# THE MSS LIAISON VOLUME 57 NUMBER 9-10

September - October 2017
AFFILIATE ORGANIZATIONS:
CHOUTEAU-KCAG-LEG-LOG-MMV-MSM-MVG-OHG-PEG-RBX-SPG-SEMO-MCKC-CCC-CAIRN.

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MSS MINUTES. The Fall 2017 Board meeting of the Missouri Speleological Survey was called to order by President Dan Lamping on Sept, 17<sup>th</sup> at the Berome Moore pavilion, Perryville, MO. Introduction of Officers: Dan Lamping, President; Alberta Zumwalt, Secretary; Don Dunham, Treasurer; absent was Scott House, Vice-President. Roll Call of Directors: Chad McCain (proxy for Alicia Wallace), MCKC; Gary Rusch (proxy for Chad McCain), SEMO; Max White, SPG; Al Quamen, LEG; Gary Zumwalt, LOG; Ken Grush (proxy for Jim Cooley), KCAG; Doug Leer, MMV; Rita Worden, Chouteau; Joe Light (proxy for Tony Schmitt), MVG; Dan Slais, RBX; Michael Schoenewies (proxy for Craig Williams), CAIRN; Alex Litsch (proxy for Jessica Self), MSM. Absent were: Krista Bartel, CCC; Lorin O'Daniell, PEG; Bill Heim, OHG. Secretary's report. Alberta Zumwalt reported that the minutes of the Spring 2017 meeting were distributed after the meeting to the Directors and Officers and were printed in the May-June issue of MSS Liaison. The minutes were approved. MSS Liaison. Gary Zumwalt reported sending out 44 paper copies and the rest as electronic copies with cash on hand of \$49.24. The next deadline is Nov. 1st. Treasurer's Report. Don Dunham had sent out the report electronically before the meeting and copies were distributed at the meeting. Accounts: General fund \$10,538.78; Subscriptions Missouri Speleology \$4,301.41; Research Funds \$12,724.78; Anne Johnson Data Fund \$19,654.73. Interest checking \$23.38; Affiliation fees \$1050.00; Subscriptions Liaison \$1031.00; Total \$49,324.08. Assets: Savings bonds \$2,000.00; Interest checking \$47324.08; Total \$49324.08. Missouri Speleology. Don Dunham reported the second volume of North Fork Rivers will come out before the next meeting and will probably be mailed out. Pres. Lamping is working with an issue on Cherokee Cave in St. Louis. Affiliate Organizations. Pres. Lamping said this position has been vacant since Jon Beard stepped down, a position he held since the 1980s. There have been no volunteers to take this position. Duties are to collect the annual reports of organizations and to review applications of new organizations. Pres. Lamping suggested that the position be eliminated and asked for a motion. He said reports would no longer have to be submitted, that the Board would deal with applications from new organizations, that the Treasurer would continue to collect the annual fees. Chad McCain made a motion the affiliate organizations position be eliminated. Seconded by Rita Worden. Passed. Appointment and approval of Secretary. Pres. Lamping re-appointed Alberta Zumwalt as Secretary and asked for Board approval. Al Quamen made a motion to approve the appointment. Seconded by Rita Worden. Passed. MSS Research Council. Pres. Lamping said that we now have lost two people on the Research Council, Jerry Vineyard and Oz Hawksley. The remaining members are Dwight Weaver and David Ashley. These were life-time positions. According to the revised MSS bylaws in 2015, the council members will serve three year terms and will have approval of the Board. Pres. Lamping said that he has two people that might serve on the council. He wants to make sure they are willing to serve. He will ask for Board approval at the Winter meeting. Pres. Lamping said that if someone got a grant through CRF, then the MSS could match it. Cave Files. Pres. Lamping said the St. Louis files have been moved to Tony Schmitt's place. Ken Grush reported that there are close to 30,000 faunal reports and 5,000 map records, with approximately ½ of the caves mapped. He is still collecting info until Scott House can take over. Pres. Lamping said the Illinois Speleological Survey (ISS) is taking the structure of the MSS

