



CAVE OWNERS' NEWSLETTER

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of the
Department of Conservation and Historic Resources
Commonwealth of Virginia
for the Cave Owners of Virginia

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Season's Greetings



from the Virginia Cave Board

With this newsletter go the best wishes from the members of the Virginia Cave Board for the holiday season to you, the cave owners of Virginia, a very important group indeed to us.

We would like to be reaching out to more of you, to let owners know that we are interested in them and want to be helpful with our expertise and concern for caves in any way that we can. Here are a few caves on the list we have for whom we currently have no mailing address for an owner. Can you supply the missing information? If so, please drop a postcard with the name of the owner and the mailing address (being sure also, of course, to mention the name of the cave owned) to the editor of this newsletter: Evelyn Bradshaw

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The caves we are asking about this time are:

Sinks of Potts Creek Cave in Alleghany County
Cochrans Cave #2 in Augusta County
Burns-Chestnut Ridge Cave in Bath County
Jackson Cave in Bath County

Also, if the mailing label we are using for you starts with the line, "For Virginia's Cave Owners!" it means that our information is that you own a cave. If the ownership status has changed, we'd like to hear although we'd be glad to keep you on the mailing list if you are interested in Virginia's cave resources, even if you aren't currently the owner of one or more Virginia caves.

New Board Members New Name for Commission

You will notice that this newsletter comes to you from the Virginia Cave Board, not the Cave Commission. The General Assembly passed a law during the 1985 session standardizing names for state boards, councils, commissions, and offices within the executive branch. A vast number of committees and commissions turned into boards pursuant to this legislation, which became effective July 1, 1985. This in no way alters the mandate of the 11-member group to monitor developments with regard to this valuable state resource.

In 1985 also the Board was strengthened by the addition of two geologists to fill vacancies that developed as terms ended or members resigned. Charles Bartlett, a consulting geologist active in southwest Virginia, came on in the spring. William Davies of Falls Church, retired from the U. S. Geological Survey and a former president of the National Speleological Society, was appointed by the Governor in the summer. The Board treasurer, Philip Lucas, in a management post with Virginia Power, was transferred to northern Virginia (thus bringing to three the number of northern Virginia Board members). Philip Lucas is also the President of the Virginia Speleological Survey; he and his son Charles carried out the search for treasure caves written up in this newsletter by Charles. The Survey also received a grant from the Richmond Area Speleological Society to enable the Survey to acquire its own computer to handle the quantity of cave information accumulated over the years, and to add to that some cave information which had been gathered by the Virginia Research Center for Archaeology at Yorktown. Incidentally, it turns out that Cornwallis Cave in York County is indeed a natural cave; on the basis of its historical background (as well as geological interest because of having developed outside the karst area of Virginia) the Board added it to the list of significant caves in the Commonwealth.

Since its inception as a permanent state body, the Board has operated without state funding. Board members have been responsible for their own expenses and organizations within the caving community have authorized grants to make possible continuing installation of signs notifying cave visitors of the provisions of the cave protection act and to bring you this newsletter.

Siting of facilities in karst areas for dumping of hazardous wastes in the Commonwealth could pose a threat to not only caves but groundwater as well. The horrendous situation in our sister state of Kentucky, where pollution has affected much underground water (you can hardly enter one cave for the stench), stands as a warning to take action before and not after the fact. The Board is trying to establish liaison with the state board responsible for siting advice, so that we can supply information on specific areas to avoid etc.

Virginia's Open Space Land Act allows land owners to grant an open space easement for five or more years to a state agency to preserve an area and protect it from urban development. As the nation's agricultural land is being converted into suburban/urban sprawl at an alarming rate, this Act gives a tool for stopping the trend and provides a tax advantage to the owner at the same time. The Board sees this as a way to protect some caves and will be glad to hear from any cave owners who would like more information on this.

At the annual convention of the National Speleological Society in Frankfort, Kentucky, last summer former Cave Commissioner Dr. Robert Anderson was one of those made a Fellow of the Society. Among other activities, Robert has been serving as treasurer of the Cave Conservancy of the Virginias (with headquarters in Richmond, Virginia) and active in exploration and mapping of a large cave system under Fisher Ridge in Kentucky.

