speleological Survey (MSS) meetings, caving field trips and outings together that had nothing to do with caving as well as working together for 15 years at the Missouri Department of Natural Resources, Jerry and I have come to the end of a remarkable journey together. We knew it would happen eventually but you are never really prepared for such a thing.

Jerry was one of the three founders of the MSS in 1956 and as the years passed he was the only one of the three who remained steadfast in supporting the Survey, living through its troubled times and enjoying its good times on a daily basis. His contributions to the MSS are incalculable. I wish every caver had been able to get to know Jerry as well as those of us in the "long timers" crowd who are still alive; we know what we have lost and it is substantial because Jerry Vineyard was a remarkable person.



Jerry Vineyard using a 35mm camera to photograph a Carroll Cave stalactite in 1957. His camera and the expandable flashbulb holder were state of the art for cave photographers of the period. Photo by Dwight Weaver.



Jerry Vineyard emerging from the Devil's Well circa 1957, an early project of the MSS

For more than 40 years Jerry was the face and voice of the MSS locally, regionally and nationally as his position at the Missouri Geological Survey and his guardianship and management of the Cave Files made him the point person, the go-to person for Missouri cave information. He typed up on a small portable typewriter what became the initial foundation of the Cave Files in 1957 and in his lifetime they became an enormous repository of valuable information because of his close cooperation with all the people and entities that contributed to the files. He corresponded with cavers, professional people, bureaucrats, politicians, scientists, land owners and everyone else who had an interest in or need for Missouri cave data in his endless quest to build one of the finest sets of state cave files in the nation. He also kept the public informed by sending out regular press releases as Missouri cave statistics grew from a few hundred known caves to literally thousands of caves. He provided leadership and inspiration that is often hard to find and he did it in a way that not only succeeded for Missouri but won the respect of cavers and most everyone who came into contact with him. He was certainly one of the best friends that Missouri caves and cavers have ever

had.

As guardian of the Cave Files lodged at the Missouri Geological Survey (MGS) in Rolla, he went to bat many times for the MSS within the governmental entity to which he and MGS were attached for the benefit of the MSS. Some politicians, as well as political operatives within the agency, would probably have ended the MSS-MGS relationship long ago if they had had their way but Jerry was there to look out for the interests of Missouri cavers and the Cave Files. MGS was not only a repository for the Survey's cave files and maps but the division reproduced the original cave maps, no matter how large they were, in a useable format, stored them, and made them accessible to everyone. Most of this was done at little or no cost



Jerry Vineyard giving a report on the MSS Cave Files and Catalog to the MSS board of Directors at a meeting at the Missouri Geological Survey, circa 1980s. Photo by Dwight Weaver.

to the MSS. The division also provided, free of charge, space for the Cave Files.

Thanks to Jerry, the MSS was awarded the National Volunteer Action Award by Ronald Reagan in

1985 for the Survey's work in locating, recording and surveying the caves of Missouri. Jerry was the one who signed the nomination papers that led to the award.

What was Jerry like as a person? Physically, he was not an imposing man for he had a slight build yet he had a commanding presence. His voice was soft but when he gave a talk or needed to speak out his voice boomed! He had a great sense of humor and was noted for his practical jokes. He was quiet much of the time, a good listener and a deep thinker. He was creative, thoughtful and considerate. In all the six decades that I knew Jerry I never heard him speak ill of another person. He lived the Golden Rule. As the expression goes "still waters run deep" and Jerry's depth of personality and reverence for caves, nature, and respect for his fellow man was exemplary.

Joseph Vinguard (lott) and Jon

Jerry Vineyard (left) and Jon Beard examine a map in the Cave Files, circa 1996. Photo by Kate Johnson

There were contradictions in Jerry's life as a speleologist and hydrogeologist. He just barely tolerated the mud and water in caves. On various occasions I saw him climb huge clay banks to avoid six inches of mud and water in the cave stream — which is, I believe, why he always managed to come out of a cave cleaner than any of the rest of us.

Jerry, a life-long member of the NSS (#2400RL: HM-CM-FE), had an amazing range of knowledge about many subjects. He was a skilled writer, editor and conversationalist. I wish we could turn the clock back 60 years and let Jerry continue to be our guide to great achievements. For the caving community Jerry was a phenomenon of the twentieth century and he will be missed in so many different ways. I have to give Jerry credit for a lot of my own accomplishments because he was always there behind me pushing me to achieve. I learned so much from Jerry. He was a man of faith, not only in spiritual matters but also the faith and trust he put in his fellow man. I for one am glad that he walked into my life six decades ago.

Jerry, many of us loved you dearly. You left us your beautiful and loving family. Your wife Helen and your daughters, Vanessa Hammons and Monika Randolph, remain to brighten our thoughts. Your accomplishments, friendship, leadership and legacy are going to be remembered for a long time.—Written May 2017



Jerry Vineyard portraying Dr. J Harlen Bretz at the 1997 NSS Convention in Missouri. Note the corncob pipe in his shirt pocket. Jerry did not smoke but Bretz loved to smoke Missouri corncob pipes. Photo by Dwight Weaver.

Memories of Jerry - I only knew Jerry well for one year in 1956 and 57 (Jerry joined the navy and I left St. Louis for graduate school), but what a year it was. Communication was by snail mail with a carbon copy to everybody. The first cave trip was to Wet Glaize Cave. It became Carroll Cave when we met Charlie Carroll. We mapped along Carroll River, carrying a Coleman lantern. The local farmers still brought their milk to the cave to cool each morning and one of the matched pair of white mules Charlie had given his son Paul on Paul's wedding was still alive in the pasture.

Another trip was to Meramec State Park. Lone Hill Onyx was unspoiled in 1956. Jerry wouldn't believe the green flowstone until his photos were developed. We also mapped Green's Cave and visited Great Scott Cave. Both Lone Hill Onyx and Great Scott were named by Jerry that trip. On the float trip on the Current River in May 1957 we were the only canoes on the river. I remember Wallace's Well, Little Gem Cave (Jerry remained behind at the lake to take pictures and found himself knee deep in water - he beat the rise in water out of the cave), and Bat Cave. My last cave trip with Jerry was a memorable trip to Berry Cave in Pulaski County in the summer of 1957. I met his family in Dixon that trip. His dad gave me a lesson on how to play checkers.

The last time I saw Jerry was in 2006 at the 50th Anniversary meeting of MSS in Meramec State Park. We were standing by a poster of historic pictures. The picture of Charlie Carroll was labelled "Old Man Carroll". Charlie was 68 at the time of the photo. Jerry and I had a good laugh over the fact that neither of us would see 68 again.--John Cantwell

About Jerry and Caving. Jerry was a friend of mine. We loved caves, and we loved the Ozarks. We loved science. Caves were a source of endless fascination. So much to study. So much to discover. Jerry Vineyard and the Missouri Speleological Survey shaped my appreciation of caves, inspired me to study caves. I read books. I wrote reports to send to the cave files. I made maps. I learned to carry a field notebook in my pack. I kept a log of my cave trips. I took photos. These are aspects of being a scientist that have followed me throughout my life. Whenever I stopped by the Missouri Geological Survey to get cave maps, and topographic maps, Jerry was always there to help



James Helwig at Devil's Well

me. I treasured his books about Missouri's geology and springs. We went on cave trips together.

