

A world of mystery in the dark

Cave lovers protect their turf

BY MATTHEW CAMPAGNA • STAFF WRITER

Deep underground, in the hollows of mountains, where light won't go, he made his home. It was there, in utter blackness, that Bilbo Baggins found him, along with the one ring. It was Gollum that Bilbo found, a cave dwelling creature of darkness and arguably one of the most warped and insidious villains ever conceived in modern literature, or more recently, in film. And sure enough, "There's something warped about a person's interests to have a passion for caves. It's in my genes, I suppose," says Phil Lucas.

While the 61-year-old president of the Virginia Speleological Survey shares Gollum's affinity for things subterranean, there is little else to connect him with the creature of the dark. For starters, he's fond of sunlight and holds an appreciation for natural beauty. His home sits atop a hill just outside of Burnsville, and enjoys one of the prettiest vistas imaginable. From the deck, or any of several large windows, the landscape rolls out into a long view of open meadows and forested mountains mirrored in a little pond, all of it stretching for miles without any sign human interruption. The newly constructed, wood-sided house that he shares with his wife, Charlotte, is home to a host of dragons they've collected over the past 15 years, depicting fantasy and folklore from around the world.

He also makes a fine cup of coffee. Hospitalable, refined, eccentric, eclectic and fascinating, Lucas is no Gollum at all. But he does love caves. And he's read Tolkien several times as well.

The primary purpose of his organization, the Virginia Speleological Survey, is one of record keeping, Lucas says. Virginia has more than 4,000 recorded caves, and the data on those caves is in Lucas' basement on shelves and filing cabinets, in reports and on maps, and imbedded on the hard drives of his two computers — one Mac and one PC. He has been president of the VSS since 1975. "You have to be retired to do this," he said. "It's a labor of love; it's a full-time job without pay," a sentiment substantiated by numerous phone calls that interrupted his interview. "All about caving," he said of the calls.

Lucas says there is a balance that must be struck between disseminating information and

limiting human traffic in caves. Caves, he says, are a valuable, limited and nonrenewable resource. "Once its destroyed, it's gone," he said. "If someone comes along and brushes away some Native American markings, purposefully or by accident, they're gone forever." So understandably, he's cautious about putting the word out on caves. "There are a lot of things caves are important for, and a lot of things that can be damaged ... It's true in spades when it comes to caves: you can love them to death."

Caves are formed slowly over thousands — perhaps tens of thousands — of years. They come about when limestone is dissolved by groundwater that has absorbed carbon dioxide, becoming weakly acidic. The limestone dissolves into tunnels and openings, cracks and crevices, creating a network of passages and water ways. "When you go into a cave, you're looking at something very ancient ... something older than whatever sits on top of it on the surface," Lucas said.

Lucas describes caves as being like a time-capsule. Only the most minimal changes take place over great spans of time underground. The climate is fixed, there is no wind, and because only very specialized creatures dwell in subterranean environments, there is no wildlife or human impact to speak of.

When he was a teenager, Lucas was on a Boy Scout camping trip in Panther Gap, located in Bath County. He and a few other scouts went exploring, and found a cave. It was a pretty entrance, Lucas said, with a stream flowing out of it. Naturally, Lucas plunged in. Inside, he discovered a large lake of water, and examining the walls, he found a side passage, hidden from plain view. He ducked inside, leaving his friends to wonder where he had gone. He crawled through the low, narrow passage, and noticed there were hand and elbow prints ahead, where someone had crawled through before him.

At the end of the passage, he emerged onto a rock shelf — a balcony of sorts — overlooking a large subterranean chamber. On the wall to one side, he found etchings of a man's initials, and the date he had been there. They'd been written in 1943. The matchstick that had been used to mark the walls was still stuck in the mud nearby. "It was as fresh as anything," Lucas said, "like it had been done the day before. That's when I realized how special a cave

could be, that it was like a time-capsule."

Nor would that be the first time Lucas has discovered old marks. He said he has found numerous signatures cave explorers have left behind, dating from as far back as the 1800s. Caves are often full of history, Lucas explained. Native Americans used them for shelter, storage, resources and ritual. During the Civil War, people mined saltpetre from caves for making gun powder. And in older times, before refrigerators, caves were often used as cellars to keep things cold, and as water supplies. From cave drawings to old stores, there's no telling what historical artifacts a virgin cave may preserve. And for this reason, Lucas says, cavers love to find new, uncharted caves.

