

THE MSS LIAISON

VOLUME 60 NUMBER 11-12

November-December 2020

AFFILIATE ORGANIZATIONS:

CAIRN – CCC – CHOUTEAU – DAEDALUS – KCAF – LEG – LOG –
MCKC – MMV – MSM – MVG – OHG – PEG – RBX – SEMO – SPG.

Distributed free on the MSS website: <http://www.mospelio.org/>

Subscription rate for paper copies is \$10.00 per year. Send check or money order made out to the Missouri Speleological Survey to the Editor, Gary Zumwalt, 1681 State Route D, Lohman, MO 65053. Telephone: 573-782-3560.



Missouri Speleological Survey President's Message January 2020 by Dan Lamping.



At the last MSS meeting, we set a date for our winter MSS meeting to be on Saturday, Jan. 23, 2021 with a tentative location of the Missouri Geological Survey in Rolla. We've since confirmed that holding the meeting at the MGS in Rolla is not an option for us. There's been discussion of having an online meeting on this date. After the last *Liaison* went out, I sent a Google Form to MSS board members, officers and the Cave Files Committee to solicit feedback for whether we should try having an online meeting or just wait until spring and hopefully have a meeting in-person. The votes were split down the middle with half wanting to try for an online meeting and the other half preferring to wait. Also, in the last *Liaison* I asked for board members to consider our meeting structure and whether we'd like to potentially change-up how we do things a bit. When asked to share thoughts on the Google Form there was an overwhelming response in favor of changing our meeting structure. This is an important topic for the board to discuss and I don't want to leave anyone out by making decisions in a formal virtual board meeting when some have expressed a clear disinterest in meeting online. So, for now, we are going to postpone having a formal board meeting until spring. That said, I do plan to host an informal online meeting sometime in February for officers, board members and Cave Files Committee member who are interested in discussing some options for how we can improve our meetings. Ideas shared during our informal, virtual meeting can serve as a starting point for discussion at an in-person spring meeting. We will also need to determine a place and date for the spring meeting, which we can discuss and later share with board members through email and via *Liaison*. Likely, the meeting will be during the evening. Board members, Officers and Cave Files Committee members should expect to see Doodle Poll so we can vote on a time and date. Please only respond if you intend to participate.

In the Cave Files Committee report you will notice a list of 50 features which have accession numbers that have been counted as caves. But after an audit of the data quality, it was decided that we can't determine whether these are actual caves, whether they're enterable or whether they could be duplicates of other, known caves. There just isn't much information on them, including locations in some cases, so they are now marked leads in the database. With this change Perry County has 666 known caves and Shannon County has 717 known caves, meaning Shannon County now surpasses Perry County for the most known caves in the state. More importantly, the data quality for Shannon County is much more reliable and complete given the support that cavers have in that region from government agencies, which leads to a greater frequency of trips. No doubt, when it comes to total cave passage and number of long caves Perry County has an unquestionable lead. If you are interested in trying to track down the leads in Perry County, please reach out and we'll get you some data in order to begin field checking to determine whether they are caves that are enterable and are not duplicate locations for caves already recorded.

Recently, Ken Grush compiled some figures from the Missouri Cave Database that would be of interest to cavers. One of the interesting numbers out of this is that there is a total 454 miles of known cave passage surveyed within Missouri. At present there are around 7,500 caves documented in Missouri. We have known survey lengths on 3994 caves which is around 2.4 million feet of mapped passage. Around 4400 of the known

caves in Missouri are mapped, but there is no surveyed length on around 400 of our maps, so we can't include them in the total. Here are a few interesting tables to take a look at. One reason to publish this information is to correct any mistakes that may be recorded, so if you notice something seems to be off from reliable records you may have, please let us know. Keep in mind, all of our data, including the number of known caves, ranking, surveyed lengths, etc. are in a constant state of change. A considerable amount of work goes into putting data in and managing data within the Missouri Cave Database. The Missouri caving community owes a significant debt of gratitude for all of the work Scott House and Mick Sutton have put into developing the database and to Ken Grush for his efforts at managing it and getting all of the information that he can into it.