database, developed by Scott and Ken. Jim Sherrell asked "what is a cave?" Ken said mines that have caveadapted species and faunal records would be worth putting in the database. Darkness would be a qualifier. He does not really want to put all mines in the database. Pres. Lamping said if a person puts it in as a "cave," and if Scott or Ken or whoever enters it, deems it a cave - then it is a cave. Having an icon distinguishes the mines from the caves. Agency Reports. Ozark National Scenic Riverways - Pres. Lamping said the Powder Mill Research facility flooded with a loss of equipment, files and computers. All of the lower level went under. The MTF and ONSR are allowing CRF to use a Forest Service facility in Winona to store equipment, etc. Missouri **Department of Conservation** – Pres. Lamping reported there is no longer a cave biologist. Shelly Colatskie changed positions. They are now working with Natural History biologists. The permit will expire soon. The field biologist hopes it can continue. MDS had asked for work to be done on Great Scott Cave, Mossy Spring Cave and Saloon Cave. State Parks - Ken Grush reported the contract ended the first of June. Affiliate Organizations **Project Reports. Carroll Cave** – Pres. Lamping said there used to be monthly survey trips and now there is 1 or 2 a year. The lease expires in a couple years. Bob Lerch is the new CCC President. For the lease, they have to go through the lawyer instead of the landowner. The landowner has sold most of his property. Valle Mines is being mapped every third Saturday of the month. There is a 90' entrance shaft and on the other side a ladder with 30'. Jim Sherrell will do a presentation this winter. CAIRN - Work in Lon O'Dell Cave. Berome Moore Cave - Chad McCain is the new MCKC President. He reported a total of 20.91 miles mapped in the cave. **Public** Outreach. Website - Pres. Lamping said that Joe Light maintains the website. Pres. Lamping puts the content on the website. The store will be on the website. Five Missouri Speleology issues are already on. Hoping to get the rest of 56 volumes on very soon. Facebook - Send stuff to Pres. Lamping and he will put it on the site. Don Dunham reported someone from Italy wanted to get info from Water Tracer's Cookbook. Next meeting: Jan. 20<sup>th</sup> at 1:00 pm, Rolla, MO. **Meeting adjourned**.—Respectfully submitted, Alberta Zumwalt, Secretary.

Missouri Speleological Survey Files Report for November 2017. Jonathan Beard sent: A map of Boswell Tractor Pit in Polk County. This is the second longest cave surveyed in Polk County at 1098 ft. Leith Cave and Spring, the longest, is over 1700 ft long. Jim Cooley sent: A report on Flippen Cave in Benton County, along with faunal records for the visit. Dillon Freiburger sent: A new map of Little McDowell Cave in Barry County. Accompanying the map were the Adobe Illustrator file and field survey notes for the cave archive. Paul Hauck sent: A report and map of Double Barrel Pit in Perry County, which is a now-inaccessible filled pit that connects with Crevice Cave through two small concrete pipes. Dan Lamping sent: Reports (monitoring and related records) and photos on CRF activity at Saloon (CFD), Mossy Spring (WSH) and Green (WSH) Caves; A map of Zoe Tunnel Cave in Shannon County in the new Echo Bluff State Park. Joe Sikorski did the drafting; Faunal records for a conservation clean-up in Cliff Cave, a St. Louis County favorite. Joe Light sent: Report and photos on Hidden Hollow Cave in Crawford County. At least one report came in from caving during the fall MVOR. Report, faunal records and photos on conservation activity at Greens Cave in Washington County by MVG Grotto; Report, faunal records and photos on a trip to Bailey Pit within St. Louis City. Who knew Cave Salamanders lurked beneath the streets of the city? A report and photos on Cliff Cave in St. Louis County, same trip as Lamping entry, but different input. Chad McCain sent: A bunch of new caves down in Ste. Genevieve County. Among some changes to existing records, the duo of McCain and Alex Litsch have added 7 more cave to bring the total for the county up to 207...and still counting! A report on Stoddard County. There are 3 caves in the county and it appears that two are missing and perhaps one of these destroyed! Mick Sutton sent: Trip reports and monitoring forms for Anderson Cave (DNT) and Coalbank Cave (CTR). Scott House forwarded them to me to incorporate in Master Missouri Cave Database (MCD); Map of Poison Ivy Cave in Dent County that was made by Gary Johnson; Over 160 faunal records from MoSpeleo volume 26, many on extinct fauna from the work by Oz Hawksley.—Ken Grush

**Meramec Valley Grotto (MVG).** Sept. 2<sup>nd</sup> - Joe Light led a trip via the Meramec River to Green's Cave. In attendance was Peter Witteried, Keara Witteried, Rachel Holtman and her father Derik Holtman, Gabe Defew,

Henry Lamping and his father Dan Lamping. The accurate measurement of the cave entrance was made using a DistoX. Green's Cave entrance is 104 feet tall and 89 feet wide (31 meters by 27 meters). In addition, the entire cave was cleaned of trash and graffiti. A water line was discovered in the cave from the spring 2017 floods. A detailed report was generated for the cave files. Sept. 23rd - Joe Light, Jennifer Light, Brian P Kaub and his father visited Hidden Hollow Cave (Crawford County) at the MVOR. Some old pencil graffiti was noticed, thus pictures were taken and a report generated for the cave files. Sept. 29th - Dan Lamping with Joe Light helping led a group of Mehlville High School students to Cliff Cave in St. Louis County. The students learned about cave conservation, geology, biology, history, and had a great time. They also spent time removing graffiti and trash from the cave. Pinkish lichen was noticed in the cave. Pictures were taken of the lichen, sent to Morse Caleb of KU via Shelly Colatskie of MDC (Thanks Shelly) for identification. The pool of water inside the cave has eroded along the west side dropping the water level down. A bone in the cave was identified as not being human by CAIRN, and a dead possum was seen. The possum was later named Edward. After years of looking, it was determined that the oldest graffiti in the cave is from Aug 9, 1908. A detailed cave report was generated and submitted to the MSS. Oct. 8th - Joe Light with the help of Derik Holtman of Illinois took CAIRN to Bailey Pit in the City of St. Louis. The archaeologists did a detailed inventory of the cave, and many interesting items were found including a roller skate, a spark plug, and an ATT phone. Cave salamanders and a snake were found in the cave. This is a historic event, because this is the first time cave salamanders have been found in the City of St. Louis. Also, a detailed cave report created by Joe Light that was lost in the ether for nearly a decade finally found its way home to the MSS cave files. It was also discovered that archaeologists do not like cable ladders.— Tony Schmitt.

