

INTERVIEW WITH WILLIAM AND BETTY WHITE

DN: Just for the record, why don't you tell us who you guys are and where you are at?

I'm William White, I'm an Emeritus at Pennsylvania State University in Pennsylvania, and I retired this last year.

DN: I didn't know that

WW: I have been there 40 years

BW: I'm retired from Penn State also, all my degrees are in Civil Engineering. I'm at home now

DN: How did you guys get involved in caving and/or cave science?

WW: Well you know,

DN: Which came first, you know the ole chicken or egg

WW: Well it's a funny business because I can't remember a time when I wasn't interested in caves. As a kid in a one room grade school. I would go sneak off in the woods and go hunting for caves sometimes get back late and get in tremendous trouble with the teacher for doing this. It took a long time to realize that whole countryside was all underlain with shale and that there was not going to find any, but I was looking. But I started thinking seriously about caving when I was in college because I had a job being a local guide in a local show cave, we would go exploring the caves for the Pennsylvania cave survey that was probably in 1953, and you look in the back of this old magazine you would find a couple cave descriptions written by a punk teenager that was still in college at the time.

DN: Did you read about caves to get you started or....

WW: I just always knew they were out there, I just had to find them.

DN: Did you grow up in Penns.?

WW: Yeh, I referred myself at Penn State as a Universal foreigner most of our faculty comes from all over the world and my hometown is like 30 miles away.

DN: What was your first cave, Betty

BW: Well, it's not what my first cave you want to hear about, Will was always conveying.

DN: I never knew about all the cave scientists.

BW: He found about this female civil engineer at Penn State and he convinced me and another civil engineer fellow to go down and survey the entrances of caves in West Virginia and so this is what we did. The first time we went into the cave for some reason this other fellow was delayed, so William and the other gang went in first and so we didn't know how to go into the cave and so we started going in and of course we went through all the water, got soaking wet and they were hiding behind a rock, I got out and screamed.

DN: I did that to Ronald Gurbo in Carlsbad Caverns, and we were not pleased. Were you pleased?

WW: At that particular moment I wasn't looking for a girlfriend, I was looking for someone who knew how to run a transit so that we can make a decision wisely by looking up entrances

BW: The girlfriend thing happened later, she proved you, huh.

DN: Why do you think that kids should study caves

WW: Well actually that is not to easy to answer cuz kids should study was is neat, and some people think that engineering is neat to build fast cars or airplanes and building spaceships or whatever at that time. Now, geology is general and kind of neat out in the country side and pounding on rocks to look at things to see what is going on to see about geological time, now that's just plain fun. I didn't start to be a geologist let alone a cave scientist, my undergraduate degree is in chemistry and I took a job in Pittsburgh where I happen to intercept in Civil Engineer pit and as a physics major, but decided the physicist was or is at that time a square bush. Anyway and the geologists were out there having a good time, out there running around the campsite looking for rocks, hanging around the fire drinking beer. I mean they were genuine and more fun to be around with and I just gradually oozed over and then went to Penn State to get a PhD, I did it in geochemistry not in geology.

DN: Do you think multidisciplinary study.....?

WW: Only way to go! I mean disciplinary, every branch of science has its own nucleus where it started and people started to explore more and more and things just got bigger and bigger just like lily pads in a pond they start growing together, and now you really got to understand the whole pond, they day you are sitting on your own pond is all over.

DN: Eureka Moments?

WW: Oh boy, just about everything eureka moment, working in the lab, do analysis, field observation trying to figure out what's going on and occasionally think of something that's pretty neat but something sparkling, life changing.

DN: Something that stands out, other than the others, like Bill Elliott told us about.....

WW: I have a very small eureka moments all the time

DN: Well that's pretty good if you have them all the time, and pretty lucky.

DN: Where would you suggest about kids.....?

