



# Spring 2019 Brings New Cave for RKC!

2018-19 brought good and bad to the Rockcastle Karst Conservancy. 2019 again finds us in the middle of a new cave acquisition. On May 2nd, RKC will officially close on the new Sloans Valley Preserve. Encompassing the last two entrances open to public access into the Sloans Valley Cave system, this 5.24 acre preserve will ensure that open access will continue.

On the dark side, the heavy rains of late winter and early spring have caused troubling damage to our Great Saltpetre Preserve. Flooding along Crooked Creek and runoff down the hillsides have damaged the campgrounds, the shower house, and the kitchen in the shelter. By now, most of the damage has been repaired and the mud removed. But, erosion to the creek bank near the shelter will require a major project to restore stability to the grounds.

RKC membership continues to increase, with several more Life Memberships to help us sustain our long-term goals. Preparations for the annual May Open House at Great Saltpetre Preserve are well underway. Open House allows us to share the beauty, solitude, importance, and history of our showcase property with cavers and the general public during this exciting two-day event ... always the weekend after Mother's Day. The GSP property brings increased visibility to our mission to spread public information about the importance of Cave and Karst systems to the surrounding community.

The RKC Board welcomed back Director Janice Gott to another 3-year term. Janice continues as Secretary for another year. The other three Officer positions also remain unchanged: Chair Sean Cain, Vice-Chair Bob Roth, and Treasurer Werner Jud. Gary O'Dell rounds out the Board as the At-Large Director.

Our fund-raising program now goes into high-gear to repay the generous loan from one of our members to secure the purchase of the Sloans Valley Preserve. Additionally, we must grow our Cave Acquisition Fund to get RKC ready for future Preserve purchases. The Fund has been slowly rebuilding, since we paid off the Skylight Preserve loans in early 2017.

Finally, RKC succeeds in its mission only by the service of its members. Volunteering your time is critical to RKC's ability to get jobs done. It takes more than hard work and endless volunteer hours to be successful. We need continuing funds for RKC to fulfill its mission:

*Protecting Kentucky's karst environments and supporting access to caves in the Rockcastle County Region.*

If you love caves, help us keep them available, by opening a Sustaining Membership today.

## Spring, 2019 Newsletter

(Edited by Gary Bush)

Janice Gott,  
RKC Publicity  
6161 Grand Vista Ave.  
Cincinnati, OH  
45213-1719

Rockcastle Karst  
Conservancy  
*Protecting Kentucky's Interior*



*Help Save Our Vanishing Karstlands !!!  
Donate to the RKC Cave Acquisition Fund !!!  
Your Dollars Will Last for Years !!!*

### GSP Open House to be held May 18 & 19, 2019

Saturday, May 18, 2018 - 10am to 4pm

Sunday, May 19, 2018 - 10am to 4pm

**(Note:** The Open House is always the weekend after Mother's Day)

Great Saltpetre Cave was a significant source of saltpeter for gunpowder during the War of 1812. The property has been an important part of the Rockcastle County community. Come and enjoy it. Join us for:

- Guided tours of the Cave. They're free!
- Free soup beans and corn bread.
- BBQ and Food concession stand, operated by the Livingston Fire Department.
- Souvenir concession stand.
- Miles of hiking trails.

The public is welcome and encouraged to attend. Bring the whole family for a great day of interesting fun. The free cave tours last 45 to 60 minutes. The cave has electric lights. The cave floor is generally flat. Dress for the cave environment - comfortable shoes and a sweat shirt. The cave is 57 degrees year-round. Bring a flashlight, if you wish. Bring a picnic lunch or patronize the Livingston Fire Department's BBQ concession stand.

