

**Minutes of the Kansas City Area Grotto**  
**May, 2020 Business Meeting**  
**Held Tuesday, May 19<sup>th</sup>, 2020 – 6:30 to 8:30 P.M.**  
**Meeting Held Remotely on Zoom**

The meeting was called to order by president Seth Colston. The following members and guests were present: Seth Colston, Jim Cooley, “Jodi”, Julie Cottrell, Bill Gee, David Fairbairn, Jennifer Gleason, Kristen Godfrey, Kay Hines, Rick Hines, Nick Kennedy, Jesse Kovac, Austin Kuecher, Laura Jaynes, Jeff Page, Shawn Paxton, Shannon Robinson, Asa Tarrant, Houmin Zhong

**Presentation:**

This evening’s presentation was a talk by Bill Gee on what happens to cave survey data after leaving the cave. Bill described the process of cartography from backing up data to publishing a completed map (or as close to completed as a cave map can be).

Bill explained that less than half of the total work that goes into mapping a cave takes place in the cave itself. The rest takes place afterwards, far from the muddy and entertaining environment of the cave. For sketchers and other cavers, there is something of a black box between the work in the cave and the release of the final cave map, so Bill kindly listed the seven steps of cave cartography:

1. Review the data/sheets and make backups
2. Organize the data
3. Draw the map
4. Circulate the map with others for comments
5. Verify the accuracy of the map via another trip to the cave
6. Publish the map
7. Return to the cave to map any unmapped regions

The first step begins immediately after exiting the cave. Once all sketchers are out, the project leader checks that all of the sheets have been returned, that each page is numbered, and that the total number of pages has been counted. Even empty sheets are numbered and scanned so that there is no doubt that no pages are missing. If needed, the mud and water are cleaned off of the sheets: It is easier if the pages have been cleaned before scanning.

As soon as possible after leaving the cave, backups are made via scanning, photocopying, or photographing all sheets. Scanning is generally the best method, since the results are flat and regular, but photographs also work well. Any sketches made via tablet likewise need to be backed up.

The final owner of the original sheets should be decided before the trip; often, it is the landowner who receives the pages. After backups have been made, the originals are sent out as previously decided and copies of the scans are distributed to all sketchers. It is useful to give scans and survey data to the people who originally made the sketches, since it serves to keep their memories fresh in case the cartographer has specific questions in the future.

The second step is to organize the data. Each cave is given a separate directory on the storage device, and each survey trip has separate directory under the main cave directory. Often, the main directory is named with the unique Missouri Speleological Survey (MSS) accession number for the cave. The directory includes scanned images of all survey notes, relevant photos, etc. While working on the map, the cartographer backs up all of this data periodically to multiple locations, at least one of which is off-site.

Bill, for instance, keeps one set of backups in a fireproof safe in his home and another set on his personal server. For most caves, even large caves like Carroll, it may be useful to send copies of each sketch to every sketcher to serve as extra backups.

If multiple cartographers are mapping the same cave, the cave is generally divided into sections, with each cartographer working on one section. This is how, for instance, Carroll Cave is mapped. In these cases, all the work in progress is sent to the project leader. With multiple cartographers, it is important to agree on the standards for software, symbol sets, cardinal directions, colors, and other factors *before* the computer work begins.

The third step is drawing the map. The exact process depends on which software is used, so Bill did not dive too deep into this topic, but he did explain that when drawing, it is important to do the work as soon as possible, while the memories are still fresh; this is especially necessary when working off of another person's sketch, in case there are questions about any of the specifics. The drawing itself can be very time-consuming, and it is not uncommon to spend as much time or more on this as on the cave trip itself. Again, all data is backed up regularly.

Once the first draft is finished, it is reviewed during the fourth step. A copy of the work in progress is sent to the sketchers for feedback, to get their input on whether anything needs to be added, changed, or removed. Any blunders are (ideally) caught and fixed during the reviewing stage. Maps that require multiple trips should be reviewed as the data from each trip is added.

The reviewed draft undergoes a quality check in the fifth step. Another trip (or several) is scheduled to the cave to verify that the map matches the cave and that nothing was left out. Often, it is helpful to do this with people who were not on the original trip, so that there are fresh eyes to look for any inconsistencies. After the QC trip, it's back to step one again to make changes.

Publishing the map is the sixth step. Any interested parties should receive a copy, and the landowner should receive the map electronically, by paper, or both. Ultimately, it is the landowner who decides who can and cannot receive a map, though for all Missouri caves, a copy of the map should be sent to the MSS.