Middle Mississippi Valley Grotto (MMV). Aug. 19<sup>th</sup> – 20<sup>th</sup> - Michael and Doug Leer started a re-flagging project in Berome Moore's Cat Tracks Passage. This involves removing and replacing flagging to cordon off sections of the passage where the pre-historic cat tracks exist on the passage floor. The passage was re-visited on Sept. 17th to inspect the flagging already installed to make sure that it was holding up properly. The flagging is still in progress with about 2/3 completion of the mile long passage. Aug. 20th - A marathon trip into Berome Moore Cave took place with the intent to locate a Handshake connection (reportedly a "Tex Yokum" find) from the breakdown area to beyond the water crawl. It was a four hour trip to get to the assumed location with part of the crew going through the water crawl and the others heading to the breakdown. The participants were Larry Ablin, Brett Misel, Dane Driskill, Jason Henewinkel, Ioana Herte, Michelle Leicht and Mike Wallace. The connection was not made and the group exited the cave after the all-day underground trip. Sept. 13<sup>th</sup> - Rick Haley, Aaron Addison and some Architecture students from Washington University visited Foglepole Cave. The purpose was to orient the students to the underground environment with "Design with the Environment" in mind. It should be noted that no bats were observed during this trip. Sept. 23<sup>rd</sup> - Jason Hanewinkel and Ioana Herte visited Jason Isreg Cave. This was a simple visitation trip. Oct. 16th - 20th - Jo Schaper attended the National Cave and Karst Management Symposium in Eureka Springs, AR. The Symposium consisted of 4 days of "cave talk". Oct. 21st - Jo Schaper attended Interpretation Day @ The Narrows. The Narrows includes four springs on USFS land at MO 142. The locals described the local history in the karst area of the Eleven Point Scenic River. Also - Jim Sherrell, Alex Lerich, Derick Holdman, Paul Hauck, Jason Henewinkel, Ioana Herte, Larry Abeln, Michele Leicht and others totaling 13, participated in 5 survey teams in Valle Mines. A survey of Discover Entrance to Big Lode cave yielded 1100 feet. Per a separate report from Jason Henewinkel, 2,000 feet of survey was obtained. The survey revealed that they are within 200 feet of connecting to Little Bill.—Doug Leer

Kansas City Area Grotto (KCAG). Sept. 30<sup>th</sup>- Jim Cooley and Julie Cottrell visited Flippen Cave in Benton County to conduct the annual bio-inventory and perform lock maintenance. They then proceeded on to Stark Caverns (MIL-001) in Eldon, Missouri (Miller County), a show cave formerly operated as Fantasy World Caverns. This cave is located seven miles north of Bagnell Dam, near the Lake of the Ozarks. This cave was recently purchased by some friends of Cooley's, who reopened it as a commercial venture on July 22<sup>nd</sup> under its original name of Stark Caverns. The owners are building a new, two-story Visitors' Center, and are looking to add a wild cave tour to

their repertory of offerings. After Cooley & Julie took the commercial tour, Cooley, the owners and some cave employees pushed a low, complex stream passage to evaluate it as a possible wild tour route. Cooley is also commencing a resurvey of this cave for the landowners, as many passages are not indicated on the current map. A thorough, professional photo shoot will be conducted as well. Oct. 8th- Gary Johnson, Bill Gee and Laura Jaynes visited Vanderman Cave, on the Murphy Memorial State Forest and Wildlife Area, which is owned by the Missouri Department of Conservation. Although concerned about rain earlier in the week, the cave stream was running about the same as usual, a continuous trickle. Bill and Laura continued the cave survey in a passage which is typically hands-and-knee crawling height. But occasionally this passage intersects a joint in the bedrock, and then the ceiling height jumps to 15 - 20 feet. They continued surveying to where it merges with the cave stream passage. They soon encountered a steep upper passage in a joint that they said likely headed up to a sink. Here the ceiling height was 20 feet or more. They continued forward into a crawlway passage with two 25+ foot long shots, where the water was only an inch or two deep. Then they ended the day in this C passage with a 100+ foot long shot. Total additional survey in C survey was 218 feet, with additional survey in the K passage of 34 feet. To continue further will likely be a wetsuit trip because the cave stream becomes deeper, possibly six inches deep, and the ceiling descends. Meanwhile, Gary looked into cave leads elsewhere in Hickory County. After tracking down several leads with no caves, Gary tried to get access to a known cave (about 300 feet long), but the landowners turned him down ... again. But while talking to another landowner, Gary learned of a new cave lead, which is supposed to be not far from Elkton, which he will search for on the next trip. Oct. 28th- Bill Gee led his annual bat census trip into Carroll Cave, which is a round trip from the ladder down Carroll River passage to the mountain room and back. Participants were Bill, Rita Worden, Keenan Dillard, Daniel Wehrly, and Dave and BJ Seidel. The count was basically the same as last year. Oct. 23rd - 30th- Jim Cooley, Ed Yoder, Joe Williams, Jay Bridgewater, Adam Marty, Kirsten Alvey-Mudd, Laura Anthem Jaynes, Tyler Smith, Chip Arnold, Bill Wood, Ron Deiringer, and Kyle Marshall built a vertical chute-style bat-friendly mine closure at the 68-foot-deep Garatee