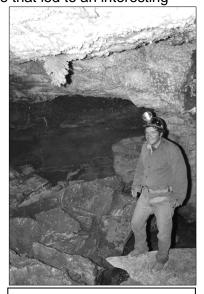
I was on a trip with Jerry to Devil's Well on Dec. 18, 1960. I was still in high school. Jim Helwig and other members of the St. Louis University Grotto were visiting the cave. It was a part of Jerry's research. The entrance was a small hole in the limestone, that opened into a vast chamber down below. There was a huge room with water from wall to wall, and deep. They lowered us into the cave using a winch. There was a seat. It was breathtaking. Literally. The huge lake was way, way down. Then, as they lowered me, the water got closer and closer. Stopped just in time. The cavers used rubber life rafts to get around. What an experience. What a cave!

Another time I went on a trip with Jerry to Bat Cave in Shannon County, May 6, 1961. The entrance to Bat Cave was huge. At the bottom of a huge talus slope was a passage that led to an interesting

cave. The air was filled with the smells of the forest, leaves, twigs, limestone, and clay. A hint of guano, perhaps. Bear bones had been found, which were sent

to Dr. Mehl at the University of Missouri. I think there was a chert arrowhead in the rib section of the remains. When our trip was over, and we returned to our vehicle in the woods, something was wrong. I no longer remember what. The other cars were ten miles away. We were tired. We were muddy. It was dark. No choice. We had to walk. A warm stroll down a road through the Ozark forest of oaks and maples. The stars were so bright, we could walk without lights. Bats could be seen from time to time. There were more bats in those days. We talked, not about the St. Louis Cardinals and things like that. No, we talked about caves, and springs. And how glad we would be when we got back to the cars, and things like hamburgers and malts.

My life is better for having known Jerry, and for having been a caver in Missouri. Whenever I am in the Ozarks, walking down a trail along the Current River, or crawling through a limestone cave, Jerry walks with me. I miss him.--Earl Neller, 1561 Game Farm Rd., Ellensburg, WA 98926



Earl Neller – 1991 – Fittons Cave

Caving Memories of Jerry Vineyard. I met Jerry in 1983-84 when I was MVG President. I determined as President I needed to go to an MSS meeting and find out about you guys. I really wanted to meet Jerry, but I was so nervous. It was THE Jerry Vineyard after all. I could hardly get the words out (know that's hard to believe). But I soon found out Jerry was very friendly and loved to talk to cavers.

Jerry was a good friend to my husband, Joe Walsh, and me. We often exchanged emails not necessarily on caving topics. When I was going through Joe's stuff, I found an email that Jerry sent complimenting Joe on his "Rimstone MO Speleo." Jerry said it made him wish he was out exploring caves again. I can understand why Joe printed and saved it.

I was fortunate to collaborate with Jerry on several nominations of Missouri cavers for NSS Fellow Awards and an NSS Conservation Award.

Many of you are aware of Jerry's fondness for practical jokes or purposely misleading people for fun. Here's a story most if not all of you have never heard: It was an MVOR – in the mid 1980's in the Lake of the Ozarks area. Jerry led the geology field trip. Most of the MVOR went – 100 cars lined up along the road. The main focus was the Decaturville Structure (aka, the Decaturville Meteor site). We all gathered around while Jerry explained the geology. Someone in the crowd asked, "What's that concrete thing over there?" Jerry said, "The government wanted to analyze the minerals left by the meteor. NASA was going to launch a rocket off that pad to go down

into the earth so the scientists could analyze the minerals. But NASA ran out of money, so they never did launch the rocket." Everybody went "oh, mmm uhhuh" and nodded their heads. Joe Walsh, the farm boy from Jerseyville, Illinois told me later. "That concrete slab is NOT a rocket launch pad, but a base for a corn silo." Jerry, you were so "bad."

I like to think Jerry is sitting around the heavenly campfire telling caving stories with Joe, Tex, Ken, Bob and all the other legendary Missouri cavers.--Lois Bronnert Walsh

Memories of Jerry. Several of us at the Roubidoux Grotto knew and worked with Jerry Vineyard. It seemed as if he had been in all of our Pulaski County Caves. Dan Slais noted conferring with Jerry, many times on field trips with the Association of Missouri Geologists, concerning the lost river status of the Roubidoux Creek. Slais' book, *The Roaring Roubidoux*, was certainly helped by the knowledge of Jerry on this karst feature.—Dan Slais



Woody Cave – Jerry's last cave trip

Memories of Jerry. We met Jerry for the first time at an MSS meeting in the early 70's. It was years before we realized that he liked to pull pranks on people. He had a wonderful sense of humor.

Before Lake Ozarks Grotto's MVOR featuring the Decaturville geology tour by Jerry, grotto members did a dry run with Jerry. Gary and I, along with our son, Travis, were on that trip. At one point, Travis picked up a wheel weight off the ground and asked Jerry what it was. He made up some long scientific-sounding name for it.

I remember when Dwight Weaver and Tex Yokum were going to Washington D.C. to get the National Volunteer Action Award from Pres. Ronald Reagan. Dwight had a beard and Jerry said he couldn't receive that award from the President with a beard. Dwight shaved his beard and that is why he looked so different in the pictures.

One time, we were in Jefferson City for some kind of event. We were standing outside the building with Jerry and some others. Dwight Weaver pulled up in the parking lot, parked his car and got out. Jerry hollered, "Hey, you can't park there!" Dwight got back in his car and moved it to a different spot!

Yes, Jerry could pull a good prank. But there are other stories, too. Dwight tells one of Jerry driving over fence posts in a field that is very funny. Then, there's the cave trip to Onyx Cave at the Lake of the Ozarks. That is when we realized that Jerry didn't like wading in water in caves....

I was always amazed at Jerry's diplomacy. He always knew exactly what to say in any given circumstance. He touched so many lives.

We enjoyed a trip to River Bluff Cave in Springfield with Jerry and others, shortly after it was discovered. It wasn't long after that trip that we lost Ken Thomson. Jerry will live on in our hearts. He will never be forgotten....—Alberta Zumwalt

JERRY VINEYARD, THE GENTLEMAN CAVER/SPELEOLOGIST. Dave Hoffman Memories: I have had the good fortune to have known Jerry Vineyard since 1960 when I first met him as a caver at Devils Well in Shannon County, Missouri. I have also had the good fortune to have worked for and with Jerry at the Missouri Geological Survey (MGS) for about 35 years and kept in touch with him during 13 years of retirement. During all this time I have known Jerry, he has been a gracious gentleman, a wonderful mentor, and a very good friend.



Jerry in bosun's chair to be lowered into Devil's Well, talking on Army field phone to communicate between the winch at rim of sinkhole and platform at bottom – 96 feet above lake below – 1960.

It all started at Devils Well on a cave trip in 1960 arranged by Don Rimbach. Don recruited some of us Middle Mississippi Valley Grotto high school aged cavers to accompany him to Devils Well to help Jerry do some clean-up work related to Jerry's Masters thesis at Mizzou about the Devils Well and Cave Springs karst hydrology. Jerry, the gracious gentleman, offered to stay on the surface to help operate the winch and let me, a relative newbie high school age caver, have the honor of being one of those chosen to ride the bosun's chair (Jerry had been in the Navy) at the end of the ½" steel cable down the 96 feet from the platform at the base of the sinkhole to the MIDDLE of the awaiting 80 foot deep by 100 foot wide by 400 foot long lake at the bottom, where hopefully there would be an awaiting canoe or rubber raft to meet you. If the winch operator did not stop unwinding cable in time, of course you got lowered into the water while strapped into the bosun's chair. And of course, communication in this large echo chamber room was always difficult plus the communication had to be relayed from the platform at the base of the 80 to 100 foot deep sinkhole up to the sinkhole rim where the winch and operator were located. Boy that water was cold! Thanks to Jerry, the gentleman caver and winch operator, I now knew why he graciously stayed on the surface. After hollering a lot I

was eventually raised to just above the water level, got out of the bosun's chair and into a canoe, paddled to a muddy side passage just above lake level, and scrambled on to solid ground.