Top 10 Long Cave in Missouri			
Rank	County	Cave Name	Cave Length
1	Perry	Crevice Cave	30.8 miles
2	Perry	Berome Moore Cave	23.3 miles
3	Camden	Carroll Cave	20.3 miles
4	Perry	Mystery Cave	15.8 miles
5	Perry	Rimstone River Cave	14.2 miles
6	Shannon	Powder Mill Creek Cave	8.8 miles
7	Ste. Genevieve	Blackfathom River Cave	7.1 miles
8	Boone	Devils Icebox	6.6 miles
9	Pulaski	Piquet Cave	4.8 miles
10	Christian	Garrison Cave #2	4.8 miles

Rank	County	Miles of Surveyed Passage
1	Perry	81
2	Camden	22
3	St. Genevieve	19
4	Shannon	16
5	Pulaski	14
6	Boone	10
7	Marion	9
8	Crawford	8
9	Christian	8

Missouri Speleological Survey Files Report for November, 2020. If you have **new information** on any Missouri caves, my email address is slagrush@gmail.com. We need your help to improve the database and make it more complete. I can and do work with Facebook entries, but for information or photos to be incorporated I need to be "private messaged" with the cave name and county. **Matt Beeson sent:** -New location and photos for Ramsey's Hole in Stone Co. and Blankenship Cave in Barry Co. and for Joint Pit in Taney Co. - (Via Scott House) Revisions to the Currey Cave map in Barry Co.: map turned to make north at top of page and added limestone lithology to cross sections and profiles). -New maps of Waffle (CL=25), Notonicks ("Not-Onyx;" CL=26), Beady (CL=28) and Rock Hole Caves in Barry Co. -Later, new map of Joint Cave (CL=35, CD=36). -A Main Table export that updated directions and descriptions in the database for Natural Bridge Cave in Barry Co. He also sent 5 faunal records for the Bridge. -Completed map of Little Stream Cave in Barry Co. - New Main Table imports for 5 caves in SWMO, Grand Fortune Shelter, Rock Hole Cave, Beady Cave (all these Barry Co.), Ramsey Hole (Stone Co.) and Joint Cave (Taney Co.). Along with the Main Table entries, Beeson also sent 5 faunal records. What's nice for me, he sent the exports via Filemaker export format...makes them easy to import! **Mark Brooks sent:** -Two reports on recent survey (one was Hammer Drop Passage; the other Formation Passage) in Berome Moore Cave in Perry Co. Along with the report came 11 photos of the passage and 8 faunal records. **Matt Bumgardner sent:** -A new Photosynth of the Bennett Tunnel in Bennett Spring State Park. If you haven't seen one, check out Bumgardner on Facebook or the Missouri Cave, Mines, Rock