Garatee Mine Vertical Chute Closure

Mine shaft on the Valles Mines property, which is privately owned. This was a CRF project in support of the Missouri Department of Natural Resources' Land Reclamation Division. The primary objective was to ameliorate a serious public hazard (a deep, open vertical mine shaft), while preserving the habitat and viability of a sizable gray bat maternity colony. Five tons of steel went to close the shaft. The vertical chute measures eight feet by eight feet square. removable gate bars and a pre-engineered rigging point will allow bat biologists to visit the gray bat colony, and for cave surveyors under the leadership of Jim Sherrell and Adam Marty to continue to map this large, mined,

hypogene cave system. A visit to the shaft to retrieve the trailer of leftover steel at 7:00 p.m. on Sunday evening (the day project was completed) revealed bats billowing out of that chute like smoke out of a chimney! -- Jim Cooley

**Springfield Plateau Grotto (SPG). Sept. 2**<sup>nd</sup>—Dillon Freiburger and Jon Beard completed the survey of McDowell Cave (Barry Co) and nearby Little McDowell Cave. Both are not lengthy caves but have impressive bluff entrances. **Sept. 4**<sup>th</sup>—Brandon Van Dalsem guided grad student Matt Miller through the front section of Shoal Creek Cave (Newton Co) so that Matt could take several swab samples of the cave's surfaces for microscopic life forms (fungi, bacteria, etc.). **Sept. 9**<sup>th</sup>—Brandon Van Dalsem, Treavor Bussard and Jon Beard

