

Jay's Background:

I began caving in 1977 in Maryland with the Frederick Grotto. My first "wild" caving trip was remapping George Washington Cave in the eastern panhandle of West Virginia with the guy who got me into caving in the first place, Mark Johnsson. In 1978-1982 I was a student at Virginia Tech, where I was active in the cave club mapping in the caves of Skydusky Hollow, Virginia.

I took a hiatus from caving during my military service from 1984-1993, although I did some lava tubing on Cheju-do Island, Korea and also poked my weapon/head into some holes in the Kurdish territory of Turkey and Iraq. During training with the Austrian Mountain Troops on the Loferer Steinberge mountain I looked down a few alpine shafts and got back into caving upon my return to Fort Bragg in 1992. I caved there with the Triangle Troglodytes and also became a member of the West Virginia Association for Cave Studies. From 1993-95 I lived in Baltimore where I was studying pre-med and caving/diving with the Baltimore Grotto. Much of my caving was in Virginia and West Virginia. I also trained for sump diving specific caves with Joe Kaffl and the Northeast Sump Exploration Team (NEST).

In 1995 I entered the University of Minnesota School of Medicine and graduated as a physician in 1999. During my time there I became good friends with Dave Gerboth and John Ackermann. Most of my MN caving was in John's karst preserve caves: Spring Valley Caverns, the Big One, and Riverview Cave as well as the smaller ones in the preserve. I managed to attend the 1998 NSS Convention in Sewanee, TN and spent the week prior to this doing Alan Cressler's "TAG Deep caving camp" in the area of Little Coon Valley.

After med school I moved to South Dakota for my residency training in family medicine (just completed this past June) and got involved with Jewel and Wind Caves. I map with Rod Horrocks in Wind Cave when I get the chance. The Colorado Grotto has also been very kind to include me in their monthly weekend mapping trips into Wind Cave. I've mapped a couple small caves here in the Black Hills, namely Blue Rock Crystal Cave, Gravel Springs Cave and Thornton Cave. In 2000 I married Jodi Oberstein, a nurse at the hospital. We have a son, Nicholas, born August of 2001.

Of late I've been doing some fun alpine caving in Montana and Wyoming, mostly with the Northern Rocky Mountains Grotto. They are very active in Montana and enthusiastic cave mappers. My wife's twin sister caves with them. Last year I helped map Lost Creek Siphon (MT), the definitive map is now done after over thirty years' effort. It is a cold alpine river cave that is almost entirely a series of shafts taking lots of water and was very intimidating to some of the explorers. Rebelay technique and modern cave suits, along with Willie Hunt's water-resistant radios, allowed us to bottom the cave multiple times during the survey. This past summer I had the

privilege of going to the South Cirque of Silvertip Mountain (in the Bob Marshall Wilderness Area of Montana) with Hans Bodenhamer and Jason Balensky. The hike in was grueling but the area is a magnificent karst pavement with some very neat caves. In September I participated in the International SRT Exchange near Driggs, Idaho and really learned a lot of interesting vertical techniques from the cavers of the Polish Mountaineering Association.

At the present I'm on "break" from medicine awaiting the results of my licensing examination, which I took last week. I'm working on an article on harness-hang syndrome as well as evaluating Petzl's NEST S61 Cave Rescue Stretcher. I'm also trying to get more survey trips with Rod into Wind Cave, which I find to be an absolutely fascinating cave. My caving interests include expedition caving, alpine karst systems, vertical techniques (and gear in general) and caving medicine. I've done some explosives work with John Ackermann and want to learn micro-blasting soon. Bolting is one of my specialties: I have Hitachi and Bosch rotary hammer drills (wired for lead-acid batteries) as well as 10mm and 8mm self-drill kits. While in Minnesota I bolted solo up an overhung 10meter wall (under a waterfall's spray) in Spring Valley Caverns to find some nicely decorated passage: we had to terminate the survey of the stream passage up there rather than break the pretties.