At a major gathering of cavers over Labor Day, your editor talked to one of the family that bought Endless Caverns last year and learned that it is planned to reopen Endless to visitors after necessary renovation of the property, probably for the 1986 tourist season.

We don't have the details but in October Grand Caverns and the associated park facilities near Grottoes, Virginia, were closed down. This has been one of the projects operated by the Upper Valley Park Authority. Another is Natural Chimneys.

Volunteer Vacations Etc.

For some years the American Hiking Society has been running a highly successful operation called Volunteer Vacations. AHS makes arrangements with various National Forests for a team of about ten to do a job that will take about a week. It then recruits volunteers and people sign up for the work trip they fancy. They find their own way and pay their own expenses to and from the work site and bring their own camping gear. The Forest Service furnishes the tools, any necessary instruction, and sometimes provides food or a cabin. Information about this may be secured from American Hiking Society, 1701 18th Street, NW, Washington DC 20009.

Seasonal employment is also available with the National Parks. While many of those who sign up are young people in their twenties, there are also opportunities for older citizens with time in the summer for an outdoor experience. The competition for these jobs is quite heavy so inquiry early in the winter is advisable. I don't have right at hand now the title of the pamphlet that lists jobs and stipends but will track it down for any who are interested. There are also openings for volunteers with federal agencies like the National Forests so just ask the one nearest you for more information. While you yourself may not have time for this kind of activity, you may know people who would welcome a change of pace and a chance to be of service in the out of doors.

Speaking of volunteer work, we suspect that a major need for some time to come will be helping to cope with the damage done in Virginia due to the heavy storms in November that swept away homes, destroyed bridges and roads and caused general havoc. In addition to specialists of various kinds, rehabilitation efforts will include the tedious work of helping people who didn't lose their homes to clean up the mud and debris that was washed into their homes.



The Cave Owners' Newsletter is published by the Virginia Cave Board for the cave owners of Virginia and edited by the Secretary of the Board, Evelyn W. Bradshaw, 1732 Byron Street, Alexandria VA 22303. Please note that the former address of the Board, P. O. Box 7017 in Richmond, VA, is no longer good. Communications for the Board should be addressed to the Secretary at the address above or in care of the Department of Conservation and Historic Resources, 1100 Washington Building, Capitol Square, Richmond VA 23219.

Owner Profiles**An Interview with****Mrs. Lena Frazier****A Virginia Cave Owner**

By John R. Holsinger, Member of the Virginia Cave Board

On 27 July 1984, Roy D. Powers Jr. (Chairman, Virginia Cave Board) and I had a long, pleasant visit with Mrs. Lena Frazier. Lena and her husband Ted are the owners of Gibson-Frazier Cave, which is located near the Powell River west of Jonesville in Lee County.

Gibson-Frazier Cave is one of the finest caves in the county. It contains nearly a mile of passage, a stream, and an intriguing maze section. A large, cone-shaped mound of guano in an upper level passage suggests that the cave was formerly inhabited by a colony of the Gray Bat. Descriptions of the cave, based on our explorations in the 1960's, have been published in two books on Virginia caves. In November 1976 we completed a detailed survey of the cave, resulting in a good map now on file with the Virginia Speleological Survey.

The entrance to Gibson-Frazier Cave is a relatively large, impressive opening in a bluff on the north side of Hardy Creek. A passage from the entrance extends SW for 120 feet to an artificial concrete dam that was put in the cave by Mrs. Frazier's father in 1919. The cave stream was dammed to provide a reliable source of water for the farm. Water from the lake behind the dam is brought to the entrance room by two pipes, and from there it is pumped out of the cave and up the hill by a hydraulic ram pump. This pump was also installed in 1919 and has been in operation ever since. Water from cave is now used primarily for the livestock but at one time it supplied the house as well as the rest of the farm. The pump was purchased from the Rife Ram Pump Co., now long since out of business (hydraulic ram pumps are no longer manufactured). Simple replacement of a few gaskets has been enough to maintain the pump in good working order over the years.