acted as hosts to CAIRN members for photography and video documentation of the passages and features of Lon Odell Memorial Cave (Dade Co). While there, CAIRN members discovered another obscure petroglyph on a cave wall. The cave has at least six of them including the "underwater spirit." Sept. 12th—Matt Bumgardner and Bethany Bruman were hosted by caver John Wilson through part of Kipuka Kanohina (Kula Kai Caverns) (John is part owner) on the big island of Hawaii. This lava tube system is over 12 miles long and is primarily owned by a community of cavers. Sept. 14th — Brandon Van Dalsem and Treavor Bussard monitored a few caves and pits that they had found from previous trips at the Buffalo National River as part of CRF projects. The most interesting part of the day was the 30-40-foot pit that led to about 200-300 feet of cave. It had a fantastic formation room, white frost covering everything and even some nice drapery. Sept. 16th — Jon Beard was assisted by Dave and BJ Seidel as part of a four-team survey in the Maze in Berome Moore Cave (Perry Co). A total of 20.9 miles of the cave's passages have been mapped thus far with a lot more to go (all parts of the cave will be mapped including passage mapped before as well as a lot of passage never mapped before). Sept. 17<sup>th</sup> & 25<sup>th</sup>—Cynthia and Clayton Russell conducted bio inventories in Three Forks Cave (OK). They were looking in particular for slimy salamander egg clusters but didn't find any. They did note an Ozark big-eared bat, 1 eastern pipistrelle, numerous cave salamanders, 1 slimy salamander and one Oklahoma salamander. Sept. 20th—Jon Beard continued to add to the stock of photos of the faces of broken speleothems in Fitzpatrick Cave (Christian Co). Sept. 23<sup>rd</sup>—While Charley Young, granddaughter Abby, Brandon Van Dalsem, Bill Palmer, Roy Gold and two acquaintances were taking excellent macro-photographs of slimy salamander eggs (and guardian mothers) in Big Bear Cave (Ozark Co), Jon Beard was finishing the survey of Little Bear Cave across the hollow. These truncated maze caves are a combined 3,040 feet. Sept. 24th—Chris Lewis and Jon Beard guided the MSU anthropology club through Fitzpatrick Cave (Christian Co) to give the club an informative field trip about cave archaeology. Artifacts and a possible petroglyph were shown as well as biology and the restoration work being conducted in a very vandalized cave. Afterwards, the group was shown the Main Room, Formation Loop and Split Knee Passage of adjacent Breakdown Cave. Sept. 27th—Jon Beard spent the day photo cataloguing vandalized speleothems in Fitzpatrick Cave (Christian Co) as part of the restoration project there. Jon also noted a mating pair of gray bats, two pipistrelles and eight cave salamanders. Sept. 28th—Brandon Van Dalsem and Treavor Bussard made the long 1,500-foot trek through Canopy Avenue (mostly a bellycrawl), crawled through a brief eardunker to take a video of the 50-foot tall Drapery Dome of Breakdown Cave (Christian Co). This was the first video taken of this impressive, seldom-seen place. They also explored Bat Bone Hall. Oct. 1st—Jon Beard was assisted by Richard Thompson in the completion of the survey of 1,098-foot Boswell Tractor Pit Cave (Polk Co). They surveyed the far southwestern portion of the cave, followed by the far northeastern portion of the cave (Clay Desert Crawl). The cave was gated by Richard using SPG cave gating funds and is the second longest surveyed cave in the county. In one room, Jon documented purple colored crystal masses that may be fluorite. Also—Faith and Chris Lewis spent the day searching for and recording various fossils visible on the ceilings of Breakdown Cave (Christian Co). Oct. 3<sup>rd</sup>—Jon Beard was given a guided trip through a formerly commercial cave in Stone County by a new landowner. There is extensive spray paint graffiti in the cave. The landowner is hoping SPG will assist in gating the cave and help remove the graffiti. Later that day, Jon helped to guide Doug Gouzie's MSU speleology class through the middle portions of mile-long Ash Grove Cave (Greene Co). The group travelled from the eastern entrance to the Skylight entrance to the western entrance and also visited most of the Dripstone Hall passage. Oct. 4th, 11th, 18th, 25th—Jon Beard spent these days photo-cataloguing vandalized speleothems in Paul's Gallery in Fitzpatrick Cave (Christian Co). There are over 1,100 photos taken thus far. While in the cave, biota was noted including a big brown bat, a few pips, some cave salamanders, a couple of dark-sided salamanders and in the work area, a very pesky, persistent house fly. Oct. 8th—Chris Lewis took anthropology class members to Hall Branch Cave (Greene Co). While there chatted with the landowner, and the two discussed the need to gate the cave to conserve its resources. Also —Cynthia and Clayton Russell visited Cumberland Caverns (TN) as part of the TAG Fall Cave-in. Oct. 12th—At the Missouri Department of Conservation's Southwest Regional Office, SPG member and Missouri Master Naturalist Melvin Johnson presented a "Bat, Cave, & Karst" display along with a one-hour presentation to the new Missouri Master Naturalist Class The presentation including information and quizzes on Missouri's Bats, Caves, and Karst features; the "Sugar Cube Karst" Project, WNS information and updates, with each participant receiving a copy of SPG's "Caring For Your Karst". The fifteen adult participants graduated and were certified as Missouri Master

Naturalist Springfield Plateau Chapter Members on October 26, 2017. Oct 13<sup>th</sup>—Dillon Freiburger and fellow CRF cavers Kayla Sapkota and Derek Bristol completed the survey of Skull Pit (AR) after Derek made a climb into new passage. Then the three found and surveyed Log Climb Cave after Derek made a climb on a log. Both caves are part of CRF projects at the Buffalo National River. Oct. 14th—Jon Beard led a scout troop through the Main Room, North Loop, Formation Loop of Breakdown Cave (Christian Co), and some of the scouts braved Hell's Gate to see Brent's Room. Afterwards, Jon showed prospective SPG members Chris and Christine adjacent Fitzpatrick Cave. Also—Dillon Freiburger, Kayla Sapkota and Derek Bristol helped with the filming of an educational program for the U.S. Forest Service at Blanchard Springs Caverns (AR). Oct. 15<sup>th</sup>—Jon and Alicia conducted a bio inventory of the main entrance passage in Garrison Cave #2 (Christian Co) as well as taking some passage height measurements for Jon's redrafting of the cave map. Afterwards they talked with the landowner at length about the cave and its survey. Oct. 16<sup>th</sup>- 17<sup>th</sup>—Cynthia and Clayton Russell and Jon Beard joined Mark Jones in a survey trip to Three Forks Cave (OK). On Saturday 500 feet of the passages containing the Second Parachute Room were mapped, and on Sunday 300 feet of passage from the Waterfall Room were surveyed to their termini. Cave critters were noted during the weekend. Oct. 16th-20th—Dillon Freiburger attended the National Cave and Karst Management Symposium with many other CRF members in Arkansas. On the 16<sup>th</sup>—Dillon Freiburger, Kayla Sapkota and Bob Lerch assisted Ben Miller in the survey completion of Corner Crawl Cave (Barry Co) in Mark Twain National Forest for the CRF. It is now one of the longest caves in the area and is a surprisingly complex Pierson Limestone cave. On the 21<sup>st</sup>- 22<sup>nd</sup>—Jon Beard and Mark Jones assisted Scott House in the survey of ten short caves in Mark Twain National Forest in Barry County as part of CRF projects there. The following caves were mapped, bio-inventoried, photographed and described: Howling, Cobblestrewn, Wet Foot, Tilting Tree, Descending Ceiling, Loop Canyon and Squeeze. Second day: Left Turn, Slab Spring and Little. The longest cave was 85 feet in length and only one cave had obvious bat guano. The most commonly seen of three salamander species was the Ozark zigzag. Oct. 27th—Jon Beard and Eric Hertzler mapped and monitored two short caves in Mark Twain National Forest in Christian County as part of CRF project work. First up was Big Mouth Shelter, a 139-foot wide, 60-foot deep shelter in the Swan Creek sandstone member of the Cotter Dolomite. While Jon sketched, Eric searched for and reported fauna. Next was Cedar Head Cave, a 39-foot long dry cave in the Compton Limestone. Oct. 28th — Jon Beard hosted Chris and Jody Gertson and others in an educational trip through the Main Room of Breakdown Cave and all of adjacent Fitzpatrick Cave (Christian Co). Afterwards, Jon cleaned two stalagmites in the Third Level of Breakdown Cave in preparation of rejoining them to their proper places, the 953<sup>rd</sup> and 954<sup>th</sup> speleothem repairs in that cave. Oct. 29<sup>th</sup>—Candace Walden and Jon Beard assisted Treavor Bussard in the resurvey of Walkway-all-the-Way Cave (Greene Co), Treavor's first survey sketch. While Treavor sketched, Candace and Jon removed some graffiti and trash from the 95-foot cave. Fauna was noted. After the survey was done, Treavor did a bio inventory of adjacent Crawlway-all-theway Cave. Oct. 31st—Jon Beard and Doug Gouzie guided Doug's MSU speleology class on an educational field trip through the Main Room of Breakdown Cave and lower level of Fitzpatrick Cave (Christian Co).--Report by Max White, Material provided by Jonathan Beard.