Since 2000 I've been the grotto newsletter editor of the NSS News. I first met the present NSS News editor Dave Bunnell during a Flower Pot (an interesting WV vertical cave) trip during OTR '79 when he was at the University of Virginia, Ron Simmons was also on the trip. I caved again with Dave at the TAG deep cave camp. When the editor opening came up I applied and was selected, in large part because Dave wouldn't mind chewing me out if I was late with my copy! I love reading the various grotto newsletters as well as section publications like Nylon Highway.

At present, I belong to the Paha Sapa Grotto (SD), Vertical Section, Survey and Cartography Section, the Northeast Sump Exploration Team (where I am Medical Director), West Virginia Association for Cave Studies and am a life member of the NSS.



Jay geared up for Spin Shaft, South Cirque, Silvertip, MT. July, 2002

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Aaron Bird: Tell me how you got into caving.

Jay Kennedy: I went to high school in Maryland and one of my classmates was named Mark Johnsson, who is now a PhD in Geology, I think he's out in California now, but last I knew he was up at Bryn Mawr, Pennsylvania. Anyway, I was just sort of constantly exposed to it... in class he was telling about how to work a carbide light, and always bringing in his cave maps; he's a very active mapper. He mapped some of the caves down in the Swago Creek area in West Virginia.



Actually the first wild trip I took in January 1977, we went with Paul Roney from Frederick Grotto to George Washington Cave in Jefferson County, WV near Charlestown, and mapped that. It was an old commercial cave and has what is believed to be an authentic carving of Washington's name in a little alcove in the back. Jack Speece sells a little book and that map we generated from that trip is in there. So all that happened through my classmate.

As a high school student, my parents trusted me enough to let me go for these weekend or week-long trips down to West Virginia where Frederick Grotto had a little field-house and we would go exploring in Organ Cave, Higganbotham System.

Aaron: So when was this going on?

Jay: This was 1977 still. So I got out of high school in 1978 and went to Virginia Tech and a large part of my choice for attending that school was the cave club there, which was very active then, and actually is still active today.

Aaron: Yeah, they are very active. They've got some good people. I occasionally cave with some of the Virginia Tech people now in Greenbrier County, West Virginia.

Jay: That's where we had our field-house... down by Higganbotham's. I think it was basically an old slave quarters.

Aaron: Was that Kathy's Farm?

Jay: I'm not sure. It was up above Higganbotham's # 4.

Aaron: O.K., so how about after that time? Wasn't there some military time in there?

Jay: Yep, I moved back to Maryland after I graduated from V.P.I. and worked as a waiter in a restaurant, and applied for a Federal Law Enforcement job with the Border Patrol. It seemed to go on forever... took the exam, had to go to what they called the "Murder Board" where three seasoned Agents basically put you in all kinds of situations to see how you can think on your feet.

I did pretty good at that and I did well on the test and the next thing was the background check. That went from I guess... April until December and I thought, "My gosh! What could they be finding about me?" I had never been arrested or been in any trouble, but I guess that's just the Federal bureaucracy at work, but it went on for so long that I thought, "Well, maybe they're not interested anymore," so I signed an enlistment contract with the Army to go in the Airborne Infantry, and actually after I did that, I got a hiring notice.

It's probably just as well because I would have had to go to Chula Vista, California for my first border patrol assignment, and then turn around the come back to Glenco, Georgia for the Federal Law Enforcement Training Center. So just a little impatience on my part... I ended up going into the military instead of being a Fed.

Aaron: Did you get to do any caving while you were in the military?

Jay: Nah, not really. I kinda wish I

had because I spent a couple years at the 3rd Ranger Battalion at Fort Benning, Georgia, which is about an hour and a half from TAG... but what little free time I did have, I didn't feel like traveling because I did so much as part of Duty.

I did do a little bit of caving in Korea on Cheju-do, which is a volcanic island off the southern coast. Its pretty interesting, they have a really good-sized cave there that's commercially developed along with a bunch of smaller lava tubes.

When I really got interested in caving again was in 1990, when I was working with the Austrian Mountain Troops on several of their high mountain peaks, and I earned their High Altitude Mountaineering Badge. In the process of doing that we got up onto some karst and mountain ice and found out later we were on the Loferer Steinberge which was where some of the English [caving] groups were working.