Formations website. A Photosynth is a merging of lots of 2 dimensional photographs with a standard digital camera (iPhone??) into a 3-dimensional video. Perhaps not a lot different than a standard video...without the "shakes." This generation is also much improved over previous ones that Matt has done. -3D image of one of the cat tracks from Berome Moore. The technology just keeps getting better. **Jim Cooley sent:** -Plans for gating a cave in Camden Co. to protect wildlife habitat. -3 entrance photos for caves in Ripley and Oregon Co. Directions and survey notes to Ravine Cave in Oregon Co. -5 reports of a missing person search in Benton Co. covering five caves. Six Use Monitoring forms for caves in Ripley, Ozark and St. Clair Counties. The faunal records were a cumulative 82 new reports. -A Main Table entry for new in St. Clair; so, all of the database entries were already done, I just needed to import. Along with this database import came several entrance photos and 2 faunal records. Cave is only 26ft. long, but enough to qualify as a cave. **Dillon Freiburger sent:** - (via Scott House) a finished map of Wallace Pit (CL=75, TD=41). **Ginny Freidrich sent:** -Trip Report for Forbidden Cave in Ozark Co. I believe this is Ginny's first submission, great job! **Ken Grush sent: -(with Mark Jones)** 16 fauna records, reports and photos of new caves while monitoring for CRF: Bee Fork Cave (CL=21) in Oregon Co. and Jitterbug Cave (CL=61) in Shannon Co. -Scans of about 550 pages of survey data that Paul Hauck organized into a single atlas of the Crevice Cave survey. Many of these old survey/sketch pages had only survey notes and every survey begins with "1" without providing the sequence. Hauck also lent all the original survey notes and copies which needed to be organized to make sure any non-survey notes also get captured. Getting Hauck's notes are critical in utilizing the data. -2 new Main Table entries and 6 faunal records for Fish Trap and Little Fish Trap (see below under House) in Shannon Co. -Over 300 new scans for 15 counties. These scans came from the new Winona satellite Cave Files. These files were originally sent to the Jefferson City area, then to Springfield and only recently were again moved, now to Winona. While monitoring/surveying caves on MTNF and ONSR, I have opportunity to review and compare the files with the scanned version of St. Louis Cave Files. These 300 files had additional information that was not available in the St. Louis files. **Michael Haley sent:** -Information on a new cave, in St. Charles Co. He included 6 photos, faunal records, location and a description of the interior. **Paul Hauck sent:** -Electronic files of many surveys he has done over the year, primarily in Perry but also Franklin and Cape Girardeau Counties. There were some 1600 plus files organized into over 300 folders. More than half of these files were for the resurvey of Crevice Cave. Hauck also provided hardcopies of the earlier survey (about 550 more pages) that needed scanning (see Grush above). **Derek Holtmann sent:** -(Via Scott House) 60 photos from a recent survey trip to Berome Moore in Perry Co. **Scott House sent:** -3 historic (2014) and 1 recent Use Monitoring reports for the MTNF and 4 historic faunal records from 1981. The fauna records included House as a member of the party; anybody's activities can slip through the cracks. While working directly in the operative database, he made additional changes/updates to more than 230 main table entries. Hopefully we're closing a lot of the cracks as we add more historic records. And we're always working to improve the database. -An email exchange discussing the naming of Powder Mill in Shannon Co. The "powder" more likely came from nearby Bluff Cave (aka Powder Mill Cave) not the eponymous, longer Powder Mill Cave which would have been too wet. -5 Main Table entries for these new caves in Shannon Co. He followed up with 4 new maps that he surveyed over the same extended weekend. New maps are for Cobble (CL=108), Descending (CL=71), Little Osage (CL=69), and Little Fish Trap (CL=30) Caves. These new caves allowed Shannon Co. to break through 700 caves for the county, actually 703 caves now. This number compares to Perry County's 712 caves. Officially, we have not audited Perry County's cave count, but we do know there are many undocumented caves that only have locations, about 80. After auditing Perry will actually have closer to 633, way less than Shannon Co. (See also Lamping entry below.) **Mark Jones sent:** -Almost 500 photos from his recent cave trips while monitoring caves on the MTN and ONSR. -Reports on monitoring work on 13 caves in the MTNF that were visited in September. Along with the report came 45 faunal records. -Reports on caves: Blankenship (new) and Rock Hole Caves in Barry Co., Ramsey Hole (new) in Stone Co. Jones also sent about 25 faunal records and 25 Use Monitoring forms. **Ed Klausner (from Iowa) sent:** -New cave maps of Bee Fork Cave (CL=21) in Oregon Co. and Jitterbug Cave (CL=60) in Shannon Co. Both new caves in the MTNF. **Dan Lamping sent:** -3 faunal records and a Use Monitoring import for a CRF trip to Moss Spring Cave in Shannon Co. -The latest update of Tumbling Creek Cave in Taney Co.; this is an ongoing survey project. Might be a good opportunity to see a unique cave and participate in a cave survey. -Main Table entry for new Salamander Cave in Shannon Co. Salamander is now the 697th cave in