WW: If you are a undergraduate looking for a school to go to and interested in caving, look for a school with a cave club, so you can actually do some caving. Then look, if you are going to be a geology major, look at the geology departments to see if anyone works with caves or things related to caves. It wouldn't have to be caving, maybe hydrology or something like that. The faculty would have to be a least sympathetic, if you wanted to at the end of your undergraduate career you might have to write a thesis a lot of school require this and of course you will want to write about caves.

You don't want to be laughed at when you go to your professor's office to make a suggestion. But that's the undergraduate world is really finding a good school with good courses and things like that because you probably are not going to make your living as a caver, there is only a handful of people that actually pulled it off but not, you would be a hydro geologist or environmental scientist or something of this kind.

DN: What do you think are the big questions in your field?

WW: Hydrology a cave, not being sorted out, we are making alot of progress and still trying to find out and understand how ground water systems work. That kind of thing has a very virtue of high remarkable status, there are a lot of problems dealing with water quality, water supply, pollution control and that kind of stuff

DN: Which impacts the Civil Engineer?

BW: Civil engineer problems are what is the strength of these roof beams in the caves right now and why does breakdown occur in the cave and what is the proper of particular time stone in that area and the brittleness of limestone in another area.

WW: But if you are looking for a really global significant scientific problem, I think caves as a..... Because everybody is in a teensy over global warning rather they lick to do something about it or if they rather it go away, depending on which political person would be and its an impossible thing to deal with because the record is very cluttered and noisy and trying to understand any glaciers are retrieving when your moving up the valley so something happen maybe it will come back in 10 years, particularly in caves that are just about the right kind scale if you look at a nice campus stick that is a couple of meters high you got a record of 25,35,40,50 thousand years that is standing from present back to the end of ice ages and you can learn to read the signature and its really a lost language in a sense. Haven't found a Reseda stone and if you can read it, it will tell you about these crazy writers. We are having our heat waves, that we are having, or these short flips will sit still or go away or is it a long term problem which would give us a lot of trouble, 10-50 years down the road and records there, the question is just learning how, and that's where the action is at this moment.

DN Question: How about your favorite cave?

WW: I can say I never saw a cave I didn't like, I have gone through so many caves that have been traveled, fraternity party, trashed through and still interested package layout, don't have no problem.

DN: How about you Betty?

BW: I have liked every cave too, but I remember my first trip to Butler cave where you walk through the passage way and there was stars all around the passageway, its like walking through a winter wonderland, very pretty, DN: was it crystal? BW: I don't know, it was a tinsel crystal.

DN: One last question. What is the most adventurous you have done in a cave?

WW: You mean crazy, yeh crazy very dumb. I actually done one, in a cave in Venezuela, "The Cave of the Quacheros?" The back of the cave narrows down this long passageway, it finally goes smaller and smaller in the crock pit called the "wind pass" and the wind howls through this narrow crack and below it sumped right up to the thin to the end of the crack and underneath as I was told, its larger room so what you do is take a deep breath and go for it. There is 12ft, 3 or 4ft down, but he said you be careful don't want to come up to soon cuz you will get wedged in the crock. Ok! Young and stupid.

It's hard to keep a light lit on so I picked up the lamp and took a deep breath and said come on Jim, pull away through. One guy that went with us took the don't come up to soon seriously and is standing by the stream channel on the other side by the pump and there he goes underwater, ok come on out and of course, the realization you have to go back in order to get out of the cave.

DN: How about you Betty?

WW: Well maybe you can tell her about the honeymoon?

DN: Sounds very memorable.

BW: We went to a convention on our honeymoon. It was the Carrel Cave in Missouri and in order to get in carrel cave you had to load a raft and you had a ft. of air space above the raft, so in the cave, since we were on our honeymoon they let us have a raft of our own; so here we went into carrel cave. Carrel cave is a very muddy cave in fact after about 300 people tromp ell through the cave you sink into the mud up to your upper leg. We went through this cave and were so exhausted I told Will to leave me there and that was our honeymoon.