Our mission on this trip was to retrieve Don Rimbach's diving gear and some other equipment left in the cave in this muddy short side passage just above the lake level on a previous trip. The gear had been left in the cave when an intense Saturday evening spring rain storm, with its associated intense runoff pouring down the sinkhole, had prevented the planned re-entry on Sunday. The storm runoff had caused the lake level in the cave to rise about 20 feet. Oh, and did I mention that this was in the days of carbide lamp caving when light was provided by an open flame? Upon retrieving the diving gear and other equipment, which included a "water proof" large military rocket box and a 50 cal. ammo box, we were stumbling our way back to the lake. Losing my balance momentarily, I crashed the ammo box into the wall. Guess what, it had a can of carbide in it and it was full of water because it had been forced against the ceiling during the flood and water had leaked in. The jarring caused the lid of the

carbide can to pop loose and water that had seeped in to the ammo box mixed with it. Well now we had a bomb with water and acetylene spraying out of the "sealed" ammo box. It was now time to put out our carbide lamps and get as far away from the bomb as possible by throwing it into the lake. Fortunately, there was a Coleman lantern hanging over the middle of the lake on a rope about half way down the 96 foot drop from the platform at the base of the sinkhole and it provided some light. We eventually were able to attach the bomb to a nylon cord and after lots of hollering and poor communications we got the surface people to haul the bomb to the surface. Thanks Jerry, I will never forget your gentlemanly offer to let me go in to Devils Well while you stayed on the surface.

On another occasion when I was working for Jerry as his college student summer assistant at the MGS, he decided that we needed to go to Shanghai Spring in Pulaski County and map the short cave the spring flowed from. Jerry had been to the cave before but I had not. Upon arrival Jerry got out his box of caving gear in which he had a pair of hip waders. He offered these waders to me as he knew the cave had hip deep water. Again, Jerry the gentleman. Well, as Jerry was my boss, I had to diplomatically decline the offer and explain that I was used to wading in cold cave water from all my work in Carroll Cave. So off we went to the cave to make the map. Jerry decided we should go to the end of the short cave where the water sumps and map our way out. As we went in, we immediately encountered the water and the water got deeper as we went in. I got my feet wet but Jerry was nice and dry in his hip waders. Eventually the water got hip deep. Then Jerry stumbled on a submerged rock and had to lean over to recover. That leaning was just enough for the water to overtop the hip waders and they filled up with water. The hip waders full of water were very awkward to maneuver and eventually Jerry fell over and got all wet. I, meanwhile, only got wet up to my hips. The moral of the story is to be cautious about accepting the generous offer from the gentleman caver.



Oz Hawksley and Jerry cutting cake at the MSS 50th Anniversary celebration.

June 24, 2006

Jerry was a teacher and mentor and was always trying to educate all people about karst hydrology. This included educating the professional geologist and hydrologist that worked at the MGS and the USGS, Water Resources Division here in Rolla on the secrets of karst hydrology. These professionals, of diverse ages and physical fitness, were not cavers so they had not had the opportunity to see the inside of the karst hydrology system in Missouri caves and springs to better understand how they actually worked as opposed to what they had learned in the common textbook general theory. So Jerry, the gentleman caver, decided they needed a field trip to Carroll Cave to see what the inside of a complex karst hydrology system, complete with a subterranean stream piracy, looked like. A date was set and on that date, a dozen to a dozen and a half of victims, I mean non-caver participants, gathered and headed to the cave. Jerry wanted to show them the underground stream piracy of Thunder River at the T

Junction 2.5 miles into the cave from the natural entrance. This 5 mile round trip would be an all day trip so Jerry planned to take lunches and hot coffee to be consumed at a rest break at the Lunchroom. As usual, Jerry was being a gentleman by thinking about the welfare of the participants. After the boat shuttle via the Neck Breaker of the entrance passage, Jerry led the group of flashlight toting non-caving professionals up the Carroll River Passage at his usual brisk pace with occasional stops to discuss the geology and hydrology. Being guite familiar with Carroll Cave from my dozens of mapping trips there, Jerry tasked me to bring up the rear and gather up any stragglers as well as carrying a Coleman lantern for better lighting and a backpack with lunches and a gallon thermos jug of hot coffee. I had the advantage of knowing from memory where the best and easiest route to traverse was located. Of course as they went up Carroll River, the intrepid group had to wade knee deep water and negotiate the knee deep boot sucking mud banks. And the mud gets stickier and slicker as you go. At the Lunchroom, a break was finally taken to consume the food and coffee and for the participants to rest their weary bones. Then, even though time was becoming a problem, most went on with Jerry at an even brisker pace via the Water Barrier to the T Junction and Thunder River. I stayed at the Lunchroom with those who were too old, weary, and unfit to make the forced march to Thunder River. Eventually, Jerry and his victims, I mean colleagues, returned to the Lunchroom with only minor injuries. Then we all headed out of the cave safely. A successful educational trip was completed. The next day, a number of participants did not show up for work. And to this day when I see some of the participants, they recall this trip and refer to it as the "Bataan Death March." But this was just Jerry being a gentleman caver/speleologist.

In July 1981, the Eighth International Congress of Speleology was held at Bowling Green, Kentucky. As part of this Congress there were to be a number of field trips. Jerry the gentleman caver/speleologist decided that a post-Congress field trip to the Ozarks was in order for these international cavers/speleologists and it would be conducted by the MGS. Jerry recruited colleagues Jim Vandike and me to assist in arranging this field trip, preparing a guidebook, making all logistic arrangements, and running the field trip. Many adventures were had during the preparation for and execution of the karst field trip. We visited a dozen or so of the well-known major caves, springs, and karst features of the Missouri and Arkansas Ozarks during the four day field trip. We picked up the field trip participants in southeast Missouri at the end of their two day field trip in Kentucky, led by others. That previous two days had been a disaster for the participants with busted schedules and messed up logistics with little sleep and missed field trip stops and unhappiness among the participants about some who were too slow and contrary. They were unhappy. We immediately adopted a military drill Sargent mentality and imposed a rigidly enforced schedule on them and thereby got everything back on track. We had to assign one of us to "babysit" the slow and difficult participant and keep him on schedule even if it meant he could not participate in the full field trip stop or some strenuous stops. We got many thanks from the participants for a successful Ozarks field trip. But again, that was just Jerry being the gentleman caver/speleologist.