Mrs. Frazier recalls that her family moved to the present farm from Appalachia, Virginia, in 1919.

Both the dam and ram pump were put in the cave during the same year and by the Fourth of July of that year the family had water at their house on the hill. As a young girl, Lena visited the cave in September 1919 and then wrote an adventure story about the trip for her seventh grade class. She still remembers having seen a rock formation resembling a bathtub somewhere back in the cave.

Prior to 1939, the year that REA brought electricity to the area, the cave was used as a refrigerator as well as a water source. Local fishermen, however, would sneak into the cave and drink the milk that was stored there. To put an end to this problem, a large wooden door was placed over the entrance. In recent years, since about 1962, a more substantial door with a good padlock has replaced the old one. The new door precludes trespassers from tampering with the pump and helps prevent freezing of the ram during cold snaps.

Lena told us that people have come to explore their cave from time to time through the years, but with the exception of our group they have been sport cavers. Probably my most memorable trip to the cave was in August 1977, when a group of us took Mr. and Mrs. Frazier and their son Steven across the lake in a rubber raft in order that they could see some of the extensive passages beyond the lake. The Fraziers are proud of their cave and are extremely grateful that it has provided them with a valuable source of water for many years. Toward the end of our visit, Lena said that if she ever catches anybody vandalizing their cave water supply, she will chase them off at gun point.

I have enjoyed my visits to the Frazier farm and always look forward to returning. On more than one occasion we have been treated to iced tea or ice cream on a hot summer day, and a place to change out of wet caving clothes on a cold autumn day.

We are pleased to present what we hope may be the first of a series of reports from the Virginia Speleological Surveys:

Treasure Caves of the Goose Creek Valley

Away, away ere break of day/ to seek the long forgotten Gold

by Charles Lucas

There is the lure of gold in the Virginia hills or under them, that is. The legend says that Thomas Jefferson Beale found gold 200 miles north of Santa Fe in 1817. He supposedly cached this stash consisting of several hundred pounds of gold, silver, and many gemstones in Goose Creek Valley. A box of papers was left behind for safe keeping while Beale made one last trip west and it was to be opened after 10 years. Beale never returned and the box was forgotten for 23 years.

In 1845 Robert Morriss, the man to whom Beale had intrusted the box, remembered it. When opened it contained three cyphers* or codes and a short letter telling Morriss that he was to decypher the codes and deliver shares of the riches Beale had found to the men and the families of the men who had helped him. Morriss never decyphered the codes or found the treasure, and the codes were passed down to James P. Ward. Ward dedicated his life to finding the cache of treasure and did manage to decypher** the second longest cypher. This cypher told Morriss, the original owner of the box, that Beale had deposited 1300 pounds of gold, 1200 pounds of silver, and many gems 4 miles from Buford's Tavern.† It went on to discuss how the treasure was to be divided, how it was buried etc. but it did not give the precise location of the treasure. Ward never did decypher the other codes though he did have everything he knew concerning the treasure published in a pamphlet. Unfortunately, before the pamphlet was sold it was stored in a large warehouse that burned to the ground. Few copies survived.

In the late 1860's interest in the treasure revived. George and Clayton Hart began a systematic search of the 4-mile radius around Buford's Tavern, now called Montvale. They consulted various psychics, who tried to pinpoint the site, but their attempt failed. The Harts also collected all the information about the treasure in written form. In their files is the first mention of the caves of Goose Creek Valley.

The caves in the valley seem to have played a major role in the search for the treasure. One of the psychics the

Harts consulted described in detail Beale's Treasure Cave, also known as Crusher Cave and Potato Cave. Beale was said to have visited the cave and to have left a clue there. Popular magazine and newspaper articles have spread the knowledge and guesses about the treasure, and today many hundreds of people regularly search the area.

* These codes are very good and two have not yet been decyphered.

**This was accomplished by using a letter/number corresponding with some parts of the Declaration of Independence.

† The value today is estimated at 40,000,000 dollars.