INTERVIEW WITH BILL ELLIOTT

DN:

BE: I started caving when I was 15, well that was my first cave experience, just a sport adventure but why do it, because it combines a physical adventure with electrical adventure, I like that.

DN: You're not trying to

Be: Yes of course, I liked it when I was young, I did a lot of vertical caving and that was a lot of fun to have and meet new species of cave animal or collect blind fish in Mexico and that end of the rope. I don't do this kind of thing anymore but I still get pleasure out of the physical adventure and the electrical adventure on the same trip.

DN: Can you remember your first cave trip and what it was like?

BE: Yes, and it was stupid, I mean looking back, I was 15 years old and my buddy Jack and I went to this small cave in my hometown of Texas. We went to a steam cave, He was a fairly type Lutheran preacher, he charged all the kids 50 cents to go in.

We went in there, I was a lifeguard in the summer and I had a swimming pool rope and we used it to slide down. We had to go down this 15 ft sink hole and explored this cave with flashlights, no helmets, nothing for protection, it was just great fun. Two weeks later we got 2 girls to go with us to the same cave, we had lots of fun, we pretended that the flashlights went off but at the same time of course we had to feel around in the dark.

DN: I had no idea Bill

BE: This was great fun but I didn't seriously think about caving until I was 20 and I worked in a show cave, Interspace Cavern. At this time I was zoology major in college, at that point and picking bird zoology when I stated caving seriously, but the guides that we had there like to give real good tours.

They had a pretty good tradition there at Interspaced Cavern, at that time and our tourist guide was Bill Russell who is a famous caver there in Texas and he knew everything about caves.

DN: Was he biologist?

BE: No, he was a geographer but you know we could ask Bill cuz he was like a encyclopedia and then we started caving after hours and I soon joined the University of Texas Grotto and started map and then I was soon getting vertebrates from Mexican caves and finding these species which I couldn't believe that someone who knew so little that could find something new to science. Of course I didn't know were exactly I would send them to, Jim or Bill they were the graduate students in cave biology so we became friends and he would send them to..... Who would identify them so even in my first few trips to Mexico. I was finding new things and that was interesting and thrill so that it what got me hooked.

DN:

BE: First of all, one reason we go caving because it makes us feel special we are a little different from average person and even the average scientist so those of us that are cave scientists are sort of like caverns. We are cavers as well, the most of us started as cavers but we get the special feeling but we know that caving environments are not understood by the average person and so we get this feeling of beauty to this resource that is not well understood by the general public its overlooked, abused, but I think that cave resources an of importance to the general public even though they don't want to go caving certainly the 2 issues.

I think that we are important to the public that's bats and groundwater definitely big resources and big benefits to the general public without even going caving.

DN:

BE: Right, I think those are big questions because they reach a lot of public if we didn't have bats we would be intimidated without flying insects there are our first line of defense against all flying insects, some they are agricultural pests threats to risk of public health, not all of them of course but bats are over first check natural checks of flying insects and of course its been well established that like Mexican retails bats of SW are enormous important, economically important to the tunes of millions possibly billions of dollars in the control of agriculture pet lines certain mauves, but even lesser or less possible bats like gray bats and so are definitely important even though you have never gone into a cave issue. Water in certain regions very important issue unrecognized in Texas its becoming obvious that groundwater that from Edwards Aquifer everybody knows that it is an important resource but the fact that they are overdrawing water from it, and its really starting to pack the system and change water quality which that is becoming an issue in Missouri, major resources in groundwater it is so abundant that people haven't woke up yet, to the fact yet that it is easily polluted.

DN: What is the coolest thing you ever saw in a cave?