We were looking down these pits with our lights, and I thought, "Huh. Looks like cavers have been in these shafts." We're tossing rocks down and they're going for quite a ways. When I got back from that trip I had kind of renewed my interest in caving.

In my last year at Fort Bragg as a survival instructor, at the John F. Kennedy Special Warfare Center, I started caving again with the Triangle Troglodytes, and I also got accepted into WVACS, which is the West Virginia Association for Cave Studies. I did a lot of caving up in West Virginia and Virginia.

Aaron: What were some of the projects you were working on then?

Jay: Back in my Virginia Tech days, I mapped in Skydusky Hollow with Ed Devine. I remember Buddy Penley's, Paul Penley's... I missed the big rescue they had in 1982 because I was with John Mumry climbing at Seneca Rocks and cav-

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ing in the Swago Creek area. It was the weekend of my 22 birthday... probably one of the more challenging rescues the Club had.

Bob Wolfers had a depressed skull fracture and Pete Sauvigne broke both of his arms and it required quite an effort to bring them up a 120' pit and then about ¾ of mile of cave to get 'em out.

So did some mapping in Skydusky Hollow... and the usual cave club antics. Also, one of the more infamous things I did, was I rappelled the new stadium addition. I think it was about 1979 or '80, when they put up the new visitor's section. I remember doing it on a Whaletail on Bluewater rope off a single bolt. It's something I probably wouldn't try nowadays.

Aaron: It's hard to even find a Whaletail around now.

Jay: Yep, but I still have that same Whaletail around in one of my boxes of gear... probably one of the few that came into the country.

Aaron: Yep, probably was. So, what was the next group you were involved with after your military career?

Jay: Triangle Troglodytes. We were doing some mapping up in Smythe County, Virginia... or "Smith County" depending on how you pronounce it. Then with the West Virginia Association for Cave Studies, I went mapping in Ludington's with Sonja Ostrander and other WVACS members, and that was a pretty good trip into Ludington's.

I remember a really interesting trip to the Little Red Wagon Dig in Organ Cave, which I understand is still underway, but now they've brought fans into the dig area to ventilate it better.

Aaron: I think they have a bellows there now.

Jay: Back in those days, we would fill up plastic garbage bags outside

the dig, tie them off, send them, and open them up to actually taste the fresh air.

Aaron [laughing]: Oh!

Jay: Carbon dioxide builds up so badly at the dig face.

Aaron: I think what they do know is have someone operate a hand-cranked bellows.

Jay: Uh huh. I read in one the newsletters that I receive as the Newsletter Editor for the NSS News, that they got like a blacksmith's forge bellows. And I think they used dryer duct work from a standard clothes dryer. They also have to shove a bar in at the dig face to see if any water comes in because they think they're getting close to a stream in a neighboring cave. It would be kind of exciting to suddenly have water come gushing in your dig while you're in it.

Aaron [laughing again]: Yes, it would.

Jay: After that, I got up to Baltimore and did some caving around the Friar's Hole area. Also got involved with the North-East Sump Exploration Team, and started doing an awful lot of scuba diving. I had been dive certified since 1982, but hadn't gotten my cave certification yet, but I did train to do a couple of sumps with NEST.

One was Locust Spring Cave... it was Locust Spring Cave in Pocahontas County (WV) that Joe Kaffl was mapping in. It's a pretty interesting cave...about a 220' sump and multi-mile passage on the far side and they were continuing to bolt across a series of pits in there.

The other one was Alexander's Cave up in Pennsylvania, but that trip actually was a no-go because Joe ended up getting a bone infection. Actually I had come home (to Maryland) from medical school (in Minnesota), that was 1998, and had my tanks and everything in the car when we had to cancel. I also went

to the convention down in Sewanee and had done some caving in TAG for the first time. I thought that was a really interesting area.

Aaron: So did you take part in Alan Cressler's Cave Camp as well?