the county, it will soon take over as the high cave-count county when it surpasses Perry Co. Shannon Co. has had a pretty thorough accounting through the years, whereas Perry County's 712 accession numbers will be getting an audit. Many of Perry's 712 caves have absolutely no information on them and often appear to be duplicate entries for nearby caves. Call it a neck-to-neck race right now! **Joe Light sent:** -A report that he did on Blackjack Crack that is a system vertical fractures that run for more than a hundred feet and are big enough, deep enough to walk "underground" and not be seen on the surface, but they are open to the surface. -Three newspaper clippings on Crankshaft, Munkres and Rice Cave, all in Jefferson Co. -A report on a home in St. Louis City that was reported to be an entrance into Benton Park Cave (English Cave). Evidence of an entrance to the cave was not found. -22 photographs from 2011 trip to Shannon Co. and Leatherwood Creek area. -A MoCaves website report from 2005 on a visit to Bailey Cave and the cause of Panian's Peril, a floating bedrock block that slid some distance with a caver-rider! -A data dump of some 1800 files (about 2/3rds are jpg or "photo" or "scan" format), about 13gb, all about Cliff Cave in St. Louis Co. After having his report on Cliff Cave in the recent Missouri Speleology (MoSpeleo), he decided to share his data to the MSS Cave Archives. **Alex Litsch sent:** -A GPS location for Anderson Cave in Jefferson Co. and an entrance photo. -A survey trip report on Lower Pipistrelle Right passage in Crevice Cave, Perry Co. -Survey trip report in Berome Moore Cave, Perry Co. for Shale Passage. -A copy of the map for Anderson Cave in Jefferson Co. The landowner shared his copy of the map. Litsch also sent 4 faunal records for the cave. **Chad McCain sent:** -2 reports of survey trips to Berome Moore Cave in Perry Co. McCain says "Berome became the 28th longest cave in the USA." -2 updates to the xml file for Berome Moore Cave. The xml provides a line plot of the cave overlain on the aerial photography of Google Earth. Pretty cool! **Stan Sides sent:** - (Via Scott House email) memories of the first discovery of Crevice Cave, plus a historic image from back in the day. **Jim Sherrell sent:** -A link to a report of 3D visualization work done on the cat tracks of Berome Moore, sadly only a report of the work. **Tyler Skaggs sent:** -Several entrance photos for some of the new Shannon Co. Caves: Descending, Bay Creek and Cobble Caves (see Scott House above). A photo of Big Osage Cave was also sent for an older cave record that didn't yet have an entrance photo. **Isaac Smith sent:** -4 photos, video, location and 10 faunal records for Bethlehem Cave in Jefferson Co. Further, he found a new cave nearby, but must not have thought well of short Rathole Cave. -72 faunal records for 5 caves monitored (5 monitoring forms too) for CRF while on the Current River (OZAR). **Eric Sutterlin sent:** -Via Jim Sherrell, about 25 photos of Rocky Digs in Jefferson Co. and Little Bill Shaft (aka Big Lode Haul Shaft) in St Francois Co. The 2 features are actually fairly close to another. **Shawn Williams sent:** -Report on survey trip for 3 fairly new caves in Ozark Co.: Columbine, Maidenhair and Phlox Caves. A few interior photos and faunal records were also sent. Also, a Trip Report was sent. **Richard Young sent:** -Report on vandalism at Crevice Cave in Perry Co. And followed that up with "cultural assessment" for the cave. -Recordation of Crevice Cave for Cultural Resources. -Ken Grush

Missouri Speleological Survey Files Report for December 31, 2020. If you have **new information** on any Missouri caves, my email address is slagrush@gmail.com. We need your help to improve the database and make it more complete. I can and do work with Facebook entries, but for information or photos to be incorporated I need to be "private messaged" with the cave name and county.

I think a **new tool** is becoming important in caving across the state **LIDAR**. To put everyone on the same page. **Alex Litsch** sent a link, to one source <https://caltopo.com/map.html#ll=37.95449,-90.18402&z=10&b=r>. This is a great tool that can help locate missing caves and find new caves. I knew SPG has been using <https://viewer.nationalmap.gov/advanced-viewer/> something very much the same. Matt Bumgardner sent me a link earlier this year for the second link. I thought I was behind the times and everyone knew, but I want to make sure our whole community is aware of this resource. If you haven't used it before, Litsch's link takes you direct to the data. The USGS "national map" takes you to a page to a "Layer List" in data, where you can choose to layer in "3-DEP elevation hill shade stretched" to view the LIDAR imagery. Both datasets take you to national views but you can scroll into Missouri or any other state.