## Great Saltpetre Cave Management Committee — Chaired by Scott Pavey

The property suffered flood damage this spring, but, with a lot of effort, it's slowly returning to good condition. Mud has been cleaned from the buildings. Electrical outlets have been replaced, where needed. Gravel has been spread on the campground road. The roof on the lower mondo was generously replaced by James Clements. Frozen pipes and the instant water heater in the kitchen were repaired by Werner Jud. Werner also repaired the electric line to the point and replaced the gas valve in the kitchen's oven. Renovation of the old Ticket House, by Bob Roth, is proceeding, as the weather will allow.

With the warmer weather, local school outings to GSP have resumed. Bob Dobbs, with numerous volunteers, continues to educate and delight the youngsters from Rockcastle and

surrounding counties by showing them through the GSP cave and with interesting videos about bats and caves.

Darryl Marsh has continued sponsoring Scout troops from near and far to camp at GSP and leading them on wild-cave trips to nearby caves. These Youth Group efforts will, hopefully, inspire a new generation of cavers or, at a minimum, encourage future Kentucky citizens to support the preservation of these important natural resources.

One disturbing development at GSP has been the accelerated erosion to the creek bank just east of the shelter. The heavy rains have caused multiple creek flows to overflow the dam. The resulting turbulent water flows have drastically cut into the bank below the dam, as shown in the photos below.

## Crooked Creek Flooding and Bank Erosion at GSP — by Neena and Werner Jud

After an already wet winter, during the night of February 25, 2019, intense rain hammered the Crooked Creek watershed and Great Saltpetre Cave Preserve. This caused the water level in the creek to rise, rapidly overflowing its banks and spreading wide across the campground road.

The rain was so heavy that little could seep into the ground. Instead it rushed downhill, water-falling over the stone walls on either side of the kitchen forcing muddy water inside. It also carved deep gouges in the gravel filled steps to the cave which have now been restored. Last year's road repair survived rather well against this deluge, despite some patches of gravel in the field.

Floodwaters scoured the point, carrying off the hot tub, tarps and many other items from the sauna area. It thoroughly scrubbed the sandy beach clean. These items have since been recovered and we are working to ensure they will not be carried away again.

The most significant result of this flood was more creek bank erosion. After it flowed through the culverts and over the dam, the water's turbulence scooped out the bank far

enough to justify moving the Port-o-Lets and dumpster. It has been slowly eroding over the past couple of years, but this event made a drastic change. We are currently exploring a few options for bank stabilization and would welcome input.

Water is a powerful force, whether coming down fast and furious or slow and steady. It carved the valleys and dissolved the limestone, creating our caves. Water also brings minerals into the caves, building the formations. On the surface, water enables the plants to grow, to convert carbon dioxide into oxygen and more plant matter. Although these changes occur over drastically differing time spans, water is the prime mover.

As much as we want to keep the property the way we always remember it, change will come to the Preserve, whether by natural forces or decisions made by the stewards caring for it. It is our goal to manage these changes, carefully balancing improvements to the infrastructure with a desire to maintain the natural appearance we all enjoy.



## New "Friends of GSP" Coming to GSP

As part of GSP's continual work in public outreach, this year, the committee has implemented a 'Friends of GSP' program to allow a process for better connection with the local community. A flyer will be available at Open House to usher in this new campaign, followed by other announce-

ments later in the year. *Friends of GSP* is monitored and regulated by a newly updated GSP management plan, but will have its own officers to guide and oversee the benefits for GSP and residents of Rockcastle county. A website link will soon be available for more information.

## Great Saltpetre Cave Preserve — Photos from the Good Old Days



Original dam,  
creek bank, and  
campground area,  
Circa 1970



The GSP Shelter,  
With wood-chip floor,  
Circa 1970



The Picnic Areas on  
the Point,  
Circa 1970



*... A Day at the Preserve  
And an Hour at Lowe's ...*



*R.I.P broken tools. You served me well.*

Not much happened this winter, I suppose due to the rain and generally bad weather we've had. There is a trip scheduled soon and I expect more trips to follow.