Jerry was always the point man at the MGS for other agencies and individuals who asked questions or provided information about caves and karst related topics. One of these events involved Maramec Spring in nearby Phelps County. This very large spring is in a privately owned park, open to the public, and includes a trout fishing spring branch and fish hatchery operated by the MDC. Someone, probably the MDC, called Jerry to report that the fish and other critters in the spring water were dying and that the water was contaminated with high levels of ammonia. Jerry was asked to help figure out where the ammonia was coming from so that it could be stopped. Jerry proceeded to work on the problem by checking cave data and consulting with colleagues. When Jerry talked to me about this situation, because he knew that I was familiar with Maramec Spring and its subsurface drainage basin, I reminded him that there was a urea pipeline that traversed the recharge area. Immediately, Jerry recalled another report that had crossed his desk earlier about a "small" spill associated with a break in this urea pipeline. As it turned out this "small" spill was not so small and it was right in the dry bed of a losing stream that recharged Maramec Spring. With Jerry's help, the mystery of the ammonia contamination was solved and the responsible party was identified and had to make restitution. As a further consequence, Jim Vandike of the MGS was funded to do extensive water tracing dye tests to further identify the extent of the Maramec Spring recharge area. Thanks to Jerry the gentleman caver/speleologist.



Oz Hawksley and Jerry receiving plaques at the MSS 50th Anniversary celebration.

Jerry was contacted on another occasion by the MDC about a new sinkhole that had opened up on some of their land at the northwest edge of Ft. Leonard Wood that they also allowed the Fort to use. MDC was allowing individuals to cut firewood on this small tract and one of the woodcutters reported a new sinkhole opening in the ground where a month earlier they had been cutting wood. Jerry, the gentleman caver/speleologist, was always willing to help and said that he would get someone from the MGS to come take a look and make a report. I got nominated for the job. It turns out the 15 foot diameter opening in the nearly flat ground belled out to a 30 to 50 foot diameter vertical shaft what was 110 feet deep. The Fort soldiers that had met me at the sinkhole wanted it explored and asked me to do that. They went back to the Fort and got some good climbing ropes and I checked out the pit. There was a small passage at the bottom and there were other nearby domes that

seemed to approach the surface and threatened to collapse. So the area was fenced off with concertina wire. What an interesting job I had. "Please Br'er Fox," said Br'er Rabbit, "don't throw me in to the briar patch." Thanks Jerry the gentleman caver/speleologist.

Another Jerry story that he loved to tell is not a caving story. It has to do with the MGS Air Force. There were two of us at the MGS that were airplane pilots, Jim Williams, who became State Geologist, and me. We would fly air photo, remote sensing, distant travel, and other missions for the Survey. For the publication, *Geologic Wonders and Curiosities of Missouri*, Jerry decided that some better pictures of Elephant Rocks from the air were needed. So Jerry drafted me as the pilot for the mission. These pictures needed to be taken early in the morning when the sunlight and shadows were just right. Jerry would be the photographer using the Survey's Hasselblad camera and I would be the pilot navigating the airplane to just the right location. This was in the days before

electronic cameras so the camera used roll film and because the Hasselblad was a medium format camera with a bigger film size than 35 mm, it only got 12 pictures on a roll of film. We arrived on location at Elephant Rocks and began photographing with a couple flyby passes to get just the right view angle. Jerry decided that I was being too cautious and flying too high and far away from the target and needed to get much closer. He also needed to change film in the camera. While he was busy changing film and tinkering with the camera I circled to make another closer pass. As I approached for the next pass Jerry was still fiddling with the camera and not paying attention to where the airplane was. I finally said, Jerry, we are there, take the picture. He looked up and gulped in surprise, we were right on top of the target and he thought that he could reach out and touch it. He successfully took the picture. But, in his gentlemanly way, he loved to tell the story of his surprise about how close to the target we got.



Oz Hawksley and Jerry with then MSS President Matt Forir and MSS Vice President Joel Laws at the MSS 50th Anniversary celebration. Note the smirky smile on Jerry's face, which indicated that he is about to be a gentleman caver again and cause some mischief.

And I cannot forget to mention the MSS, which Jerry founded along with Frank Dahlgren and Oz Hawksley in 1956. This was and is a major milestone in Missouri caving. I had the pleasure of knowing and working with all three of these giants of Missouri caving. Jerry is responsible for keeping this organization functioning for over 50 years by maintaining the cave files, encouraging cavers, and facilitating meetings at MGS. This strong foundation should keep the MSS functioning long in to the future. Thanks Jerry, the gentleman caver.

It was always a pleasure to stop by Jerry's office and be updated on the latest caving going on that Jerry knew about because of his long time work with the cave files and his correspondence with all the cavers. For a while my office was in the same hallway as Jerry's, so I would see him up to several times a day every day as I would walk by. Jerry was always calm, courteous, and gentlemanly but he could be funny and mischievous on occasion. I learned to recognize when he was being mischievous because he would often have a sly devious smirky smile. Then

it was time to be careful because he was about to be extra "gentlemanly," which could be good naturedly at my expense. Love you Jerry, keep up the smirk.

Jerry Vineyard Did Look Out

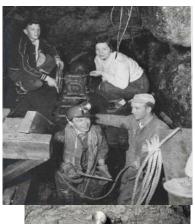
(To the tune of Good King Wenceslaus) by Jim Zollweg and Mark Clemens A St. Louis University Grotto Caving Carol From Mud Magazine - mid 1970s

Jerry Vineyard did look out as MVOR was leaving All the cavers lay about, drub=n and sick and heaving. Bright the sun did shine that day, though the caves were cool, But the whiskey from last night— on their stomachs was cruu-el.

"Look upon this glorious day, let us all go caving!"
But the cavers paid no heed — they thought Vineyard raving.
Jerry wanted to go map Cave Spring and Devils' WellBut still the cavers they did drink, and said to go to hehhhelll.

As he crawled into a tent, Biffle he did see.
Asked where the real cavers were and speleology.
"Where has gone the MSS, what's this diorama?"
"They've all gone to Arkansaw— or to Ala-Baaaama."

--submitted by Eugene Vale





Memories from Jo Schaper: Jerry and Cave Spring and Devils Well

Devil's Well



Cave Spring

Jerry loved the Association of Missouri Geologists field trips to quarries and rock collecting sites. He often took pictures of rocks, and occasionally brought extraordinary samples on the bus to take home, such as a septarian nodule he found near Warrenton.



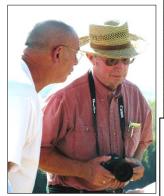
Jerry's three loves were his wife Helen, geology and writing. His two professional loves came together in his master's thesis, later published by The Missouri Speleological Survey, which he co-founded.

MSS Founders – Frank Dahlgren, Oz Hawksley, Jerry vineyard – photo by Dwight Weaver - 1990 Year of the Caves Celebration.



I have no photos of Jerry caving, but I do have a number of photos of him as Jerry Vineyard, geologist. Jerry at Rocheport, with the Missouri River...so important to his career. I asked if I could take his photo with the river, and he said, "No, that would be an insult to the river." He turned his back and I took

it anyway.

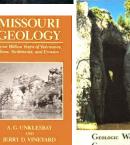


Left -Jerry rarely went on any field trip without a camera. He took many of the photos in the revised edition of Geologic Wonders and Curiosities of Missouri.

Jerry was a great communicator, especially to non-scientists. He started his career with the Survey in publications, helping to edit Caves of Missouri. He went on to write countless articles, serve as public information officer, and be involved with media projects of all kinds, including books, articles, slideshows, tapes, talks and CDs. After his thesis, he co-authored Springs of Missouri, with Gerald Feder of the USGS. stepped in to help edit the first and expand the second edition of

Geologic Wonders and Curiosities, by Tom R. Beveridge after Beveridge's death. He co-authored Missouri Geology with his former Mizzou faculty advisor Dr. A. G. Unklesbay, and after retiring, wrote Gargoyle Country, about the karst and geology of Springfield and Greene County, Missouri.