Lake Ozarks Grotto (LOG). Sept. 16<sup>th</sup> – Gary & Alberta Zumwalt attended the MSS meeting at Berome Moore

Frank Hurley & Dwight Weaver

shelter. **Oct. 21**<sup>st</sup> – LOG celebrated its 50<sup>th</sup> anniversary at Jacob's Cave, Versailles. Frank Hurley & Dwight Weaver are co-founders of the grotto. Attendees were treated to free cave tours, a presentation on Goodwin done by Ken Long and old pictures of members by Gary Zumwalt. Attendees received a 50<sup>th</sup> anniversary koozie. Former member, Scott Jenkins, and his Out

on a Limb Band played music before a banquet of grilled brats, burgers & hotdogs. Everyone brought a dish to share. Speakers were Frank Hurley, Dwight Weaver and Morris Hall. **Oct. 28**<sup>th</sup> – Goodwin workday - Ken Long,

Gary & Alberta Zumwalt joined Klaus Leidenfrost, Jean Knoll, Chuck Lahmeyer and Byron McDaniel cleaning up the area, cutting brush, piling



it up, and pumping the cave. Klaus, Ken & Gary made a new piece of equipment to aid in the pumping of the cave. It is an odd looking thing but it keeps from sucking up mud. I think they should put a patent on it! On a serious note - The October issue of "Rural Missouri" has an article on Goodwin, "A Cave to Save" by Zach Smith. Klaus Leidenfrost was interviewed for the article.—Alberta Zumwalt