The MSS is a private organization that maintains a master cave file database. Since the MSS is nongovernmental, it is not subject to the Freedom of Information Act, so it is not required to give out maps or GPS coordinates. This means that the MSS can accumulate data while keeping the locations of the caves secret. After a map is complete, the MSS should be sent the map along with various other pieces of information. The MSS is given the name of the cave, a scan of the original notes, the GPS location (often averaged across visits to control for GPS drift), and a photo of the entrance with no people blocking the view (though people can be beside the entrance, for scale). Trip reports and observations of cave biota are sent as written, and maps in progress are sent as well, so that the project can be picked up by someone else if the original trip leader drops it. Everything should be sent in electronic format, as a JPG, as a PDF, or both. All photos should be labeled with the date taken, the cave name, and the name of the photographer. Once submitted, most of this information ends up in the hands of Ken Grush, the primary maintainer of the MSS's database. He can be contacted for any questions about MSS submissions.

The seventh and final step is to repeat the whole process as other sections of the cave are surveyed. No one should wait to publish until an entire cave is finished, because it is never finished. There are always new regions to map and new leads to follow.

## Officer Reports:

**President:** Seth Colston reported that the damaged Disto X2 was sent by Bill Gee to Eric Stemberg for repair. The instrument had a bad capacitor that cost only \$100 to repair (the new capacitor cost 1.9 cents, while Eric's specialized knowledge and expertise cost the other \$99.981). The repair of the Disto was important since new components are no longer made, so new Distos are difficult to come across.

Additionally, Seth reported that the Fish and Wildlife Service has released an update on bat handling recommendations: A risk assessment is currently underway to see how the virus affects bats and whether American bats could form a disease reservoir if the population becomes infected with the coronavirus. Pending an official report, Seth's own recommendation is to stay out of caves with large colonies of bats, as most bats are now out of hibernation.

**Vice President:** Jim Cooley reported that there are no updates.

**Secretary:** The April meeting minutes were accepted, and Bill Gee reminded the group that he is publishing previous months' minutes on the KCAG's new website.

### **Treasurer's report:**

April beginning balance = \$2811.37 (Commerce Bank)

Deposit = \$15.00

Checks = \$

Debit card = \$

Bank fee = \$5.00

End balance = \$2821.37

-----

Activity:

Income:

Dues - Max White = \$15.00

Expenses:

Bank fee = \$5.00

=====

April beginning balance = \$427.16 (Paypal)

No activity

End balance = \$427.16

=====

April beginning balance = \$67.00 (petty cash)

End balance = \$67.00

**Quartermaster:** A digital inventory, complete with photos, is underway for the various pieces of equipment that the grotto has available for lending. If anyone needs to borrow camping gear, contact Seth Colston.

**Fundraising:** No updates. Contact Seth Colston (swcy92@gmail.com) or Bill Gee (bgee@campercaver.net) for more information.

**Presentations:** Please contact Seth Colston at swcy92@gmail.com if you are interested in giving a meeting presentation or have a topic idea. See Upcoming Events for scheduled presentations and future meetings.

**KCAG Picnic:** Traditionally, the June KCAG meeting is held as a picnic at the house of Rick and Kay Hines, but the picnic has been postponed and tentatively rescheduled to August 1<sup>st</sup>. Seth will wait until July to make the final decision as to whether it will be cancelled or held as normal (or mostly normal, with the addition of social distancing!), since the decision is dependent upon the coronavirus situation at that time. Rick and Kay support a decision deadline of ten days prior to the intended date, primarily to have enough time for the announcement to get out to everyone in the grotto.

In the meantime, Seth will host informal grotto meetings throughout the summer, at 7:00 p.m. every other week, starting on Monday, June 15<sup>th</sup>. The Zoom link, which will remain the same for every informal meeting, is: <https://us02web.zoom.us/j/88946130480>

He is also monitoring the possibility of holding the July meeting outdoors in-person while socially distanced. A final decision on the July meeting will be announced ten days in advance.

**Carroll Cave Conservancy (CCC):** Rick Hines reports that gravel has been laid on the road up to the silo to repair the soft spots. Discussion is still underway about relocating the gate to the property to an area approximately fifty feet from the road to reduce the danger of parking in the blind spot while unlocking the gate. Rick asked Troy Frederick, the neighbor who initially built the road, to give a quote for moving the gate; Troy has not yet provided the quote. The CCC will need donations in order to fund this project, as well as for the proposed building or structure that will serve as a memorial for Pic Walenta, our late president.