Just a prelude to this edition of Files Report: At close of the 2020 year, the Missouri Cave Database, MCD, had 3529 monitoring forms (7.7% increase over 2019 report), 5955 map records (3% incr.), 22880 reports (3.5% incr.), and 37682 faunal records (7.6% incr.). By comparison with same time last year, the database had 3277 monitoring forms, 5768 map records, 20100 reports, 35009 faunal records. A 3-8% growth rate during a

COVID seems quite amazing. Kudos to all of the cooperators working within the state. Despite the changes to Perry County announced in this Liaison, the cave count is still over 7500, just not as much as we were before we moved several “caves” to the “lead list.” **Nathan Aaron sent:** -3 field checked LIDAR caves in Texas Co. Three for 3 turned out to be caves; 2 corrections for “lost” caves and 1 confirmed with known cave. Nathan also had a rare sighting of faunal specimen that has only been reported 4 times in the state! **Matt Beeson sent:** -A new map of Natural Bridge Cave (CL=162) in Barry Co. **Seth Colston sent:** -A detailed trip report, 8 survey sheets, 5 cave pictures and 6 faunal records for a survey trip into Geronimo Cave in Camden Co. Although Colston has been on many a trip already, this is his first report to the database, an excellent effort regardless of being first effort. -Five pages of survey notes on Blue River Hidden Cave in Jackson Co. (KCMO). A final map is being prepared (see new cave by Gary Johnson, below). **Jim Cooley sent:** -A new map for Quarry Cave in Shannon Co. including all survey notes and sketches, 4 plates in color and B&W with an index showing how plates divided up the length of the cave (14 maps in all, including B&W and color), Xara file and Walls data. All are good to have in the archives. **Spike Crews sent:** -Contact information, aerial photo “confirmation” and much improved GPS location for Flatroom Cave in Greene Co., which came via his coworker. **Ken Grush sent:** -A collection of over 700 PowerPoints and duplicate pdf version (for each county that display visually the Public Land System Survey (PLSS) locations for many caves. -Two reports from 1989, one from *Liaison* and one from *MVG’s Caver*. Both reports are on a cave on the banks of the Mississippi where a 17-year-old succumbed to “gases” in 1907 (see Joe Light below). -A collection of data on new shelters in Jefferson Co.: Goldman #2 (was a lead), Robinson, Weeping Grotto and Annex, Silent Running Shelters and one new cave Kley Cave. Maps and photos were archived for all except the cave which only had photos. Additional information was collected on the Fort Hill Shelters also in Jefferson Co. that straightened out issues between Public Land System Surveys (PLSS or quarter sections) and latitude and longitude location which often were both done wrong. Most were scanned with LIDAR, which generated 3D Models available for review for those that have Microsoft 10 computers (look for 3D Viewer). I didn’t even know it was available until I was directed to look for it, but part of the newer computer package! -A collection of data on three shelters in the Lamotte Sandstone in Ste. Genevieve Co.: Hickory North Shelter and Annex Hickory, Middle Shelter and Annex, and Hickory South Shelter. -Over 100 recently transcribed “vintage” reports in Taney Co. And over 70 reports for St. Louis Co. -3 entrance photos for Big Bend Shelter, Rock Creek Cave and Tidwell Pit, all in Jefferson Co. Additional photos went straight to the archives. Some notes were added for each of the caves. Two Faunal Records were also added. **Paul Hauck sent:** -Almost 2000 photos with more than half in Crevice Cave in Perry Co. Other caves include photos of Hoff, Meretz, Running Bull, Hopeful Hole, Rimstone, Weinrich Beer, Echo Pit and Viox Spring Caves. **Scott House sent:** -Maps of Fish Trap Hollow Cave (CL=74) and Little Fish Trap (CL=30), both in Shannon Co. -Two new caves with new maps for Perry County: Next Door Pits (32=CD) and Ice Box Rift (50=CL, 32=CD). -The results of a week working for the agencies from the Winona locations. New maps included 4 caves from Shannon Co.: Black Walnut (38=CL), Big Osage (138=CL), Snow Flea (25=CL) and Sayornis Caves (38=CL); Mitchell Hollow Cave (126=CL) in Carter was also sent. He was working with the operative database, so he also updated the database with 109 Fauna records (see Jones below) and 20 Use Monitoring forms (Jones also). -another volley of new maps: Bay Creek Shelter (30=CL), Cold Air Hole (42=CL), Crack (91=CL) and Turnback Hollow (439=CL) Caves; all in Shannon Co. **Gary Johnson sent:** -Location for a new cave, Blue River Hidden Cave in Jackson Co. (see Seth Colston survey notes, above). He also provided information to fill out the Directions and Brief Description fields of the database. **Mark Jones sent:** -8 Use Monitoring Reports for the 8 caves he visited on ONSR while volunteering with CRF. In addition, he had 34 faunal records and 8 cave reports. -Some 80 Faunal records, 18 reports and 16 Use Monitoring Forms while monitoring for the agencies from the Winona facility. **Dan Lamping sent:** -A faunal record from his recent survey trip to Wallace Cave in Shannon Co. As he reports this trip concludes 8 years of survey work to complete this map. -Maps of Dry Pit Cave in Shannon Co. and Mosier Pit in Jefferson Co. -2 Main Table reports for 2 new caves in Washington Co.: Mineral Fork Crawl Cave and Mineral Fork Rubble Cave. **Joe Light sent:** -Five St. Louis Post Dispatch articles on a 17-year-old who succumbed to “gases” back in 1907. Turns out MVG reported on the same cave in their *Caver* in 1989, a report by Earl Hancock (see Grush above). -A report of sewer collapse causing a “sinkhole.” Although near English Cave, there is no connection. -Five photos of Hamilton Cave, 2 photos of Sleepy Hollow Cave and 3 photos of Hamilton Fault Cave, all of Washington Co.