Jay: Yeah! The Deep Cave Camp. That was really interesting. That was also where I ran into Dave Bunnell again after umpteen years. I had gone on a trip with him and Ron Simmons at Old Timer's of 1979, to Flower Pot Cave. I believe he was a grad student at the University of Virginia, when Ron Simmons was also at the University of Virginia. I was just basically a teenage kid from V.P.I. It was fun trip... wet cave, couple drops in there that were pretty interesting... a lot of flood debris. I guess later on in the day, it rained pretty hard. The cave must have been pretty spectacular when it was taking all that rain.

Anyhow, I ran into Dave at the Deep Camp, and went up to Thunder Hole with him on a rigging trip and actually did the cave a couple more times because I liked it so much. We were based out of the Little Coon Valley and Alan did a great job with that trip because there were quite a few people there who hadn't been to TAG before and they got a chance to see some really interesting cave.

Aaron: You had mentioned that you're the Grotto Newsletter Editor for the NSS News?

Jay: I've been doing that since April of 2000. It's a pretty interesting...pastime, I guess, or service to the NSS. I always enjoyed reading Dyas' Digest back in the '70's when Mike Dyas did it. You can get the "skinny" on what the different clubs are doing and the interesting caving that's going on around the country.

Aaron: How many do you read... let's say in a month?

Jay: Ah, I couldn't tell you off hand. I

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try to read 'em as soon as I get 'em, and the ones that have something that the general Membership would be interested in goes into one pile and the rest go into a box that one of these days I'll send to the NSS library. I try to look at it from the standpoint of what the general reader of the NSS News wants to know about.

Aaron: Sure. So what's something interesting that you've read lately?

Jay: Gosh... so much interesting stuff... well, the NSS apparently is going to acquire Great Expectations Cave in Wyoming, which is a world-class cave. I haven't been in the cave myself, but I've been by the entrance several times with John Scheltens when we're out at the Western Regional this year, which was held probably five miles south of there. I've been interested in that cave since the late '70s, early '80s, when they were really pushing it. From my understanding it's about 1200' deep, or so, but it's five miles long as a through-trip. What boggles my mind, is I'll be on some of the high ground around here (Black Hills) and visualize one of the towns that's about five miles away and try to imagine entering the ground where I'm at and coming out at that town.

Aaron: Isn't there an infamous crawlway in that cave?

Jay: It's called the 'Grim Crawl of Death'.

Aaron: Yeah, that's it.

Jay: It has gobbled up a lot of caving gear over the years, because people will come through it from the upper entrance and by that time, they're pretty well spent, so when their pack opens up, they don't take much of an interest in recovering the equipment that spills out. It's pretty low and you have to be careful in spots how you turn your head because there's a tendency for the water to grab you by the helmet. Pretty sobering cave I think.

Aaron: I read a story once about a through trip in that cave, where someone started at the top and another started at the bottom, just two guys, and they met in the middle and then each went on their way. Actually, maybe that happened more than once.

Jay: Yeah, I think that was Tommy Shifflet and Don Coons that did a solo crossover trip.

Aaron: Wow. O.K., so there is another Rocky Mountain Cave you've been involved with, in Montana?

Jay: Lost Creek Siphon. Actually it was Joe Oliphant's project. He moved to Montana from Indiana and basically rejuvenated caving there, I believe. Anyway, he invited me on that project and that began Labor Day of 2001. Willie Hunt and I hauled up the ropes and most of the rigging that we would require. Based on previous explorers' estimates of

What we ended up doing, over a series of 6 trips, we proceeded in rigging the cave in almost pure European style, staying out of the water. One pit that was really daunting was one called Puberty Pit, so named because it separated the men from the boys on previous trips. Actually, Jim Chester almost died in there when he had trouble climbing back out... he actually had to be pulled out by the other members of the party.

That was a pretty intimidating cave in that it's so loud in there that the survey party would have difficulty hearing each other. Willie Hunt had come up with these really ingenious waterproof radios based on a fairly straightforward design and use an inexpensive transceiver and ear buds and throat mikes helped make it pretty easy to survey in there. I think what really helped was the technology.