At the time of our meeting, it was announced that the CCC meeting was currently scheduled for the end of July and would not be held remotely. Rick said that the meeting will most likely be held at the Camdenton Fire Station, the usual place, but that the location is not yet set in stone. **THIS HAS CHANGED: THE JULY 25<sup>TH</sup> CCC MEETING WILL NOW BE HELD ON-LINE, VIA ZOOM. CCC MEMBERS WILL BE NOTIFIED OF THE STEPS NEEDED TO "ATTEND."**

Bill Gee reports that the planned repair of the electrical systems at Carroll Cave was delayed and will need to be rescheduled. The work was intended to be done on March 18<sup>th</sup> before its cancellation due to the pandemic. Bill suggests that a new date be chosen so that volunteers can be gathered and the electrician can be contacted. Additionally, Bill intends to update the rescue caches during his upcoming data logger trip to the cave.

Jim Cooley is in search of new officers for the Carroll Cave Conservancy. The CCC's leadership consists of four elected officers, up to five other positions appointed by the officers, and a set of board members. Terms are two years long, and elections are being held this year. Rick plans to step down as the president and retire to the board. Currently, nominees include Jay Kennedy for VP, Bill Gee as secretary, and Kristen Godfrey as Treasurer.

The firefighter rescue training planned for Carroll Cave has been postponed to an unknown date, but Shannon Robinson stated that he was in contact with the fire department and will update everyone once he receives any news.

**Missouri Speleological Survey (MSS) and Missouri Caves and Karst Conservancy (MCKC):** Jim Cooley noted that the MSS and MCKC are currently doing little field work. The May meeting was cancelled, and the next meeting will be in-person this fall.

**NSS update:** The NSS meeting will be held for free online in the last week of July. The NSS is also currently offering discounted subscriptions (half off!) for individuals under the age of 26. NSS director elections will be held on June 25th.

**MVOR:** All work has been postponed until July, when the final decision will be made as to whether the MVOR needs to be cancelled or postponed. Jessica Self, the host of the (cancelled) spring MVOR, will be the T-shirt vendor if the MVOR occurs as planned. Shannon Robinson has received some donations, including a kayak, for the fundraising raffle.

**2021: International Year of Caves and Karst:** This year is the International Year of Caves and Karst, and the goal of this designation is to celebrate caving and educate the public on caves. Seth thinks that this would be a great theme for the KCAG in 2021 and has been scheming up ways for the grotto to participate and celebrate. He aims to organize a year-long novice cave tour through Missouri, with one trip per month, and also suggests a series of weekend-long cave trips and/or float trips (seconded by Shannon Robinson), as well as educational presentations for the public and schools. Jim Cooley wants to organize a long-weekend-long restoration trip to Lewis Cave. Anyone who has ideas, or who wants to lead a trip or give a presentation, should contact Seth Colston (swcy92@gmail.com).

**Novice and Scout trips:** Trips are currently on hold, though Seth would consider leading a small trip of four people or fewer. All trips that were scheduled for the last month, including a scout trip and a girl scout trip, were cancelled. The annual Mormon Girls' trip to Cleveland Cave, led by Heidi Fletcher and occurring in early June, which is a part of their summer camp, has been cancelled, as has been the *entire* summer camp.

**Hickory County:** Gary Johnson was not present; no report.

**Cloud 9 Ranch:** Jim Cooley had hoped to lead a trip early this summer for QC and more cartography, but this has been cancelled. He intends to carry out this trip at an unspecified date in the future.

**Stark Caverns Survey Project:** Bill Gee has scheduled a survey trip for June 6 and has assembled a group to accompany him.

**Old Spanish Cave Restoration Project:** No report.

**Cave Spring Park Association:** No report.

**Devil's Icebox:** No new info about the potential July trips has been released. Rockbridge State Park is accepting volunteers, individually or in small groups, to deal with invasive species and do other surface work.

**White Nose Syndrome:** See <https://caves.org/WNS/> for the most current map of the spread of WNS.

**MeetUp:** Contact Seth Colston (swcy92@gmail.com) or DJ Hall (rangerdjhall@gmail.com) to add trips to the MeetUp schedule.

**New Membership Nominations:** None.

### **Trip Reports and other news:**

Jim Cooley and Julie Cottrell went on a 6-day trip to a 3,500-acre privately owned area that contains 38 caves. They surveyed for two days a 682-foot tunnel cave, which will need one more trip to complete mapping, and have finished QC on two other caves. There are a couple of cave leads in the area that need to be investigated. In addition, the new owner of a nearby 400-acre property wants Jim to do some ridge walking. Jim reports that the area has very positive caver-landowner relations.

A HCRU (Huntsville Cave Rescue Unit) training class will occur in Alabama in June. Contact Shannon Robinson for carpooling details.

### **New Business:**

Shannon Robinson proposed a memorial page for Pic Walenta, beloved grotto president who passed away in January, on the KCAG's new website. Anyone who has good pictures of Pic can email the photos to Seth.