DISCOVERY

In the summer of 1985 my father, Phil Lucas, and I decided to check out the nearest cave to our house listed by the VSS files. It was called Dooley's Cave and was supposed to be the only confirmed solution cave east of the Blue Ridge in Bedford County, Virginia.

We drove up to the Goose Creek Valley and to where the cave was marked on the topo map. There we spotted a house near the marked location of the cave. We knocked on the door and talked to a Mr. Luck. Mr. Luck kept grinning at us as we asked about the cave and he finally told us that he knew of no caves on his land but we were free to look around if he got 50% of the treasure. "Hub, we aren't looking for any treasure. We are looking for a cave." Mr. Luck just grinned at us but we gradually realized that there was supposed to be a treasure in the area and that Mr. Luck thought we were treasure hunters playing duab. We then asked him if he knew the owner of Dooley's Cave, a Mr. John Dooley. Mr. Luck then directed us up the road to Mr. Dooley's house. When we arrived there we realized that the location was way off, something like a mile.

Mr. Dooley also thought we were treasure hunters but as we talked he came to believe us or at least became less sarcastic. He told us how the cave had been discovered and asked his son to show us the entrance, a 20-foot pit in the woods behind his son Ronnie's house. We did not have

any vertical gear with us so we did not enter the cave that day. Before we left we asked about a lead Mr. Luck had given us. Mr. Luck had heard of a cave near a car crusher at Montvale. Ronnie Dooley clarified where the crusher was and we cruised over that way.

After asking people for better directions to the cave itself, we walked up toward the cave. We had seen many shallow holes in the woods near Ronnie Dooley's house and he told us they had been dug by treasure hunters. Now as we walked up the obscure hillside well away from the road we saw literally hundreds of holes. Some of these holes were 10 feet deep or more and were just scattered at random throughout the forest. This was really incredible. After a while my little brother Matthew spotted the cave, a walk-in entrance in the bottom of a good-sized sink. We explored the cave; it too was filled with holes. These were big impressive dug pits averaging 6 feet deep and wide. The largest hole was 8 feet deep, 6 feet wide, and 12 feet long. This cave was very unusual, to say the least.

We returned two weeks later and surveyed the cave, netting just under 500 feet of passage. WVACS ate up most of our caving time for a while, but about two months later we returned to survey Dooley's Cave, which we had not entered before. Dooley's turned out to be a rather pretty cave with over 600 feet of passage. Even it had two treasure pits.

A SHORT HISTORY OF BEALE'S TREASURE CAVE

Beale's Treasure Cave has been known to local residents of the Montvale area at least since 1900 and probably as far back as Thomas Jefferson Beale's day, the early 1800's. It was situated about two miles from Buford's Tavern, a major stop at the intersection of three stagecoach routes. It may have been mined for saltpetre during the Civil War but no evidence or oral tradition seems to have survived. It has been a focus of the search for the legendary Beale treasure and many dug pits and other debris remain. Two extensions off of the main passage have been discovered through the digging efforts of the treasure hunters. One wall of the longest dig is partially supported by rotting timbering and should not be disturbed. The oldest residents in the area remember the storage of potatoes in the cave to prevent spoilage and even today the entrance smells faintly of potatoes.

A SHORT HISTORY OF DOOLEY'S CAVE

In the late spring of 1967 Mr. John Dooley was walking on the side of a hill which he owned when he noticed a rather unusual depression in the ground. He mentioned this to some men that had been hired by a man from the Washington area to search for the legendary Beale treasure. The men had been hired for the entire summer and had been furnished with a bulldozer. They came up to the depression on Mr. Dooley's land and began to dig. They cleared away the topsoil with the bulldozer until they had exposed a slab of limestone they thought was bedrock. Disappointed, they left. After some time had passed, John Dooley walked by the dig again and noticed that water had washed open a hole. He went over to the opening and found a cold breeze hitting him in the face. He called the treasure hunters back and they cleared the hole out, revealing a 20-foot pit. Soon afterward they and John Dooley's sons descended the pit on an aluminum ladder. They explored, prospected, and dug a few holes. Finding nothing they took some pictures and left the cave in a nearly virgin state. In 1969 A. W. Stewart located, reported, and described the cave to the U.S.S.