"Not all caves have entrances," Lucas said. "People find them when they're drilling wells and such ... maybe someday when we can beam ourselves underground, like in Star Trek, we can find more of them."

And some caves that once were open, have long been closed. During World War II, the Japanese hid in caves and tunnels on the Pacific front of the war. Thus, the Army Corps of Engineers decided it had to find ways of blasting those caves shut. Bath County was one of the places they chose to test their techniques, Lucas said. So they set explosives, dropped bombs from the air, and tried various methods of closing off these natural shelters.

Since then, some of these caves have been reopened. Having been sealed so long, their contents were entirely preserved and in one cave, Lucas said Indian mud glyphs — symbols and pictures drawn on the walls using mud — were found entirely intact. While the purpose of the glyphs remains unknown, the cave is now under protection for its historical significance.

For other caves, the historical significance may not be immediately obvious to a person who steps in and looks around; rather, the significance is in Lucas' files, in the cave's report. Lucas brought up one such report on his computer. The cave, located in Bath County, had first been described in 1787 by Thomas Jefferson, one of our nation's forefathers. It told of the depth and nature of the cave, how it had been found and where. While the cave had apparently already been discovered, it was Jefferson who had filed that first report. The cave is now privately owned. For this reason,

Lucas asked that its name and location not be disclosed.

Other reasons for keeping the general public at a distance are those of personal risk and liability. "The vast majority of caves are privately owned," said Lucas. For reasons of liability, landowners often don't want inexperienced cavers fooling around in their caves, despite state legislation ruling that cave owners are not responsible for personal injuries so long as they did not charge the cavers for admission. "The legislation hasn't been tested in court yet," said Lucas, explaining the laws, at this point, provide only uncertain protection.

And problems can most certainly arise for inexperienced cavers. "Caves are not inherently dangerous. There's no built-in traps. But there aren't footpaths. There's climbing and crawling ... there are hazards and so forth, but it's relatively safe if you're careful, take precautions and prepare ... We'd be irresponsible to encourage people to go caving without training them," he said. As an example of ill preparation, he described a hypothetical, but plausible situation wherein a few people take some flashlights and explore a cave. But if they don't think to bring extra batteries or lights, they'll find themselves in dire straits when their lights go out. "You can stand there 100 years and your eyes will never adjust ... you might say that's an inherent hazard of caves," he said. And depending on the cave, those people might never find their way back out, and would likely suffer injury from stumbling around in the dark.

Even with lights, it's easy to get lost in some caves. Lucas once went to a maze cave in Bath County with some friends. Near the entrance, he found some string tied off, leading back into the cave. "Being the conservationist that I am, I started to wind up the string," he said. He went deeper and deeper into the cave, holding an ever increasing ball of string.

Eventually, he saw lights ahead, and a man approached at the head of a group of boy scouts. In his hands he held a tangled ball of string — the very same tangled string that Lucas had been winding up. "Needless to say, he wasn't very happy," Lucas said. "We had to show him the way out."

But while the man may have found his way out, had Lucas left the string alone, Lucas maintains he was going about it all wrong. "If everyone left a trail of string going into a cave, or marked passages with arrows, it would just make a mess," he said. According to Lucas, the proper way is simply to memorize the intersections, and never to go further than you're comfortable remembering. "You've got to look at the intersection both as you're approaching, and as you would see it when you're leav-

ing, because it will look different," he said.

For those who know what they're doing, Virginia's caves offer an opportunity for adventure, exploration and, perhaps, discovery. The VSS has recorded more than 400 caves in Bath and Highland counties, most of them small and privately owned. But larger caves, such as Butler Cave, can also be found around here.