The driveway up to the parking area continues to degrade, with gravel filling the drainage grate and washing downhill. As this continues, ruts are slowly developing. The heavy and nearly constant rains of recent have washed more gravel down and left more areas with drainage cutting into the roadway. Though not a bad issue at present, the loose gravel with inconsistent cover does make it more difficult for some vehicles to ascend to the parking area, especially at the final, curved approach at the top. In addition, the hillside above the parking area, and between our property and our neighbor's, drains onto the driveway and, as seen in the panoramic photo below, the gravel has washed away and a ditch has developed. I was told our neighbor is considering a proper drain, though I'm not sure what was meant. I spoke not to the neighbors, but to their daughter-in-law, who was housesitting.



*Ruts forming along the driveway between our neighbor's and our property.*

The trails to the pit entrances were not washed out. However, they are covered with leaves and debris. A healthy trail has minimal debris, so that the hard-packed surface can stay just that, without holding water. Debris acts as a sponge and keeps a trail wet, leading to more potential for erosion. Though we cannot stop the woods from depositing debris, it should be noted the trail itself has never been packed firm. The initial hill climb is steep and without switchbacks, and it does have some erosion and bare rock. It is not a problem at present, though it is starting to rut. Drainage can be addressed with a little work, but I am by no means a trail expert.

I spent part of the day cutting down some thorns and weeds, especially around the structure, quitting only when my hoe handle broke. I then continued on the trail, raking debris to the side up the trail to the Hurricane entrance and then toward the Skylight entrance, quitting only when my rake handle broke. It was simply not a good day to be a tool.



*Newly lined trail section*

I spent the remainder of the time relining the trail with large, straight limbs. I took a friend with me who had not been to either entrance before, and she was able to follow the trails right to each entrance. On the way back, she left the trail at one point, so I covered the area she mistook for the trail with limbs, sticks and debris, and I lined it with several large, straight limbs.

As mentioned above, the new landowners were not home, but their daughter-in-law was watching the house for them, along with their son who was not present. I introduced myself and spoke with her about the property, who we are and what we do. I gave her my contact information and let her know I was always available to answer any questions. She and her husband may have interest in getting underground at some point in time, and I invited her - and the entire family if desired - to let me know if I could be of service and facilitate a beginner trip.

***Sloans Valley System is the 4th longest cave in KY !!!  
RKC now must re-pay the loan to buy the Cave !!!  
Donate to the RKC Cave Acquisition Fund !!!***

The Sloans Valley Preserve became the 5th property operated by the Rockcastle Karst Conservancy on May 2nd, 2019. The Preserve contains the Crockett and Scowling Tom's entrances to the Sloans Valley Cave System, located south of Burnside, in Pulaski County, Kentucky.

(Note: The newly re-named Crockett Entrance was previously known as the Garbage Pit Entrance. It's now named in honor of Tom and Kathy Crockett, the previous owners of this property.) Sloans Valley is a 24-mile-long cave system, the fourth-largest known cave in Kentucky, with many entrances.



The large pit entrance on the Crockett property is one of the best known and holds a fondness in the memories of cavers, dating back to the 1970s. For many, this entrance was one of their first caving experiences. Tom and Cathy Crockett, and their children Joshua, Emily, and Sarah were welcoming to cavers for decades. After Tom's death in 2009, the family had lost control of the property to the bank. RKC worked with potential buyers of the property to get an option to purchase the entrances. We obtained an option to buy the area around the two entrances on October 31, 2018. The final closing occurred on May 2nd.

Philip Francis III, of Ann Arbor, MI, and his team have been taking recent trips into Sloans Valley, through the Crockett Entrance. They've focused their trips around the passages impounded by Lake Cumberland. He and his team have provided the photos below for this article.

### **Sloans Valley Cave System – 2019 Rafting Trips** — by **Philip L. Francis, III**

In February and March, 2019, groups of Michigan cavers spent four weekends in the Sloans Valley Cave System to assess the record-setting high water levels on various sections of the cave. While these trips visited (or attempted to visit) well-known passages and common destinations, the goal was to become intimately familiar with the specific passages where the water table impacted access as the water levels of Lake Cumberland slowly lowered to normal pool levels.