Light included a brief report on Sleep Hollow too. The last report of Sleep Hollow was in 1996. Each cave got a new cover photo for the database. Light does report that Hamilton Fault is no longer enterable. -Five pdf reports on Schnaider, Grone Brewery, Allen and Bennetts Basement and Henry Balwins Petrified Fish Caves; all are in St. Louis City proper. One report was on Sugar Loaf Mound Cave within the city also. Sugar Loaf would be a new cave, but was thought better to add as a lead since the reports suggest it might be a man-made feature. -4 entrance and vicinity photos of Moore Cave in Crawford Co. -3 entrance photos of Little Cedar Canyon Cave and included GPS location. On the same trip he tried hard to find both Tiny and Prospect Caves, without any success. We really need help with people collecting GPS on caves that they visit. He sent his track of the trip to know where not to look! -A new cave for St. Louis Co., Twelve Pouce Cave. Pouce is a reference to measurement, about an inch; so, 12 inches is about the size of passage he saw, no very inviting at the bottom of a storm drain pipe on a busy "5-lane" road within greater St. Louis area. -Sent 3 photos that hadn't been incorporated in the database, the caves are Telegraph Overflow, Klamberg and Cliff (rear entrance) Caves in St. Louis Co. Light had recently got an update of the runtime for St. Louis Co. and has started filling in some of the blanks where he can. -A GPS location for Sleepy Hollow Cave in Washington Co. -Several old/vintage newspaper clippings on caves throughout the state, some new to database and some already captured: Welch Spring Cave (Diehl acquisition), Lewis Cave (electrification), buried treasure ("real old" news), Renfro the bandit (6 caves with "his" name on it) and Tunnel Bluff Cave (8 caves all fit on one map, talk about holey land!).