Southeast Missouri Grotto (SEMO). Jan. 5th, 2017 - Chad McCain, Michael Bradford, Alex Litsch and RaeAnn Drennen surveyed 647.3' in Gegg Cave's Jungle gym, effectively knocking out all leads in this breakdown cluster of confusing room passages. Feb. 4<sup>th</sup> - Gary Resch, Ray Shaw, Jeremey Weih, Alex Litsch, Michael Bradford and Chad McCain continued surveying in Gegg Cave. Gary and Ray took a left fork way upstream while Alex and Jeremy took the right fork at the same area. Chad and Michael surveyed a newly discovered upper level found on January 5<sup>th</sup> and a total of 2009.7' of survey was obtained for the day. Feb. 15<sup>th</sup> – Alicia Wallace, Chad McCain and Mark Brewer surveyed 308.6' of new survey in Berome Moore. Feb. 22<sup>nd</sup> – Mark Brewer, Lee Kraus and Chad McCain returned to Berome to continue the last survey into the Tom Moore water crawl, heading upstream into a continuation through breakdown. 345.2' of survey was obtained. Mar. 11th - Alex Litsch and Chad McCain did a trip into 10 Degree Pit in Ste. Genevieve County to see if there is more cave for a future survey. After dropping into the pit, and pushing the cave hard, for 3-400' through a missed side lead from the discovery, more passage was found and eventually the exploration was stopped at a 30' pit. This pit is between 150 and 177 above the water flowing in at the Junction Room in Blackfathom. Mar. 15<sup>th</sup> – Brian Biggs and Chad McCain surveyed 578.8' into the "Breakdown Passage" between the entrance of Berome and Basecamp. Mar. 29<sup>th</sup> – Mark Jones and Chad McCain surveyed 445.4' by mopping up leads near the entrance and surveying into a upper lead called the Agent Orange Crawlway in Berome. Apr. 1st - Gary Resch, Chris Doerhoff and Chad McCain took vertical gear, drill, bolts, 200' of rope up to the New Discovery in Blackfathom and rigged a traverse 45' above the stream level and began survey of this new lead called the "Lost Canyon". 143.2' of hard earned survey was obtained after the rigging was completed. Still going. This was survey trip #71 in Blackfathom. Apr. 15<sup>th</sup> – Brian Biggs, Jeremey Weih, Michael Bradford and Chad McCain went into the Inseminator entrance to Blackfathom and knocked out several leads for another 332.5' of survey. Jeremey and Michael surveyed through an impossibly tight connection which completed another loop in the Squig Drop area of the area. This was called the Resurrection Connection. More lead were found and the trip was concluded by a 7 hour exit via the Historic Entrance, followed by a 2 mile hike back to the vehicles. May 27th - Brett Meisel, Raeann Drennen, Brian Biggs and Chad McCain obtained 1098.4' of survey by connecting Berome to the Sherrell/Saberton entrance as well as completing a loop through Tom Moore back into Berome. Dan Lamping, Jeremy Weih, Laura Belarbi, Dane Driskill surveyed 909.1' in Upper Annex in Berome. Jim Sherrell, Jimmy Sherrell and Alex Litsch surveyed 265.7' in a side lead in Coon Passage in Berome. Jon Beard, Phil Goldman and Cindy Manley surveyed 324.6' of survey in Formation Passage in Berome. This gave us a cooperative effort of 2,596.8' of survey for the day, just shy of a half mile. May 28th - Jon Beard, Phil Goldman, and Cindy Manley returned to Formation in Berome while Jeremy Weih and Laura Belarbi continued up Annex. 3,229.7' of new survey for the May CRF survey weekend. Jun. 4th – Chad McCain, Michael Bradford, RaeAnn Drennen, Alex Litsch, Jeremy Weih and Gary Resch continued surveying in Gegg Cave and obtained another 1308.4' of new survey. This was survey #23. At the end of the survey, by pushing a low 7" tall crawl, Michael broke into a new trunk line with an independent stream passage. Jun. 5<sup>th</sup> – After the past Gegg Survey, Chad McCain went ridge walking on the farm above the cave and found a new cave, Calf Killer Cave, SGE196. This cave has a running stream and was only accessed by digging trash off of the cave and building a fence around the sink to keep cattle out. A pit with a hand dug skylight was found, probably from an old homestead, and the bones of at least 10 cows were found at the bottom. The stream passage was later pushed by Alex Litsch and he confirmed that it keeps going and he was finally able to turn around. Jun. 6<sup>th</sup> – Paul Hauck, Dan Lamping and Chad McCain went into South Independence in Crevice Cave to dig open a lower stream lead. While the dig was successful, no time was left for surveying as recent flooding had flooded this paleo trunk and made everything slick and dangerous. Jun. 19th - Dan Lamping took Chad McCain, Jeremey Weih, Michael Bradford and Bobby Swain went to Fluted Rift in Ste. Genevieve County. This brutal trip consisted of route finding and survey past two more pits for a total of 3. After survey was concluded, the three younger cavers pushed ahead to see if the cave would open up. The found 1 down climbable pit and a fifth pit in need of rigging past a very tight passage that only the smallest cavers can get through. Dan and Chad surveyed