One oddity: Jerry was always meticulous about wearing name tags, even at his own retirement party, where one might expect he would be known to everyone. I asked him about that, and he said, "One day, you'll know so many people, you'll understand why I do that."



Jerry with Eugene Vale and Jo Schaper at Jerry's retirement party.





I was privileged to call Jerry Vineyard my friend for 31 years. Everyone has stories. Three of them stand out in my mind:

- (1) I met Jerry in 1986, courtesy of Don Rimbach, whom I had known about six months. Honestly, I was terrified of meeting new people back then, and especially terrified of Jerry, whose reputation I had lived with for 12 years, ever since writing a 50 page term paper in high school on the springs of south-central Missouri, (before the publication of springs of Missouri) and thinking I was going to go from high school to fame and fortune, only to discover that a 17 year old couldn't outgun the resources of the Division of Geology and Land Survey. At Don's insistence. I made a copy of this 12 year old term paper, and took it to Jerry as cave custodian, while he was holding court in the hallways of the Survey before the MSS meetings. Don was singing my praises all out of proportion, as I gave the folder to Jerry for the files. I was totally floored, when, near the end of the week, I got a letter in the mail, thanking me for the contribution, praising the thorough job, and including the phrase, 'you found out some historical information I didn't know, so even though it was never published, this is an important contribution to our spring files.' Even though we traded many letters and emails over his life, I'm not sure I ever entirely got over my awe that someone that important could be humble and gracious as well as thoughtful, in encouraging a person. That letter changed my life forever. Jerry was my cheerleader through my geology degree, and when, at the end of it, I did not get work as a geologist, I got an email one day which said in part, you know, Jo, you might have been wasted in a lab, or doing regulatory; we have lots of people who can do that, but not so many who can translate geology into plain English. That is still one of the highest compliments of my life.
- (2) At the Jacob's Cave MVOR, I was there with Don Rimbach. We were camped on the hill above the cave. Jerry was the featured speaker. Don fell ill during Jerry's talk, but was determined to tough it out. Most of us had walked down the hill to the cave, but Jerry had driven. By the time the talk was over, Don was insisting that he needed to get back to camp. In reality, he was on the verge of one of his seizures, which required that he lay down. He was being stubborn, but it was obvious that he would not be able to walk back up the hill without assistance. This was new to me; and Don was getting increasingly agitated. I was in a bit of a panic. After the crowd had thinned, I went over and briefly explained the situation. There was no hesitation. He made a quick excuse, went over to Rimbach, very quickly and quietly calmed Don down, drove him up the hill, and Don went to his nap. Straight from the focus being on him, to being focused on someone who needed his help.
- (3) Jerry's fascination with springs was legend by the time the Ozark Cave Diving Alliance took up the technical dive exploration of our large springs in 1998. They organized a once a year Missouri spring diving conference, which still continues. At that time they were diving Maramec Spring, with an underwater habitat, so the meeting was at the St. James Library. They invited Jerry to give a slide show. (Yes, back in the day of actual slides.) When his turn came up, the A/V tech asked for his slide show, and he took one 35mm slide out of his shirt pocket and handed it to them. Someone had to scare up a slide carousel with an empty slot. The people in the room became quiet when they saw his slide show was one slide. Lights were dimmed and the slide projected. It

was a profile cross-section of the Big Spring bluff, with a locomotive on top, and an arrow pointing left that read 40 miles. "I was asked here today to talk about anything related to springs I wished," he said. "This is the cross-section of Missouri's largest spring, Big Spring, at Van Buren, with a steam locomotive for scale at the top of the bluff. This arrow points to the longest dye trace of 40 miles, on Missouri's largest spring, at Mountain. View." He paused, then continued, "My challenge to you today is: go find out what is between these two places, write down what you see, take some pictures and make some maps, and turn copies into the Missouri Division of Geology and Land Survey. Thank you."

Poems for Jerry - written by Jo Schaper

Jerry's Tufa

Below freezing January. Spring water tumbles, steaming--a mini hot spring by virtue of winter the drainage ditch clothed in tufa beside US 65.

We step gingerly through honeysuckle snares climbing the hill. "Tufa," he says, grinning.
"Not tufa," I answer, "Concrete."
Traffic shoots north overhead at 60 miles per hour.

The cave, just big enough for a teen-aged boy, gushes water, releases rock--brown rimstones built eight inches high in forty-four years. Watercress thrives where the stream stairsteps delicately downhill around the barriers of its own making; living water sings over puddles of ice a small, stubborn oasis in suburban earth. 1/7/04 Jo Schaper

Geologist in the Field

Twelve years to see this: my friend, once my nemesis putting on hiking boots strapping his hammer to his belt quietly readying to cross the river.

Canoe upstream the Current Shannon County morning light paddles dipping, cross the sandbar through the canebrake over the rhyolite knob onto the shore of Tufa Creek.

It's too much to ask try to keep him on the path away from the running water. He walks, mostly quietly brain working, no doubt, heart taking in the atmosphere feet stepping stone to stone walking upstream the creek telling tales as he goes.

Poem For Your Retirement

for Jerry Vineyard

Old? No one's old in the million year minutes measured as the pink granite crumbles stone with a half life counted by earth's existence.

Worn? Nothing's so worn
as a huge cavern,
great blocks lending character,
speleothems shaped white trickles
of time
fashioned in exquisite improbability.

Tired? Tiredness does not describe the infinitude of water circling rain to resurgence to rain beneath the ground and up again always sparkling.

Neither old nor worn nor tired mean much to the geologist looking at a rock across a scant sixty years watching water rushing its way wearing the pebbles down grain by grain.

Retirement?
Retirement happens at the tire shop before you hit the road map and camera in hand notebook and tape recorder like a boy again in hot pursuit of places you've never been.

Jerry and the Quarry

Armed with his hammer he walks the quarry Pauses before a shady wall.

After some seconds, he strikes-pries at a crack, dislodges a small fragment of this or that peers at the sparkle in his hands--lets it slip slowly to the ground.

He smiles quietly and walks on.

Heart Vision for JDV

Heart vision rises on this occasion: more than just formalities clamor to speak.

Beyond the quiet demeanor lies a private karst: blue water running heart's blood to the same hollow spaces as all of us, hidden intensity of emotion cloaked too long in officialdom; a glimpse of caves, of mossy sinks well trampled tourist trails mixed with fragile decorated passage off limits accessed only by flashlight tour where salamanders and cavefish live quiet lives in carbide halls and one gently touches a beating pulse.

I do not linger there leave nothing but a slight footprint, bow my head in gratitude & restack the entrance rocks.

JERRY'S STORIES: The following stories are stories written by Jerry himself. Originally they were printed in 2013 as parts of an issue of SPG's Subterranean Journeys wherein a bunch of us (Roy Gold, Eric Hertzler, Jerry, others) wrote down humorous or amazing caving stories. We refer to the issue as the "funny story" issue of our quarterly journal.—Jon Beard

Steward

Water flows.

Water flows as he watches across the fertile gumbo flood plain a man standing at the confluence of the Missouri, the Mississippi.

Wind blows.

Wind blows, riffles his greying hair sky colored eyes watch the barges moving down those brown arteries doing the work of the world.

Darkness grows.

Darkness grows in the cavern Dim light penetrating beyond the spring as he inches towards a frostwork stone the object bringing him home.

He knows.