Note

Visitors to the caves should be prepared to be called treasure hunters and be treated as such. Dooley's Cave should be visited as little as possible, to preserve the good will of the Dooleys.



The Roanoke City Parks and Recreation Department recently ran a trip to Tawney's Cave and reported to the Board that they found it badly vandalized with spray paint. The Board would like to arrange for prosecution of the guilty parties, if anyone will turn their names in. It is thought that a group had a Hallowe'en party in the cave.

We don't have a full report but flood damage to the major river valleys in the western part of the Commonwealth as well as in neighboring parts of West Virginia was extensive. This has turned the energies of many cavers to helping with the massive cleanup effort and putting off unnecessary trips to caves. Just thought you'd like to know.

Hydrogeology in Karst Urban Areas

This may seem a bit scientific (it did to your editor) but the basic warning that we ignore problems of contamination at our risk is well taken. The author, George Veni, is a Texan doing graduate work in Kentucky (Source: Texas Caver).

Karst is a term describing a particular topography characterized by primary subsurface drainage. Most commonly the rock involved is limestone and its larger drainage conduits are caves. Aquifers are regions within a rock unit where all pore spaces, fractures, caves, and other voids are filled with or are capable of yielding water. Due to the prevalence of conduit flow in karst areas, their aquifers have certain unique characteristics, which include:

1. Groundwater flowpaths which can be difficult to predict, often bearing no relation to surface water drainage.
2. Very fast groundwater flow (as compared to non-karst aquifers).
3. Caves, sinkholes, and sinking streams which often act as rapid, direct, and nonfiltering hydrologic links between surface water and the aquifer.

Numerous studies have shown that urbanization produces two main impacts on hydrologic systems: first, infiltration of surface water into an aquifer is decreased (which consequently results in increasing flooding of downstream areas), and, secondly, the level, variety, and toxicity of contaminants in storm water runoff sharply increases--and with it the potential for ground and surface water pollution. Aquifers in karst areas have consistently been shown as highly susceptible to contamination because of the three characteristics stated above.

[Then George Veni describes two cases, one in Bowling Green KY which is copied below and one from central Texas which we omit as more distant.]

Lost River Groundwater Basin, Bowling Green, Kentucky

Bowling Green, Kentucky, is the largest city in the United States built upon a sinkhole plain. Most of the city is underlain by the Lost River Aquifer, one of several highly cavernous aquifers of that karst region--including those aquifers which drain through Mammoth Cave (40 km to the northwest). The main trunk passage of the Lost River Cave System winds its way under Bowling Green for about 12 km before resurging. Many extensive side passages feed into the main trunk.

Skipping many hydrologic details for the sake of brevity, I'll just say that Lost River Cave is not a cave you'd be anxious to visit. Dye dumped into some toilets (with newly built septic systems) has appeared in Lost River within ten hours. Common usage of sinkholes and injection wells for waste disposal, leakage of underground storage tanks and general insurving of urban stormwater runoff has made the Lost River untreatable for human use. Other problems involve toxic and explosive fumes collecting in the cave (carbide cavers stay out!) and leaking up into homes. Sections of the city are monitored for these fumes and sometimes evacuated for fear they will blow up!

[Following the description of the Texas situation, George suggests that cavers and other citizens can act together and get some results. One time he was able to prevent the location of a gas station where a sinking stream was. He points out that the goal is not simply saving of caves for recreational use but protection of the water supply. That interest in this is widespread is shown by the polls showing the U. S. citizens generally favor extension and even strengthening of the federal Clean Water Act.]

The Cave Board has problems learning promptly of the plans of oil and gas companies to prospect for oil and gas supplies or to set up permanent operations. It isn't that we're against oil and gas company work but we'd like to know where they are so we can let them know if they've chosen a site right on top of a known cave system. Chances are they would like to avoid such a spot too. And sometimes just moving a few yards is enough to do so.