Of the original parties, I think maybe



the cave, though they had tried it several times, but no one had ever finished a map because of the 35-degree air and water, 7 drops, and 1500' elevation change in a 5-mile walk from the road head just to get up there.

only one or two wore wetsuits. Willie and I wore wetsuits when we first went up to start rigging, but we quickly abandoned those in favor of hooded oversuits, and furry under-suits. Most everybody wore a pair of

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chest waders of some type, because at one point, you have to go through a plunge pool and you get wet up to your waist. That made it a lot less exhausting than having a wet suit because the wetsuit basically squeezes your body constantly.



Photo by: Willie Hunt

I think the second trip when we were actually doing survey we made it to the bottom and back out and that was a 15-hour marathon. There were three of us, Mark Madsen, Hans Bodenhamer, and myself. Hans did a great job on the map.



Photo by: Willie Hunt

In Lost Creek Siphon, MT

When you look at it, the plan view doesn't look very impressive... it's maybe on an 8 ½ by 11 sheet of paper, but when you see the profile, it's like 4-feet high! The original explorers thought it was 750 feet deep, but our data brought it out closer to 650'. It was probably one of the more challenging caves I've

ever been involved in the mapping of.

In a couple of days, my sister-in-law is going to bring the ropes that were used up there. We ended up bringing the rope out in stages. In fact, one of the ropes had to be chopped because it had been frozen into the ice at the entrance, which is kind of a big swallet hole that really funnels in the cold air in the winter.



The last trip I took there was December of 2001, I ended up getting a frost-bitten finger on my left hand because I was climbing an icy rope and wore out the glove on that hand breaking ice. Very challenging cave.

I've also been involved this year in the Silvertip, which is an area I've been interested in for a while. I went there with Hans Bodenhamer and a real strong caver from California named Jason Ballensky. We were basically tying up a bunch of leads that Jason and Hans had from previous years. There's some pretty neat stuff up there. There's one cave called Spin Shaft that's 217 feet



Jason Ballensky checking out a vertical lead, South Cirque, Silvertip Mountain, MT. July 2002

deep. It's a really nice pit...looks like it belongs in TAG, but its under a little ledge in the middle of a huge alpine karst pavement at about 8000' elevation. Then there's a bunch of

smaller caves... this is on the South Cirque, which hasn't been pushed as extensively as the North Cirque was in the late '70s and early '80s.

Aaron: Is there potential there for a deep system like in other areas of the Rockies?

Jay: Yeah... It's just a matter of... the snowmelt and things change. Actually I think there's going to be a trip by Montana cavers up there next summer. We're going to reexamine some of the old systems and see if anything has changed. There might be climbs that weren't really looked at hard before that could bypass some of the known obstacles.

It's a very interesting area. It's about a 16 mile walk in from the road head with about a 2500' elevation change. It's also prime Grizzly bear country too, which is a sobering thought. You have to really stay on your toes while you're up there. You can't just leave your food out. Pretty sobering to know that three people are dependent on each other since we're that far from a road. We do have quite a bit of rope cached up there and that lessons the load that would have to be brought in. I think the next time we go in it would be nice to have a horse packer to take a lot of the stuff up. It's something they've done in previous years.

I'm also trying to get more involved with the caving in Glacier National Park. I did some caving there in 1997... went to one called Poia Lake Cave, which is interesting because Poia Lake is fed by a creek called Kennedy Creek, which was named for my great-great grandfather, who was a whisky trader among the Blackfeet Indians. That cave is actually another very fascinating one, again an alpine cave, fed by glacial melt water. I lugged a wetsuit back there, and was glad I did. I went up a few of the crawlways and just started getting pretty cold and decided to turn back to where I had left a couple of my classmates from med school at a little climbdown.

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So, some interesting caves there, and we're working with the Park Service trying to work out some type of agreement. They're a little more amenable to working with cavers than probably in previous years.

Aaron: Wow, that's a pretty interesting bit of caving you've done. In addition to caving, you've also done some tests on equipment?