197' and the other team got 103'. This puts the cave at a surveyed depth of 143' with an additional 40' in depth explored. Jun. 28th - Mark Brewer and Chad McCain checked out Northdale Park Cave, which is a new cave in the city of Perryville. It is 4' high, muddy and wet with strong airflow. Jun. 30th – Brian Biggs and Chad McCain started surveying in the Mezzanine in Berome and obtained 335.9' of data. Jul. 1st -2nd - Brian and Chad returned to the Mezzanine in Berome for an additional 1002' of survey. Jon Beard, Matt Bumgardner and Caleb Schlager returned to Formation Passage and obtained 300.9' of new survey. Jeremy Weih, Chris Doerhoff, Shawn Williams and Michael Leer went to Upper Stream Annex and surveyed into Chert Vein Passage and obtained 916.4' of survey. Jul. 2<sup>nd</sup> – Alex Litsch and Jeremy Weih returned to Chert Vein in Berome and obtained 428.6' of survey. Jon Beard, Matt Bumgardner, Dane Driskill and Diana Parra returned to Formation for an additional 290.4' of survey. Weekend totals are 3,274.2' of new survey. Jul. 22<sup>nd</sup> – Alex Litsch, Chad McCain, Gary Resch, Brian Biggs and Michael Bradford surveyed 268.3' of low air torture in the stream by the Litsch Dig in Gegg Cave. This is the 24th survey and the cave stands at 3.93 miles. Aug. 13th – Chad McCain and Alex Litsch found "Overkill Pit", Ste. Genevieve County's 200th Cave. Located above Gegg Cave. Aug. 18th – Brian Biggs and Chad McCain returned to Breakdown Passage in Berome and survey 116.7' of tight survey to complete a loop connection with the Mezzanine. Aug. 19th – Jeremy Weih, Matt O'Neal and Brandon VanDalsem surveyed 1,049.7' in Upper Annex from the intersection with Chert Vein. Brian Biggs, Mark Brooks, Cody Brooks and Chad McCain traveled to the Maze in Berome and recovered many of Bob Osburn's 2.5 year old stations then knocked out 1,197.1' of survey in this area. Aug. 20th - Michael Freeman, Ann Eggemeyer, Pat Moriearty, and Audrey Freeman surveyed 290' of bypass loop near the entrance to the Annex Crossover in Berome. Jeremy Weih, Shawn Williams and Brandon VanDalsem obtained 819.5' of survey in the Maze. Alicia Wallace, Mark Brooks, Cody Brooks and Chad McCain obtained another 662.5' of survey in the Maze. 43,470.0' of survey has been obtained since the cave was purchased by the MCKC, that is 8.23 miles. 4,135.3' of survey was obtained over the Eclipse Weekend. 898.4' of new survey and 3,236.9' of resurvey was obtained and 549.2' of that was new survey in the maze. Bryan McAllister turned in the West Wind Passage notes, which totaled 1,470.3' of survey from 2003, as well as what notes he had from Crohn's Passage which totaled 107.5' After this historic data was entered, this brought the total length of the cave up to 109,502.6'. Total surveyed length of the cave is now 20.74 miles. Aug. 28th - Shattered Rift was discovered in Ste. Genevieve County by Alex Litsch. Chad McCain helped dig the tires off and they opened up a pit that eventually was learned to be about 70-80'. They returned on a later date with Chris Doerhoff and found the pit to have Bad Air!!!! This is SGE201. Red Chert Fossil Cave was also checked out and is a convoluted little cave next door. **Sept. 3**<sup>rd</sup> – Alex Lisch discovered a new pit in Ste. Genevieve. Chad McCain met with him and they rappelled into the new discovery. Several bolts were set to make a safe drop as well as two deviations. The pit was 62' deep to a tight canyon which was entered and another bolt placed for a second 60' drop. All in all this cave is approximately 130-140' deep and dropped into a cathedral type chamber with multiple high leads and 107' high ceilings. It was called Cathedral Chasm. Sept. 16th - MSS weekend at Berome. Jeremey Weih, Brian Biggs and Caleb Schlager were on one team. Gary Resch, Rita Warde and Derik Holtmann were on a second team. Jon Beard, BJ Seidel and Dave Seidel were on a third team. Mark Brooks, Cody Brooks and Chad McCain were on a third team with all four teams surveying in the Maze. A total of 2222.4' was surveyed by the four teams in the Maze. 897.6' of this was new survey, bringing the total of survey since the purchase of the cave to 8.65 miles. This trip wraps up the last scheduled CRF weekend at Berome for the year. In 2017, 30 individual survey trips, totaling 2.95 miles of survey were obtained. The new length of the cave is 20.91 miles surveyed. Good job everyone! Sept. 24th – Alex Litsch and Chad McCain discovered the mother of all pits in Ste. Genevieve County. Aptly named, Pentagon Pit. This pit starts out 20' in diameter to an old trash choke, and continued for 95' into a chamber that 70' tall and 20' wide with high leads. Immediately followed by a 30' pit, then a short crawl to a third pit at 30' deep. This was down-climbed and a large chamber was found at the bottom that was 20' wide, 80' tall, multiple high leads and a fourth pit at 30' deep. This was rigged and a 5<sup>th</sup> pit was found to be 7' deep immediately after. A sump pool was found with floating trash not far from the bottom of the fifth drop. Total depth was approximately 200' and it was a full on TAG style multi drop pit! Oct. 21st - Mark Brooks, Cody Brooks, Kaitlyn Carr, and Tim Morgan proceed to the end of survey in upper Stream Annex in Berome and obtained 735.2' of survey and pushed the length of the cave to 20.935 miles.—Chad McCain

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Caves of Missouri Discussion Group – http://groups.yahoo.com/group/cavesofmo

Petroglyphs, inscriptions, & pictographs: rockartmo.com

The new MoCaves: https://groups.yahoo.com/neo/groups/mocaves/info

## **CALENDAR:**

January 1<sup>st</sup>, 2018 – Next MSS Liaison deadline.

**January 20<sup>th</sup> – Winter MSS Meeting**, 1 pm, DGLS Annex Bldg, 111 Fairgrounds Rd., Rolla, MO. There will be presentations before the meeting. Affiliate Annual fees (\$25.00) are due to the Treasurer, Don Dunham, at the January meeting. Annual reports are no longer a requirement.

First Class

Gary Zumwalt 1681 State Route D Lohman, MO 65053

**MSS Liaison**