In many prominent sections of the Sloans system, the water table is dictated by Lake Cumberland's lake level – specifically at the Wolf Creek Dam (located 35 miles west-southwest of Sloans Valley). Since the construction of the dam in 1952, lower levels of the cave system have been permanently under water.

From 2007 to 2013, the dam repairs brought the lake down to levels not seen in decades. Since 2014, with dam repairs complete, the water level generally fluctuates seasonally between 700 and 725 feet (above sea level); however, its historically not uncommon to see a range of 695 to 735 feet.

The beginning of 2019 brought even more rain that inundated structures in low-lying areas. Rather alarmingly, by the last week of February, the upstream elevation at Wolf Creek Dam swelled above 756.5 feet; it rose 30 feet in just 16 days and was only 3.5 feet below the top of the flood-control pool. Compared to the past, the highest water levels Lake Cumberland saw previous to 2019 was 751.70 feet in 1984 and 747.12 feet in 1962, respectively.

Due to the heavy precipitation and its implication at other entrances, all four of these high-water trips utilized the Crockett Entrance (i.e., the Greenhouse Entrance, or Garbage Pit Entrance) to both enter and exit the cave. Each of



these trips relied heavily on the use of ultralight packrafts to traverse large expanses of cold, deep, open water in passages that typically have ceiling heights of 40' to 70'. While the goal on these trips was the seemingly-benign traversal of well-known

“trade route” passages to common destinations (e.g., to view the Big Room in the first trips and connect to the Big Passage on the last trip), the ultimate goal was to become intimately familiar the system at certain choke points during total inundation, and, secondarily, to allow Ameche and Fomin to practice trip-leading in Sloans. The primary goal was to know more precisely how ultra-high water tables impacted certain connection passages.

As one could imagine, the high water meant that some pleasant passages with 20-foot ceilings, that typically lie well above the water table, were filled to the brim and eventually sumped for hundreds of feet and thus prohibited further transit through the system. For cavers who know this system well, this experience was akin to rafting through the second or third story of a house and touching the ceiling in order to navigate from front yard to back, knowing that the normal route is 20-30 feet below.

As the waters of Lake Cumberland subsided with each successive weekend trip, sumped passages opened up to allow connections to other subsystems, and even as the water dropped at impressive rates, the magnitude of inundation would impress even the expert Sloans cavers. For example, the Big Room was reached during the third trip on March 15 - after the water had dropped 18 feet in the



## Sloans Valley Cave System – 2019 Rafting Trips — (Continued)

two weeks since the first trip - and even by then, the Second and Third Lake Rooms (two known passages that connect into the Big Room) were still completely missing as their ceilings were well below the water. So high was the water that the high-walled (and thus dangerous) North and South Overlooks to the Big Room seemed almost within reach (given the nice body of water to splash into if one fell). Having



reached the Big Room by the third trip, and as the water dropped more, other areas of the cave system came into focus. By the fourth trip at the end of March, 2019, the water levels had dropped 40 feet (in four weeks) to 725 feet – enough to connect from Grand Central Station to the Lunch Room and on to the Big Passage. By this trip, the lake level was back to a normal level; however, the much of the north end the Big Passage was more slippery than normal.

The rafting was the most interesting aspect of these trips. Another interesting observation was how much debris - i.e., branches, leaves and organic matter - had accumulated in certain areas as the water receded.

With each trip, the water table was lower, and this change impacted the ease with the parties could embark and disembark the rafts. Sometimes, entrance to the water an easy walk down to the edge of a boulder beach and an easy slip into a raft; at other times, the water table was lower and the water's edge met tall vertical breakdown boulders that required the parties to climb straight up or down 10 feet to enter/exit the rafts.