He knows the fragile web we weave from water air and stone the earth we inhabit but cannot own All he can do is leave some footprints And point the way to go.

Water Walker

He walks on water, they say, caver turned gnome over the years grown enigmatic, politic behind the twinkling smile.

No word passes. None needed. And no, he really doesn't walk on water. The water simply parts before him. The water is his friend.

POLKA-DOT UNDERWEAR, UNFATHOMABLE ROPE, AND A GAS LEAK

"Hey Jerry, I like your polka-dot underwear," said a female voice. Surprised, I wondered how *she* knew? By then, everybody was laughing at my expense. I checked my zipper—no problem, but then I felt a slight breeze in the back of my pants and found a slit across the seat of my jeans. That explained how she knew, but who set me up?

It was 1956—or maybe '57—who remembers. Oz Hawksley and a passel of his biology students from Warrensburg, with Louis Parker from Licking and I were probing the Cave Spring—Devils Well system along the Current River, in the very early days of the MSS. The locals had told us a fantastic story about a deep underground lake in a small cave just downstream from Cave Spring. We had to check it out.

The entrance was small and well hidden in brush, and we really didn't believe the stories we'd heard, but we changed into caving clothes and stashed our dry clothes in a niche beside the cave entrance before starting the crawl.

It was low and dry, but after about 300 feet of crawling we came to a place where there was no floor in the passage, just an open pit. With our carbide lamps, we could see green water and the hint of side passages in a lower level. Wow! The rumors were true!

We started looking for something to measure the depth with, but all we could find was a climbing rope that Louis Parker had in his cave pack. Quickly we found a rock and tied it to one end of the rope, then we all watched as the rock end hit the lake, pulling the uncoiling rope behind it. Fascinated, we watched the rope move down the unfathomed depths until it was all gone—no one was holding on to the loose end.

We never saw that rope again, but it *was* a nice rope, so all we could do was name the cave after it—Parker Rope Cave—and plan to return another day for more adventures.

While we were in the cave, some canoeists came down the river, discovered our stashed dry clothes, and one of them cut a slit in my jeans that exposed my polka-dot underwear. We never found the perps, but we were pretty careful about hiding our dry clothes after that experience. The polka-dot underwear? Turned out to be a great chick magnet. LOL

MORE ADVENTURES: We were back several times to Parker Rope Cave, determined to shake our reputation as "the bumbling brothers." We measured the depth of the underground lake at 140 feet, and tried to connect Cave Spring with the lake, but couldn't get dye through the system.

I suggested anchoring a vertical line of parachute cord, then filling a balloon with concentrated fluorescein dye, adding some BBs to give it negative buoyancy, then sinking the dye-filled balloon to the bottom, where we'd release the dye by sliding a knife down the line to puncture the balloon, releasing the dye where it would be picked up by the current of the spring.

Oz Hawksley thought it would be really tough to fill a balloon with concentrated dye, but he thought a condom might work. Brilliant!

So it was we were once again hunched over the hole in Parker Rope Cave, mixing a dye solution and pouring it into a condom. To make sure we didn't screw up somewhere, we brought a small rubber boat designed for a pilot who had to eject over open water, and talked one of the cavers to sit in this boat to make sure everything worked.

The plan worked perfectly—up to a point. The condom swelled as we poured in the dye mixture, glowing a bright green in the light of our carbide lamps. It swelled, and swelled, and swelled some more, 'til it held about a gallon. Suddenly it burst, and the caver in the rubber boat got doused with all that dye mixture. He had taken his hard hat off, so he came out with green hair. When the laughing subsided, we left the cave and washed up in the Current River, turning it green for a long way downstream.

Eventually we did make a dye connection linking all the elements of the Cave Spring system in a series of adventures over several years.

HOW TO FIX GAS LEAKS: Bill and Lillian Wallace were very kind to us while they owned the Devils Well and lived in a small house next to their barn. The house was later demolished after the property was acquired by the National Park Service, but the barn still stands. We had many trips into the Devils Well, but that's mostly another story.

On one memorable weekend, a large group gathered to map and explore the Devils Well. Among the motley group of cars and trucks that gathered, there was a 1958 Buick, loaded to the gills with caving gear and air tanks for some divers. The big, heavy Buick was built for long-distance driving, and it did that quite well. It was NOT built for Ozark backroads, especially the type you find in Shannon County.

Coming down the road from Hwy. 19 to Devils Well, a rock punctured the gas tank. Nobody knew how to fix a gas tank leak, so they decided to try to make it back to Salem before all the gas drained out of the tank. Unloading the gear lightened the car enough that it was able to make it back to Hwy. 19, where the big highway cruiser made short work of the 20 miles or so back to Salem.

The mechanic took a big wad of chewing gum out of his mouth, worked it into the hole in the tank, and nonchalantly said, "Well, boys, that hold ya 'til you get back to Warrensburg, where they'll take the tank off and fix it. That'll be \$2."

CARROLL CAVE STORIES by Jerry Vineyard. Carroll Cave was discovered about the same time as the MSS was organized. Oz Hawksley was working on his book, "Missouri Wilderness Waterways," about canoeing in the Show-Me State, so one rarely encountered Oz without a canoe lashed to the top of his car. He was so into

canoeing that he looked for ways of using canoes in cave exploring, which made Carroll Cave a favorite target for many years. A biologist friend of Oz told him about this marvelous cave south of Camdenton that had a stream in it that required a boat of some kind for the first half mile or so—and then it got really big! So it was that Carroll became the first project cave for the MSS, and as history developed, it is still one of Missouri's longest and most fascinating caves after more than 50 years of exploration and hundreds of cave stories. Here are some of my favorite Carroll Cave tales.

A PARKING LOT FOR CAVERS. Charlie Carroll owned the natural—and only at that time—entrance to the sprawling cave system that extended under a large area of sinkhole-pocked farm and forest lands. We would show up at the entrance, which was conveniently located beside a county gravel road, unload our gear and canoes, and head off into the dark unknown, in the golden age of exploration in Carroll Cave. At the time, it was by far the longest cave in Missouri, because the long and complex caves running beneath the Perry County Karst had not yet been documented. J Harlen Bretz's "Caves of Missouri" had just been published, and it revealed 437 caves in Missouri, an impressive number at the time, but doesn't it look tiny today, when MSS records cover some 6,700 known caves?

We usually arrived at the cave late on a Friday afternoon, and sometimes "Old Charlie" Carroll would show up on his tractor to visit with us and listen to stories we told him about the incredible beauty of his amazing cave. He listened, but would have nothing to do with going in the cave himself. "Nah, you boys go right ahead with your explorin'—jus don't drag *me* in that bat-infested place."

Charlie felt badly that we had to struggle getting the canoes and gear into the cave, so he resolved to do something about it, but he wanted to surprise us.

One weekend we showed up at the cave and it was completely changed. Where there had been thick deposits of cave detritus at the entrance—likely rich with archaeological treasures—there was now a wide, spacious parking area. We could drive right in under the entrance overhang, and offload our gear and boats right into the cave stream; who could ask for more? When Oz saw the carnage, he just about "had a cow."

When Charlie arrived on his tractor, he had a big smile on his face, and Oz couldn't bear to say what he wanted to say: "#@%\$&**\$ Charlie, you've destroyed thousands of years of human prehistory just so we can have a nicer place to **PARK?"**

Of course, the damage was done; it was impossible to reverse, and so we simply enjoyed the heck out of our new parking lot—how many caves have you asked permission to visit where the owner says "Sure, go ahead and explore, and while you're enjoying the cave, I'll build you a nice parking lot."