Jay: A bit. I don't really do things like pull tests or testing to destruction. I generally like getting a hold of stuff and playing with it. I'm writing an article for the first issue of the rejuvenated Alpine Karst magazine that Joe Oliphant has resurrected after twenty-some years. Its going to be on ultra-light rigging techniques, which is something the French and other European cavers have been doing for some time, but here in American we're still pretty much quite fond of the 11-mm rope and our style of vertical, although most of the guys I cave with now use Frogs and 9- or 10-mm rope.

I've used ropes as small as 8-mm for the article, mostly doing user evaluations on some of the local cliffs. I have a couple of different routes set up where the climbers don't really care for the rock, but it's O.K. for caving-type courses... overhung, or kind of loose, or not really amenable to climbing.

Aaron: And you rig those with rebelay then?

Jay: Yeah, rebelay. I have a couple of routes set up with stainless steel bolts and a couple with 8-mm self drives, and I get to practice with different kinds of hangers.

Aaron: Do you have a favorite rope?

Jay: Hmm... boy that would get me in trouble probably. There's one I've been testing lately that I'm really fond of, which is an 8-mm polyester rope made by the Canadian Cordage Company, CanCord. Available in the States from Becky Jones and Gonzo Guano Gear.

At first it was a little intimidating climbing rope that is substantially smaller than your cow's tail. The Bluewater in 9 mm, actually 9.5 mm, is a very stout rope, as is the 9-mm PMI. Bluewater sent me a sample of some 8-mm that they're developing for canyoneering with a Spectra™ core and polyester sheath.

Aaron: Wow. That's neat.

Jay: Its pretty static. In fact the closest thing I can compare it to is like prussiking on a steel rod it's so static.

Aaron: So how is holding up?

Jay: Its really good and it's a really stout rope, but unfortunately it has some sheath slippage with it, which I think probably isn't in a problem in canyoneering because they tend to double their ropes and do pull downs, but in this case, I just milked off the extra sheath, and cut it... now it looks almost as small as Spectra™ sling. It looks like a very exciting product, though it's a bit expensive due to the core construction.

Aaron: How is the abrasion resistance on it?

Jay: Well, it's a polyester sheath and so far I've been able to rig it in impeccable European style and haven't had any abrasion on it. Some of the other ropes have had a little bit of abrasion. One of the ropes I'm testing is a French rope made by Beal, called the Antipodes.

When the Poles were here for the International SRT workshop, they really liked the Antipodes ropes, and I've gotten hold of a spool of it... 200 meters. I remember climbing on it in a tree in my backyard and commenting to my wife, "This is some spooky stuff," but now I've gotten a little more accustomed to it. It has a little more bounce than the American skinny ropes. I think what I'll use it for though is pre-cut sections making pre-rigged haul lines and things for cave rescue.

Aaron: Are there any other pieces of Caves.com

equipment you've worked with?

Jay: Back in the '90s, I did some evaluation of the new SpeleoTechnics products. The FX3, CX3, which is the headlight, and I still use the original specimen that SpeleoTechnics sent me. It's a pretty good light. Now they've upgraded with a 7-LED system in the head-piece, so it lasts pretty much for the length of the common cave trips I take, which are usually up to 12 hours.

Aaron: Have you used the newer LEDs that are built for the Petzl Duo?

Jay: Yeah, I do. I have one, I believe made by Paul Montgomery in Virginia, though I don't know if he still is. The North East Sump Team adopted that as their standard dry caving light, and I was able to get one from Paul. Actually I just used that in Wind Cave this past weekend on an 8-hour survey trip. Pretty good, except that I like using the nickel-metal hydride cells and usually only get three to four hours out of a set of the AA cells before I have to change.

Aaron: How do you like the light the LEDs cast?

Jay: I've been a carbide caver most of my caving career and in the case of Paul's light it gives you a very nice area light, similar to a carbide lamp. It doesn't seem to have the bluish tint like some of the LEDs. Rod Horrocks was using the new light from Lupine, which is a German company, and I think it has 23 LEDs. I think it actually had a better light pattern than Paul's, then it's a pretty pricey light... in the range of about \$250.

Aaron: Cavers are willing to pay a pretty good amount of money for equipment nowadays, I've noticed.