On the first trip, the entire passage between the Oasis and

the Hogback was flooded and the 70-foot ceilings appeared much lower. The parties launched their rafts on the Oasis-side of the Appalachian Trail and paddled over 500 feet through the First Lake Room and Echo Junction to the Hogback.

Whereas normal transit through some high-ceiling sections of this cave entails cautious eyes upon an endless up-and-down over muddy and massive boulder fields that create the undulating lake rooms and hilltops, the rafting, though not without its own safety issues, permitted the teams to paddle across calming flat planes of water that increased traversal times tenfold.

While the sumps discovered in the passages that are normally well above the water table, the rafting alone was the most unique aspect of these trips.

On a few instances, travel time was delayed significantly as the party scouted for a proper landing to disembark the rafts.

Despite the ratios of exhausting round-trip drive time (from Michigan) to short duration underground, the experience of these trips was rather exciting and offered a unique opportunity to see Sloans as few-to-none have seen before.

Further photos and trip reports may be found at: <https://plf3.net/otr/speleo>



Trips: (Leader for all trips: Philip L. Francis, III)

Photos by Philip L. Francis, III

2019-02-28: David Ameche, Alexei S. Fomin, Philip L. Francis, III, Andrew Richardson, Ryan R. Walker

2019-03-08: David Ameche, Alexei S. Fomin, Philip L. Francis, III, Sabrina Maroncelli, Ryan Perkins

2019-03-15: David Ameche, Jasmine Dinnell, Alexei S. Fomin, Philip L. Francis, III, Dana Porter

2019-03-29: David Ameche, Jasmine Dinnell, Philip L. Francis, III, Dana Porter

## Greetings from the RKC Fund Raising Chair!

by Mary Gratsch

It is always exciting when RKC purchases a new cave. And when our next purchase includes 2 entrances to the 23-mile cave in Kentucky, it is exhilarating! On May 2nd, RKC completed the purchase of 5.24 acres containing the Crockett Pit and Scowling Tom's entrances to the world-class Sloan's Valley System.

For those not familiar with the Sloan's System, there are more than 22 entrances. However, the ones owned by the US Forest Service have been closed for over 8 years and all but one of the other entrances on private land have been closed by the land owners for many years. RKC's acquisition of these 2 entrances ensures future caver access to this great system.

RKC is currently soliciting funds for the purchase and maintenance of the property, to be called the "Sloan's Valley Preserve". **Please consider making a donation to the RKC Land Acquisition Fund!**

100 % of these donations go towards ownership and maintenance of this preserve.

Donations can be made online, at [rkci.org](http://rkci.org), using the Preserves Loan Repayment button or mail checks, payable to "RKC Land Acquisition", to Werner Jud, (RKC Treasurer), 1044 Vacationland Drive, Cincinnati, OH 45231

It is with considerable regret that I report on the passing of William Hart Russell of Austin, Texas, on March 21, 2019; an extraordinary and distinguished caver who pioneered the systematic exploration of Rockcastle County caves in 1960. Born in 1937 in Houston, Texas, to a professional librarian, Leonore Schuppert Russell, and a geologist, William Low Russell, Bill grew up in Bryan, Texas, with his brother, Philip, where his father taught at Texas A&M University for several decades. Their father took them on fieldwork trips, including some visits to Kentucky caves, which inspired Bill's very early engagement with caves and cave science. After graduating high school, Bill moved to Austin and attended the University of Texas, joining the UT student grotto and the NSS (#4357), becoming a very active caver. During summers, he worked for Carson Oil in Kentucky and heard rumors about large caves to be found in Rockcastle County.