Discovered in Bath County in 1958, Butler Cave's roughly 17 miles of passages made it the largest known cave in Virginia at the time. Since then, it has dropped in rank to Virginia's third largest cave. In 1968, ten years after the cave's discovery, a nonprofit organization called the Butler Cave Conservation Society was formed to protect the cave. BCCS purchased the 65-acre tract of land containing the cave's entrance, and in 1989 purchased an 84-acre tract containing the entrance to another cave, Bobcat Cave. "To ensure the continued pristine nature of these caves, the entrances were gated and management plans were put into effect," its web site explains. "Neither (Butler or Bobcat caves) will ever be 'commercialized'; however, volunteers — experienced in caving — are invited to spend time and energy exploring the many remaining mysteries."

According to Lucas, BCCS is significant in that it is the first and oldest privately-owned cave preserve in the United States. And while the group may not avail itself to those looking to make a start in caving, Butler Cave should provide plenty of opportunity to experienced cavers looking to pursue their passion in Bath County.

For those who are not experienced cavers, Lucas said, "The best way to go caving is to make contact with a group." The Richmond Area Speleological Society, for instance, does some caving in Bath County. According to Lucas, many such organizations offer essential training and education to serious beginners. "There are some pretty basic things that a person should know to get anything out of it and not inadvertently damage anything," he said. "For a person to go caving not knowing anything about it would be nonsensical."

There are also a number of smaller caving groups called "grottos." One such group is the Virginia Highlands Grotto, working out of Monterey and headed by Rick Lambert. Lambert also hires himself out as a guide for caving, hiking, climbing, rafting or any other outdoor activity to be had in Highland County. His outdoor business is called Highland Adventures.

But Lucas offers this warning to those who might be considering underground exploration: "(Caving) goes far beyond what you'd typically consider a hobby. There are so many

sciences involved: geology, hydrology, archeology, paleontology and biology to name a few. It's intense."

The other alternative is to tour "commercial" caves, such as Luray Caverns in the Shenandoah Valley. Essentially, commercial caves are those which have been made into tourist attractions. While there are no commercial caves in Bath or Highland counties, there are a few in neighboring counties including Natural Bridge Caverns in Rockbridge and Grand Caverns in Augusta.

Lucas also recommends Endless Caverns, in New Market. "Endless Caverns is magnificent, and it's owned by a caver," he said. While visitors to Luray Caverns will get a scripted tour, Lucas said visitors to Endless Caverns will get real explanations from someone who really knows what they're talking about.

While commercial caves are a beautiful spectacle, true cavers find them too polished for their own good; the inherent mystery dispelled, and the sense of accomplishment utterly missing. "For cavers, there's no adventure involved. But commercial caves are gorgeous," Lucas said.

Typically large and with plenty to see, commercial caves can be a feast for the eyes. But not all of a cave's wonders can be seen, Lucas said. Cave acoustics can be just as impressive to the ears as rock and crystal formations are to the eyes. Echoes can resound far and away, and heartbeat passages can be eerie when first you find them. A heartbeat passage is a chamber or passageway in a cave in which the acoustics are just so that your heartbeat echoes. "The first time you hear it, it's odd, and for some people startling, to hear their own heartbeat externally," Lucas said. "But if you do any sort of serious caving, you're bound to find a heartbeat passage before long."

There are some, however, who may not appreciate the big payoffs that caving offers. For all the wonder and fascination, caving can be — and most often is — a dirty business. For starters, there's the darkness. Then there's the mud. "You can't be afraid of mud," Lucas said. "There's all types of world-class, boot-sucking mud. Like Eskimos have a million names for different types of snow, there's just as many different types of mud. You can really get slimed, from the insides of your ears, all the way down to your underwear. It becomes invasive, and once you're in it, you just have to stop worrying about it."

"Sometimes it takes a high-power pressure washer to get the mud off your gear," his wife, Charlotte, adds.

And as caving often requires a person to climb, crawl, squeeze and worm their way through narrow passages and over obstacles, there's really no way to avoid the stuff. Lucas

explained there are different types of crawl-ways. Hands and knees crawl-ways are just what they sound like; you've got to go through on your hands and knees. There are belly crawl-ways that require a person to go through on their belly. But the most astounding, and inconceivable, may just be the exhale crawl-way.

"Most people wouldn't go down into some of the cracks that cavers do," Lucas said. Exhale crawl-ways would generally qualify for this remark. An exhale crawl-way is a crack so narrow the only way to get into it is to exhale, contort the body so it can fit through the narrowest passage possible, and make excruciatingly slow progress through to the other side. The method is to exhale, get in, take tiny breaths, exhale, move forward half an inch, or an inch and repeat all the way through, often taking half an hour just to traverse a few feet. Once inside, with lungs full and chest expanded, movement in any direction is nigh impossible.