Jay: I heard it from a rather well-respected Western caver last year, Pete Shifflett, I think he put it like

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this, "You go with the best cave light you can afford, knowing that in a couple of years you'll probably have to replace it." I've found that to be true. I've gone from the carbide light to the SpeleoTechnics lights to a variety of Petzls. Now I pretty much use the CX3 headlight and the 23-LED modification, although I was caught with a carbide light about three weeks ago on a mapping trip for a week-night jaunt into Wind Cave.

Aaron: Do you survey often in Wind?

Jay: Yes, I'm trying to get as many trips in there as I can. I've gotten ten so far. We're trying to keep the cave ahead of Fisher Ridge at the present time.

Aaron: How long is it right now?

Jay: 106.02 miles, I believe is the last number Rod Horrocks quoted me. There are just so many leads in there. A lot of them are actually fairly close to the developed sections of the tourist trails and it's really amazing. One thing I can't get over is the sheer amount of mineralogical wealth or extravagance in that cave. There's helictites and anthodites, boxwork and crystals everywhere. You go crawling past something, that people back East would crawl for a mile for, and don't even give it a second thought. It's just an interesting cave.

Aaron: How about Jewel? Have you worked in there?

Jay: I haven't done anything but sport trips into Jewel. I've done what's called the Hub Room Loop, which is a four-hour trip. Mile Wiles, Vice President of our local Paha Sapa Grotto, actually gave a very nice slide show at the last meeting about the history of mapping in Jewel. They continue to push off the southwestern corner of the map. What's required now is in-cave camping, similar to Lechuguilla where they have to bring in their food and alcohol for the alcohol stoves, and then bring all their body

waste out.

Aaron: Its up there pretty high too, isn't it?

Jay: 126 miles.

Aaron: Is Wind catching up?

Jay: We joke about it, and hope that we'll catch Lechuguilla one day.

Aaron: Let's change the subject a bit now. You're a doctor and often cave doctors get involved with cave rescue. Have become involved with cave or wilderness rescue?

Jay: Yep, that's actually what I did over the summer, which was to get more involved with that. I guess there's not very many caving doctors and among them, there are probably fewer that are as comfortable on a rope as I am. I actually have a pretty good bit of rescue equipment, and have done some development of rescue equipment.

I gave a presentation at the Sewanee convention in '98 on the a type of stretcher called the Urban Search and Rescue Stretcher, which is similar to a SKED and has a wrap-around design and acts as a full-body splint. It has built-in lifting bridle that allows lifting either horizontally or vertically. At the present time, in my guest bedroom is one of the two Petzl Nest Stretchers in the U.S. that I've been playing with. It's a very nice product, very high quality. Unfortunately I don't think the price is very amenable to cave rescue groups in the U.S. picking them up. Most cave-rescue organizations in France are sponsored by "Departements," which is kind of analogous to a county or state, here in the U.S, so they have better funding than our organizations.

Aaron: Do you think that Petzl Nest is rigorous enough to stand up to a cave rescue?

Jay: Well, it is designed for the kind of caving they do in France, which is generally vertical, and I think it kind of mirrors French cavers: its kind of

long and skinny... I don't know if some of our larger American cavers would fit in it.

Aaron: I saw one at OTR this past September.

Jay: That was probably at Karst Sports' display. I think Doug Moore had it before I did.

Aaron: Oh, O.K. the same one then. It was pretty interesting. They had people in it, carrying them around, and it looked like something that could be useful in certain situations.

Jay: I like it too because it has a built in harness, but then again it is fairly specialized product, and when you can buy three SKED's for the price of the Petzl, its going to be tough for it to compete.

I also have two of the Urban Search and Rescue Stretchers as part of my assistance with Smith Safety in developing it. One of them I left with Joe Kaffl as the stretcher for the North East Sump Team, and the other one I have out in the garage. Unfortunately the one in the garage doesn't have a skid plate on it, but I have a SKED that I would use if I had to drag anyone for any real distance.