Additionally, Seth Colston nominated Pic to serve posthumously as the President Emeritus, as a nice gesture to her family from the caving community and to honor her caving legacy. Bill noted that there are no conflicts in the bylaws. Jim Cooley moved to designate Pic Walenta as the President Emeritus, and the motion was seconded and passed by unanimous vote.

**Unfinished Business:** Seth Colston confirmed that there was no unfinished business. The meeting adjourned, and the members returned to their still fairly restricted normal lives with dreams of future caving, pizza & beer consumption, and in-person meetings.

## Upcoming Trips and Events

COVID-19 update: Some restrictions have been lifted. Restrictions or not, please make your own decision regarding your own health. The caves are not going anywhere.

June 15<sup>th</sup>: Grotto ZOOM get-together, contact Seth Colston ([swcy92@gmail.com](mailto:swcy92@gmail.com)) for details. (We normally don't have a June business meeting because of the picnic.)

Join the meeting via the following link (remains the same for each informal meeting):

<https://us02web.zoom.us/j/88946130480>

POSTPONED - June 27 - KCAG summer picnic

All cavers and guests are welcome to our annual summer picnic. Details to be announced.

CANCELED - June 12-20 - NCRC Cave Rescue Operations Seminar

New York state just outside of Albany.

<http://ncrc.info/News/Additional%20Files/NCRC%202020%20National%20Weeklong%20Brochure%20-%20mailer%20-%20home%20print.pdf> for more information.

Boys & Girls Clubs (K-12) MDC Outdoor Programs - Need Volunteers

James A Reed Wildlife Area

Tuesday, June 23 through Friday, June 26, 2020 - 10:30am-3pm

Contact Wendy Parrett at [Wendy.Parrett@mdc.mo.gov](mailto:Wendy.Parrett@mdc.mo.gov) or 816/759-7305 ext. 1133 for additional details.

June 29<sup>th</sup>: The second Grotto ZOOM get-together, contact Seth Colston ([swcy92@gmail.com](mailto:swcy92@gmail.com)) for details.

Join the meeting via the following link (remains the same for each informal meeting):

<https://us02web.zoom.us/j/88946130480>

July 11th - Carroll Cave data logger service trip

A fairly easy trip for Carroll Cave. 5 or 6 hours in the cave.

If interested contact Bill Gee, [bgee@campercaver.net](mailto:bgee@campercaver.net) NOTE! (This trip ticket is full.)

July 13<sup>th</sup>: The third Grotto ZOOM get-together, contact Seth Colston ([swcy92@gmail.com](mailto:swcy92@gmail.com)) for details.

Join the meeting via the following link (remains the same for each informal meeting):

<https://us02web.zoom.us/j/88946130480>

July 21st - KCAG Monthly Meeting

6:30 PM

Anita B Gorman Building (or Zoom)

4750 Troost Ave. Kansas City, MO. 64110

July 24th - Iowa Grotto Picnic

Camping, Caving, Survey and auction fundraiser

Fayette County, Iowa

Contact [klausnere@gmail.com](mailto:klausnere@gmail.com) for more information.

July 25th - Carroll Cave Conservancy annual members meeting. Will be a Zoom meeting.

CANCELED - July 27th - July 31st - NSS Convention

Elkins, West Virginia

<http://nsscon2020.org/>

Rescheduled to 2023. The NSS Conventions for 2021 (Weed, California) and 2022 (Custer, South Dakota) are still on.

July 27<sup>th</sup>: The fourth Grotto ZOOM get-together, contact Seth Colston ([swcy92@gmail.com](mailto:swcy92@gmail.com)) for details.

Join the meeting via the following link (remains the same for each informal meeting):

<https://us02web.zoom.us/j/88946130480>

July 30 - Aug 2 - HCRU Cave Rescue class

Union Grove, Alabama

<http://www.hcru.org/rescueclass>

August 1<sup>st</sup>, 2020: tentative grotto picnic date ... will decide 10 days beforehand.

August 29th - September 5th - 19th International Symposium on Vulcanospeleology

Catania, on the island of Sicily Italy

<http://www.19isvetna.com/>

If interested contact David Foran, [caver\\_skier@hotmail.com](mailto:caver_skier@hotmail.com)

September 18th - 20th MVOR

Hosted by MOBat Census and KCAG

McDonald County - Noel, MO.

If interested in serving on a committee contact Kirsten Alvey-Mudd, [cavechef@gmail.com](mailto:cavechef@gmail.com) or Nicole

Ridlen [nicoleridlen@gmail.com](mailto:nicoleridlen@gmail.com)