While one might see getting stuck as a serious danger in such a situation, Lucas insists if you can crawl in, you can usually crawl out, though it may take awhile. Getting in and out of horizontal passages, he said, is easy. Even easier is getting out of vertical, upward passages. "Gravity can get you down again," he said. Downward passages, however, can be difficult and dangerous, insofar as getting stuck, "because you have to fight gravity going back up," Lucas said.

Aside from the general difficulty cavers and earthworms face as a matter of course, such narrow passages may also bring claustrophobia to the fore as a serious problem. "I've known a lot of cavers who started caving because they were claustrophobic, who took it up to confront and overcome their fear. And many of them get the caving bug in the process," Lucas said. "Other cavers weren't claustrophobic to begin with, but developed claustrophobia and quit caving."

And then there are the bats, so often and unjustly maligned, neither as dirty nor as dangerous as they are made out to be in popular understanding. For caves are the dwelling places of these misunderstood creatures, and while cavers may lose track of time when underground, the bats do not. At dusk, they burst forth from their caves to feed. They know their passages well, and will fly through the smallest of cracks.

"Unfortunately, bats leaving a cave are like us getting up to use the bathroom in the middle of the night," Lucas said. "You know where the bathroom is and you just go, without paying much attention." So when cavers find themselves in the passages of exiting bats, "It makes for interesting traffic jams," Lucas said.

According to Lucas, they'll fly straight at your face, only realizing you're in the way at the last moment and banking to one side. "It's like someone throwing something at you, and you flinch," Lucas said. "And sometimes they get curious about this thing blocking their passage, so they'll turn around and come back to check you out." While Lucas is used to it, doesn't believe in bats' bad reputation, and remains unphased by such incidents, he knows a great many people would be put out by the flutter and chaos of the creatures embarking for their nightly feeding. So caving may not be for everyone. But it's definitely for Lucas.

"I find a serenity in caves," he says. "It's a peacefulness that envelops me. It's a magical place ... the age of it, the shapes and the form of it ... it's a peace that I can't find on the surface, where there is life and activity all around. It's an appreciation I hold for a remarkable place, like a cathedral."

His interest in caving goes back to his childhood. As a boy, living in Staunton, Lucas said, he'd go hunting for caves by bicycle. While his finds were small, he approached them with all the fervor a child could muster, leaving his bike behind and plunging in.

He found greater opportunities when he visited Highland County as a teenager; there he found larger caves to explore. His trips to Highland became more frequent, and, Lucas said, "I was fortunate to meet people who were cave explorers, who provided me with training and guidance."

Throughout his life he remained active in caving, regularly submitting reports to the VSS. In 1975, he became president of the organization, and has been ever since.

Lucas made his career at Virginia Electric & Power Company (now Dominion Resources), retiring in 1995 after 25 years there. In 1999, Lucas and his wife moved to Highland County, where he spends most of his days managing VSS business and reports.

There, caves are charted, maps are produced, underground landmarks denoted, and subterranean ecosystems identified and studied. Each cave is then ranked according to "significance," as determined on a 12-point criteria. The VSS, he says, is not so much a resource for cavers, but by cavers for other purposes. The state Department of Conservation and Recreation uses VSS's significant cave list to understand cave resources in Virginia. The reports are also consulted for environmental concerns when development may threaten known caves. There's even a state board, the Virginia Cave Board, devoted to educational and conservational aspects of Virginia's caves; they utilize VSS data as well.

And finally, Lucas said, "You'll never hear cavers refer to themselves as a 'spelunker.'"

While the textbook definition may be the same, he insists, "That's a term typically used by people wet behind the ears, who don't know any better. It's just 'cavers.'"

So, interested, but feeling wet behind the ears? The Internet is always a great place to start gathering additional information. Try the National Speleological Society at www.caves.org, the VSS website at www.virginiacaves.org, or run a Google search to locate caving groups in your area.

To hire Rick Lambert as a caving guide, call 468-2722 to schedule an adventure.

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