Wilderness medicine is pretty interesting. During my residency I saw quite a few people come through here, who were interested in that, being located on the edge of the Black Hills. I'm pretty well tied into the community from doing my residency here. I'm probably going to be working at the Indian hospital, which is 1/2 a mile from where I live.

I went through medical school on an Indian Health Service scholarship, and I'm an enrolled member of the Black Feet Tribe in Montana. I wanted to go to Montana to practice, but ended up taking some time off after residency and being a caver bum for a few months, and a stay-at-home daddy, and took my Boards in October, got the results back in

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November and passed 'em, and now I'm getting a License. I've already interviewed and now it's just a matter of going through with the formalities.

Aaron: Well congratulations.

Jay: It's a nice Indian hospital, here in Rapid City, though its fairly small, but it serves a badly underserved population of Natives that really need dedicated health-care professionals. One of the things I do along those lines is addiction medicine.... dealing with alcohol, nicotine, and to a lesser extent, opiates.

Aaron: What percent of the local population there in South Dakota are Native Americans?

Jay: Probably... upwards of 30% of the population. On the north side of town, there seems to be a higher population of Natives. We have Pine Ridge, which I think is in the poorest county in the U.S. and it's 90-minutes from here, and when I was a resident, we actually got quite a few patients transferred from the Indian Health Service facility there up to the regional hospital here in Rapid City.

Aaron: I went to South Dakota in 1988 for the NSS Convention in Hot Springs.

Jay: You were at John Scheltens' ranch.

Aaron: Yep, that's right. It's such amazing countryside in that area. Incredible place.

Jay: He's very graciously hosted something called the Black Hills Cavers' Classic there for the past 10 years. Always fun getting together with other cavers. This year it had a pretty good turnout and they pressed me into carving up the pig... [laughing] thinking that my superior knowledge of anatomy would help. My wife and son came down to visit that day. We got some good pictures of Nicholas. He's 16 months old now, and was about a year old then. He was fascinated with John's dog.

Aaron: So, is Nicholas a caver yet?

Jay [laughing]: Not quite. I'm training him. He likes wearing a headlamp around and every now and again I'll get down on my hands and knees and go crawling under the furniture and he just thinks that's the greatest thing. He loves playing with my vertical gear when I have it in the house. I have some nice pictures of him crawling under piles of rope.

Aaron: Getting him ready for some Wind and Jewel surveying when he gets older, huh?

Jay: Yep.

Aaron: So, we've been over a lot already, are there any other significant caves you've worked in and want to tell us about?

Jay: When I was in medical school, well the first year I kind of fell into the myth that you had to study constantly, and I almost burned myself out pretty badly. The second year I started caving more with John Ackerman and Dave Gerboth at John's karst preserve at Spring Valley, and my grades actually improved because I lived for that Saturday change of pace to go and wallow around in the mud. That was a fun time for me because John was very active pushing the cave.

Aaron: That's Spring Valley System?

Jay: Spring Valley Caverns. I think it's the second longest in Minnesota now. Considering when John originally bought the farm there, it was just a small formerly commercialized cave, John did some digging in one spot and found about four more miles of cave. Now it has... four entrances. What they would do is use a cave radio to find a suitable place on the surface and then blast and use a backhoe to get down to it, and then put in a culvert with a steel ladder.

I think it was my first trip there with him, we went back to something called the Paradox Sump and on the way there went through one of the

bigger rooms in the cave system called the Colossal Room, and I remember seeing this waterfall coming out of a hole in the ceiling and I asked John, "Hey, what's up there?" and he's like, "Don't know, no one has ever been up there."

So two years later I bolted up to it on a series of solo trips and found several hundred feet of really nice streamway, which John and I mapped and it ended at an area that had so many speleothems that we couldn't go on without breaking them, so we terminated the survey there. That's still one of the more interesting parts of the cave I like to go and visit. It's about a 10-meter rope climb to get up to it.

Aaron: That sounds like a pretty nice discovery. Well, I want to thank you for talking with me this evening.

Jay: Well if you get out here, out west, give me a call, we always have space for cavers.

Aaron: O.K. then, thanks. It's been nice talking with you.

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