Years later, in a strange sequence of events, "Old Charlie" Carroll died in a farming accident when his tractor turned over and crushed him. His son Paul inherited the cave, and years later he, too, died in a farm accident when his tractor turned over on him. Strange.

CANOEING CARROLL RIVER. Oz Hawksley was delighted to find that he could use his canoe in Carroll Cave, which has a low, wet entrance passage that requires about a quarter to a half mile of boating before you break out into borehole passage in the Mountain Room. Canoes were definitely not the best choice for this part of the cave, but we used them anyway. There was a low spot about half-way through that required one to lie down in the canoe and push on the ceiling, to get through. Easy enough to do, in most cases, but caves seem to follow Murphy's Law more than other rules of thumb.

On one big expedition, we had so many people we had to use canoes to ferry cavers into the Mountain Room. Word came that we had two more people at the entrance who needed to be ferried in, so Oz, in the Mountain Room, said he'd go get them. Time passed, but the canoe did not return. I had a dry suit, so I volunteered to go check on Oz.

I found him at the low spot, wedged tightly under a low ceiling off the main channel, and mad as a hornet. It's hard to see where you're going while lying down in the bottom of a canoe and pushing against the ceiling, so you tend to drift to one side of the passage or the other; it's like trying to climb out of a converging crack. It took a while to get him headed in the right direction and able to sit up in the canoe. In the process my "dry suit" ended up getting filled with icy cave water and both Oz and I were pretty short-tempered for a while.

For a while "dry suits" were fairly popular for use in really wet caves. We got them at Army Surplus stores, which were plentiful in those days, fairly soon after the end of World War II. They were also the source for small rubber boats and for fluorescein dye that we used for dye tracing work. Today, a visit to Bass Pro Shops will offer all kinds of useful gear that was really hard to find in the mid-50s.

BY THE LIGHT OF THE GREEN MOON. Oz Hawksley and student members of the Western Missouri Outing Club camped out almost every weekend, and made frequent use of Coleman lanterns for caving. Of course, lanterns are of no use in caves that have crawlways, but in a place like Carroll Cave, a nice big Coleman lantern provides light for say, a mapping party, and some extra warmth for the caver who carries the Coleman.

Just about everything has a fatal flaw, though, and so we learned that Coleman lanterns were fairly easy to tip over, and they didn't tolerate water very well. We were in Carroll's Mountain Room and Oz Hawksley had managed to dunk his Coleman in a pool of water, and was trying to get it relit. In the process Coleman fuel got splashed around, and by chance Oz's hands sort of caught fire. It's absolutely amazing how fast and adroitly a distinguished professor can move when his hands catch fire. We also learned that such occasions also stimulated some of the most memorable bursts of colorful language that one could imagine.

But on the whole, Colemans were reliable and uniquely useful, especially while we were mapping Carroll River in the first attempt to map the cave. Oz had a young son named Derek, who often carried the Coleman while Oz sketched and I ran the compass. The stream we grandly called Carroll River meandered back and forth across a passage with a deep red-sediment fill, so the mappers were continually crossing and re-crossing a stream. If another party was ahead of the mappers, one couldn't tell how deep the water was, because the mud was easily stirred up.

We came to yet another crossing, at a point where you were on a flat mud bank about a foot above the water surface. Oz yelled to Derek, who was ahead with the Coleman, "How deep is the water here, Derek?" "Oh, 'bout knee deep," said Derek. So Oz stepped off the bank into water that was about waist deep. What a surprise! Derek wisely moved on, making sure his Dad didn't catch up to him any time soon.

DIRE WOLF SERENDIPITY. Carroll Cave is BIG! Eventually we decided to do multi-day trips as exploration carried us farther away from the entrance. The first camp we set up in The Lunchroom. It was a sizable expanse of dry mud, so we just put down our bedrolls and made it home. Bob Starks put his sleeping bag down in a likely spot, but couldn't get comfortable. When he looked under his bag, he found what he thought was a rock, but when he dug it out of the mud, it was an animal skull.

Hawksley was astonished. He later identified it as the skull of a Pleistocene Dire Wolf. The serendipitous find inspired a long list of discoveries of Ice Age animal bones in caves all over Missouri, including numerous bears in the Current River country, sabre-tooth cats in Perry County, shaft caves filled with bones in Jefferson County, and even traces of prehistoric humans in Dade County. All this while a non-caver, Dr. Maurice G. Mehl of the Univ. of Missouri in Columbia, was researching Ice Age fossils for his book, Ice Age Animals of Missouri.

AFTER THE FALLS. The early days of exploring Carroll Cave were intense—new discoveries on every trip, or so it seemed. Virgin passage, never-before-seen speleothems, southern cavefish, bats, blind crayfish, underground stream piracy, Pleistocene bones—none of us had ever seen a cave like Carroll before. It was a tough cave. All of the trips began at the natural—and only—entrance. We did overnite/multi-day trips, and generally had more excitement than any of us could have imagined. And today, more than half a century later, a revitalized Carroll Cave with a second, caver-created entrance continues to yield new discoveries and jaw-dropping excitement. May it ever be so!

Jack Reynolds and Shirley Stafford discovered Thunder River Falls, if memory serves. Their discovery set off an intense desire to explore the underground river beyond the falls. It looked as though the only way on was over the falls themselves, and that would take some doing.

We needed a cable ladder—a *strong* cable ladder—so someone built one using half-inch hemp rope and rungs made of slats of oak hardwood flooring. Completed, it was dead weight, and we had to drag it all the way from the entrance, up Carroll River, and down Thunder River to the Falls. It got wetter, muddier, and heavier every step of the way to the very brink of the powerful waterfall.

We anchored the upper end of the ladder and threw the rest down the roaring abyss. Hawksley got the honor of being the first man down, while I photographed the excitement. In a few seconds he was fully engaged, with water pouring down his neck and threatening to rip him off the ladder, while I kept popping flash bulbs, looking for better camera angles. In my haste, I accidentally discovered a way around the left side of the falls, and when Oz got to the bottom of the falls and into the little rubber boat he'd brought along, there I was, saying "Smile!"

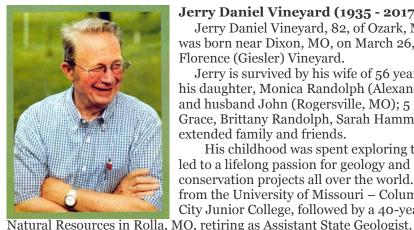
He was *not* happy to see me. Thoroughly soaked, cold, and 3 miles of wet, mud-sucking cave away from relief, he was not smiling. I seem to remember that I had to carry that dratted ladder most of the way out. Or did we stash it in a muddy crawlway somewhere? Memory fades, but the next cable ladder we made from $1/8^{th}$ inch aircraft cable and metal rungs.

Of course there was no time to complain about rough times; we had big cave to explore—lower Thunder River, Upper Thunder River, at least 60 side leads, etc., etc. The Thunder Falls adventure became part of the rich folklore of Carroll Cave, and the beat went on to "Jerry's Cairn" and beyond.