After serving a hitch in the Army in Europe, Bill came back to the US in the summer of 1960 with an Army buddy, Thomas R. Costello. Wanting to do something special to mark their return to civilian life, the two decided to follow up on those cave rumors and took the bus from New York to Rockcastle County. Inquiring about caves, they ran into John Lair and Richard Mullins, who told them where to look. They spent the next two weeks hiking and camping in the wilderness, moving from cave to cave, exploring and surveying. Among the major caves they visited were Pine Hill, Sinks of the Roundstone, Great Saltpetre Cave, Mullins Spring Cave, Teamers Cave, and Crooked Creek Ice Cave, making surveys of the first three. Their Great Saltpetre map was the first survey of the cave that had been made since the original made by John James Dufour in 1805. They made note of more than a dozen minor caves, and also visited Pulaski County.

After this, Bill came home to Austin, and immediately plunged back into an ambitious program of mapping and describing Texas caves, producing several regional reports for the Texas Speleological Survey which, in 1962, released *A Preliminary Report of the Caves of the Mt. Vernon and Livingston Quadrangles Kentucky*, by Russell and Costello. In the years that followed, Bill continued to publish numerous articles, book chapters, and reports on caves in Texas

and Mexico, building a stellar reputation among the Texas caving community to the point where one of his peers considered him, in 1985, to have earned the title, "Mr. Texas Caver." For those of us who caved in Rockcastle County, Bill was here first, a true pioneer. I consider myself fortunate that, in the months just prior to his passing, I took the trouble to contact him in order to learn exactly why a Texas caver had come to Kentucky, all the way down to Rockcastle County.



*Bill Russell in 1982. Photo by Steven Pumphrey, originally published in Third Coast, September 1982.*

**It's Time to Renew Your RKC Membership**

April 1st has come and gone. My! How time flies by. RKC's membership year runs from April 1st to March 31st. So, to continue making a difference in maintaining open access to Kentucky caves and to preserve the significant cave and karst resources in Kentucky, we need your help.

And now with five Preserves to maintain, more than ever, we need your support. Please use the form on the other side of this page to renew your membership —or— go to <http://rkci.org> and use the button on the page to renew on-line. It's too easy to let it slide, so do it now.

Because our needs are so much greater, please consider moving up to a Sustaining Membership. For \$5, \$10, or more per month, you can forget about annual renewals.

I can assure you, that small amount on your credit card won't be noticed and you'll know you're helping RKC move further and faster to becoming the premier conservancy.



**Who? Me?**

**Yes, You!**

**The Cave Preserves of RKC** (Photos by Nathan Williams, Tammy Otten, Mary Gratsch, Maksim Popov, Phil Francis III)



Great Saltpetre Cave Preserve



Misty Cave Preserve



Cornhole Cave Preserve



Skylight Preserve



Sloans Valley Preserve



# Join RKC

*We can't do it without YOU!!!  
We can't do it without YOU!!!*

**The Rockcastle Karst Conservancy**  
**Membership Application Form**  
 Apply on-line at: [www.rkci.org](http://www.rkci.org)

Date: \_\_\_\_\_

Name - Please print clearly: \_\_\_\_\_

Street: \_\_\_\_\_

City, State & Zip+4: \_\_\_\_\_

Email Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

RKC is a 501(c)3 tax-exempt, non-profit organization.

**Membership Categories and Dues**  
 (Circle Membership Type)

**Memberships for Individuals – Voting**

Individual Member                      \$15 / year (Apr. 1–Mar. 31)  
 Lifetime Member                         \$300 / one time

— OR —

Sustaining Member \*                    \$5 - \$50 / month\*  
 (Credit Card Charge via PayPal)  
 \* Sustaining Memberships can only be done on-line  
 (Go to [www.rkci.org](http://www.rkci.org))

**Institutional Memberships – Non-Voting**

Institutional memberships for groups that would like to support RKC are also available:  
**Supporting** - Non-profit, grottos, and youth organizations—\$25/year  
**Supporting** - All other organizations — \$50/year

**Make all checks payable to: *Rockcastle Karst Conservancy***

**Mail Completed Form to: *Rockcastle Karst Conservancy***  
 c/o Werner Jud  
 1044 Vacationland Dr.  
 Cincinnati, OH 45231-4749

***Please Join or Renew Now !!!***