BE: The coolest thing I ever seen in a cave wasn't always cave life, I am in love with all kinds of things in a cave include cool mineral deposits, but the coolest thing that happened to me was finding a extremely unusual blind species of scorpion on my pants, it was one of these eureka, ha moments, I looked down while I was mapping a cave down in Mexico, many years ago and we had been crawling down this wet passage there was some white blind _____ crawling on our jeans and we would gently brush them off cuz we didn't want to hurt them they were kind of a nuisance and I was getting ready to brush them off my levis and there was a perfect blind scorpion perched on my thigh, I won't say what I said but it was a big exclamation, I instantly recognized what it was, and there was only 1 other blind scorpion species known in this whole world at this point, and this one obviously at this was going to be another one.

DN: It was named after you?

BE: Yes, it was named after me, its name is _____, it is a unique scorpion, and very unique family or subfamily scorpions but it's considered the most _____ scorpion in the whole world.

DN: How does it feel to have something named after you?

BE: It's a thrill to, I have above 10 species names after me even 1 genus over the years, which is substantial, which I know people have more than that like James O'Dell that's probably the world record holder as far as the patronamatics that's what we call him. But it was very satisfying, its something that also people make fun of, that don't understand that, yeh so it is kind of a private reward its something that you can carry around with you and feel some satisfaction, but its not something you go around tell your neighbors about cuz they wouldn't understand they would think its bizarre.

DN: Which name do you like the best?

BE: That scorpion, it was originally a genus _____ and then created a special genus just for it. _____ Gneous _____ is in Spanish is a fifth cave, a very special name for a very special scorpion. That was the first one, names after me and still most exciting one I have a genus mike named after me, I tell people I have a genus named after me, wow really what it is called, ele-eliot, Really what is it? It's a cave mine oh; you should see what I'm talking about

DN: It's not going to be very satisfying

BE: People unfortunately quake size with importance and as we know that's not true in biology that size is not the same as importance.

DN:

BE: I think that in science or cave biology, there is all sorts of reasons, bats and groundwater like I say or definitely economically important issues within cave biology itself where very interested in finding species that gives us clues, to the past, that that we can understand, how they can develop in geologic time so I'm really in the subject biogeography and evolution and when we seek patterns of cave adapted critters in Missouri, Texas, California where we can relate that to the geologic setting in the whole history, to me that is real deeply interesting cuz it contains both biology and geology.

DN:

BE: Well I like to say I've been caving for over 30 years, and have not had a major injury in a cave, I'm pretty known as a safe caver don't take no high risks, I have had minor injuries but nothing I don't engage in really dangerous practices.

But the most adventurous thing I've done is repel in a deep pit in Mexico and have to dangle at the end of the rope to collect flying cave fish, and all in the while they were nipping at my toes, because of the jungle boots I had on, the tip of the shoe was all worn out, and my toes were sticking out and the blind cave fish were nipping on my toes.

DN: It tasted good.

BE: and then I would to go get a folding dip not and while I was attached to the rope I would dip up these cave fish which would wind me up on the rope, in one direction and then when I would lift these fish up to put in a jar, the rope would unwind in the other direction until it unwound, this is gold line rope which is the old fashion twists in a spiral and so that was a pretty demanding multi-task job, took a lot of deliberate presence of mind but never was in any kind of danger, in that same cave, I had to climb back in the dark for along way up the rope cuz my lamp fell off my helmet and this a 646 ft pit but really was not totally a free drop it had a crook in the middle of the pit so that you were in darkness at the bottom half of the pit, and I looked up when I was about 50 ft off the floor and I was the last person out of the cave that day and my lamp fell off my helmet and crashed to the floor but of course I had my back up flashlight swung in my back under me but I didn't want to try the crop part of dark until I reached the knot of the rope half way up so I climbed in total darkness about 300 ft and that was a very unusual experience my sense of time got totally distorted and I felt like I was in a endless treadmill in space no visual references it was pretty weird until I bumped the knot and got my flashlight out. I've seen some unusual things in a cave, small things that people, other people don't appreciate like I do.

DN:

BE: I think increasingly there are caver professors here and there that do teach something about caves, my good friend and colleague