GENERAL, GET ME A BIGGER CRANE. The phone rang one morning in my office at the Missouri Geological Survey. It was the Army, calling from a military post not far away. They had found a bottomless pit; could I help? A backhoe operator digging a utility trench for a new building noticed a hole in the bottom of the trench that was not of his making. Checking, he dropped a rock in the hole, but couldn't hear it hit bottom. Hence, a bottomless pit; time to call in the cavalry. That would be me. Grabbing my gear for dealing with bottomless pits, I drove across the hilly landscape of the Salem Plateau, underlain by Ordovician dolomites and sandstone, with thick, cherty surficial materials consisting of residuum from weathering of the dolomite strata. Sinkholes, springs and caves were common. One cave near the military reservation has an enormous room that was considered as the site for an underground jet propulsion lab, near the end of World War II. Maybe this "bottomless pit" would lead to a spectacular discovery? The crowd gathered at the site was liberally sprinkled with Army brass. After a briefing, I crawled across some boards and peered down the hole. I could see a shaft about 25 feet in diameter, with walls that looked like laid stone, but I recognized residuum from the Roubidoux Formation, which is dolomite with considerable sandstone. The dolomite had been removed by solution, leaving broken sandstone in a cherty red clay matrix. It all looked frighteningly unstable. Spotting a crane nearby, I suggested we use it. I would stand on the hook (you could do that sort of thing in those days) and they could lower me down the center of the shaft without touching the unstable walls. It worked perfectly—to a point. Just when I could begin to make out the bottom, the descent jerked to a halt—there was no more cable on the crane. Returning to the surface, a large crowd had gathered, including the Post Commander, a general. Seizing the moment, I ordered, "General, get me a bigger crane." I half expected him to push me into the pit for being so brazen, but instead things began to happen quickly. An enormous crane lumbered into view, sporting a nastylooking hook and enough cable to reach the Moho.* This time I made it to the bottom. The shaft was straightwalled, entirely in residuum, and the bottom was covered with loose stone and clay from the stoping process that had produced the shaft over time. A drain led to a dry sump, revealing the process by which the stoping debris had been removed through cavernous channels in the underlying bedrock, likely the Gasconade Dolomite. Unfortunately there was no access; the drain was clogged. After making recommendations for filling the shaft with waste rock and crushed stone from the Post Quarry nearby, I drove back to the office with a silly grin on my face, thinking, "Having this much fun in one day would probably be illegal in any profession except geology." How frequently does a lowly geologist get to say, "General, get me a bigger crane?" The pit was filled according to my directions, the building was completed, and it still stands today.--Jerry D. Vineyard Missouri Assistant State Geologist (Retired) *The Moho, or, spelled out, Mohorovicic Discontinuity, is the irregular boundary between the Earth's crust and the uppermost layer of mantle below.

BORRY YER LADDER, MR. FIREMAN? As young geologists, Jim Williams and I were always looking for interesting challenges. One day a call came in from a dairy farmer in southwest Missouri, asking if the State Geological Survey could help. He had a spring that he used for watering his dairy cattle, and it had become seriously contaminated. That's all we needed to know, because after all, we were public servants. So off we went to the small town of Republic, in a karst terrane with many sinkholes, springs, and caves. After visiting with the farmer and confirming that his spring was indeed foul, we began to look for the source of contamination. The town seemed to be a likely place—in the upper watershed of the creek running past the farmer's land, and it wasn't long before we found a soft-serve ice cream place that was discharging its sewage into an old cistern. Then someone told us about a nearby farm that, it was rumored, had a well that opened into an underground stream channel. How exciting! We rushed to the farm, and sure enough, outside the back door of the farmhouse there was a concrete pad with a lid over the "well," which was no longer in use because the home was now on city water. So we moved the lid and found a deep limestone shaft in which we could hear water running below. We just HAD to get down there, but we had no ladder. Now where could we find a ladder? Maybe the Fire Department would loan us one? We went to City Hall and asked where they kept their fire truck. We found it in a small, garage-size building. They had a nice ladder, just the size we needed, so we said, "Could we please borrow your ladder for a couple of hours?" Taken aback, the volunteer firemen scratched their heads, but couldn't think of any reason why not, so they said, "Be sure to bring it back as soon as you can. Nobody has ever borrowed our ladder before." Armed with a fine aluminum extension ladder, we hurried back to the farm, assembled the ladder, and began to try to poke it down the access hole in the concrete pad. This wasn't easy,

because we could only hold the bottom of the ladder while the rest of it waved back and forth high above us. While this was going on I happened to look up and noticed the electrical wires leading into the house were just about to touch the metal ladder—we were about to be fried! So we sat down for a few minutes to regain our courage before very carefully maneuvering the ladder into the well so we could explore the pit. We discovered a sizeable cave with sewage from the ice cream place running through. Later we ran a dye trace to connect the cistern behind the ice cream place, the cave stream, and the contaminated spring. This was enough for the City to crack down on the contamination, and the farmer's spring recovered.--Jerry D. Vineyard 2-28-2013



Jerry Daniel Vineyard (1935 - 2017)

Jerry Daniel Vineyard, 82, of Ozark, Missouri, passed away on March 31, 2017. He was born near Dixon, MO, on March 26, 1935, the only child of Henry Vineyard and Florence (Giesler) Vinevard.

Jerry is survived by his wife of 56 years, Helen (Anderson) Vineyard, of the home; his daughter, Monica Randolph (Alexandria, VA); his daughter, Vanessa Hammons and husband John (Rogersville, MO); 5 grandchildren - David Randolph and wife Grace, Brittany Randolph, Sarah Hammons, and Lauren Hammons; and numerous extended family and friends.

His childhood was spent exploring the hills and hollers of Pulaski County, which led to a lifelong passion for geology and made him a tireless advocate for conservation projects all over the world. Jerry received his MS in Geological Sciences from the University of Missouri – Columbia, He began his career teaching at Kansas City Junior College, followed by a 40-year career with the Missouri Department of

Jerry proudly served in the US Navy after attending ROTC at Mizzou. He achieved the rank of Lieutenant JG and served as a Gunnery Officer aboard the USS Chilton APA 38.

Jerry was a member of the Clarence Cannon Dam Wholesale Water Commission, and negotiated water distribution rights on both the upper Missouri and the Mississippi rivers. He was a lifelong member of the Missouri Speleological Society, with a focus on the cave survey, which encouraged scientific study of Missouri's caves and water resources. He served as a board member of the L-A-D Foundation, dedicated to preserving Missouri's natural areas. He authored/coauthored several books on Missouri's natural wonders. A copy of "Geologic Wonders & Curiosities of Missouri", coauthored by Dr. Tom Beveridge and Jerry Vineyard, is in the time capsule of the Missouri State Capital, to be opened 100 years in the future. Jerry considered it an honor to be a public servant and worked hard to preserve Missouri's natural resources for all to enjoy.

Jerry and Helen shared a strong faith in God, and Jerry was an active member of various Baptist churches throughout his life. Jerry was a beloved husband, dad, grandpa, and friend with a gentle nature and wicked sense of humor. He will be greatly missed. A Celebration of Life will be held in his honor at First Baptist Church, Ozark, MO, on Saturday, April 29, 2017, at 2 p.m. A graveside service with military honors will be 1:00 p.m. Friday, April 28, at Missouri Veterans Cemetery, Springfield. Arrangements are under the direction of Adams Funeral Home, Ozark. In lieu of flowers, memorials may be made in Jerry's name to St. Jude Children's Research Hospital, 501 St. Jude Place, Memphis, TN, 38105; or Christian County Public Library, 1005 N 4th Ave., Ozark, MO, 65721.