Alex Litsch sent: -4 new fauna records for Pentagon Pit in Ste. Genevieve Co. -New Cave Report and photos for Flooded Fissure Cave in Jefferson Co. -New location and new map of Carwash Cave (CL=15, CD=25) in Perry Co. Litsch sent all the information for a Main Table which can include Directions, Descriptions, Geology, Biology, etc. -A link to a Festus Facebook page which showed several photos of Riverview Cave in Jefferson Co. Litsch had previously sent this cave to the database in 2019 as a new cave, but apparently well-known by the locals. -A kmz file that locates on Google Earth all the sinkholes (potential leads) that Litsch has identified in Jefferson Co. There is much to do, wherever, however, you search! -A report on a new cave in Jefferson Co., but name withheld per landowner request. It is the 200th "cave" feature (cave or shelter) that we track in Jefferson. Of the 80 plus counties with features that we track, only 13 counties have exceeded 200 records, only 6 counties have gone to register over 300 caves. And only Shannon and Perry have exceeded 400 features. **Chad McCain sent:** -Survey reports in the Tom Moore part of the Moore Cave System. As of the report, the cave stands at 22.91 miles. And then almost as quickly went to 23.04 miles. He also had a display to show that the Moore System is just less than 600 ft horizontally from Crevice Cave. **Dennis Novicky sent:** -A report on his visit to Mud Spring Cave in Howell Co. He had been on a recent Monitoring Trip for CRF and found a hole not many people would check. And found more passage that most people will never see, but he's willing to go back and survey it to add to the final map. **Tyler Skaggs sent:** -A couple more entrance photos that I had to get positive identification on the cave, since they hadn't been named when he sent the photographs. Always good to have entrance photos to show people what to look for when in the field. -Several entrance photos for cave on the Ozark National Scenic Riverways while doing monitoring work for the park and Cave Research Foundation (CRF). **Mick Sutton sent:** -27 fauna records for caves that he monitored recently while working from the Winona facility. -25 more faunal records for trip he made back in 1993, better late than never! **Shawn Williams sent:** -A GPS location and entrance photo for Forbidden Cave in Ozark Co. -Trip reports to Freez'ur and Maidenhair Caves in Ozark Co. Their mapping efforts have confirmed Maidenhair connects to Freez'ur Cave, one cave with 2 entrances. Freez'ur was mapped in 1973 but did not show this entrance, apparently since then the Maidenhair entrance has opened and the connection made. **Richard Young sent:** -Two reports on caving activity in Perry Co. where the team identified 6 interesting karst features that we will carry as leads for now; most seem to have potential. But the second report highlighted 2 caves that were surveyed in the same area: see Next Door Pits and Icebox Rift. —Ken Grush

Cave Files Committee reports: As presented at the last MSS meeting, a Cave Files committee (Spike Crews, Ken Grush, Scott House, Dan Lamping and Mick Sutton) has been formed. Also as presented, this committee has begun a review of Perry County and created the list below. We concur that these listed caves have no documentation, no directions, no description, no maps, no supporting information to continue to be listed as a cave in our database. These are all in Perry County, where packing density of caves and/or pits can be half a

dozen in a quarter mile. We believe some of these are very likely duplicates of nearby caves that are better documented. Without supporting information to distinguish or identify these caves, we do plan to continue to list these 50 features but only as leads. Please, however, help us, if you know more about these caves and can provide that information, perhaps we can return to listing some of these as caves. —Ken Grush

Breathing Hole	PRY070	Walsh, 1980 stated "no cave opening at the bottom"	quarter mile
Pasture Cave	PRY086	no supporting data	quarter mile
Peanut Brickle Cave	PRY087	no supporting data	quarter mile
Slot Cave	PRY088	no supporting data	quarter mile
M-1 and 2 Cave	PRY090	no supporting data	third mile
P & W Cave	PRY091	no supporting data	8 within eighth mile
Calf Pit	PRY092	no supporting data	2 within eight mile
Hanging Wire Cave	PRY094	no supporting data	less than half mile
Hoehn Cave 1	PRY114	no supporting data	less than half mile
Buccheit Cave	PRY116	no supporting data	quarter mile
Hoehn Cave 2	PRY118	no supporting data	quarter mile
Hoehn Cave 3	PRY119	no supporting data	eighth mile
Half Ledge Pit	PRY126	no supporting data	6 within quarter mile
Boneyard Pit	PRY131	no supporting data	8 within quarter mile
Odor Cave	PRY139	no supporting data	3 quarter mile
Lemon Peel Cave	PRY148	no supporting data	3 within quarter mile
Drainage Cave	PRY149	no supporting data	3 within quarter mile
Poehner Cave	PRY150	no supporting data	quarter mile
Big Sink Cave	PRY154	no supporting data	2 within quarter mile
Dead Horse Cave	PRY155	no supporting data	3 within quarter mile
Horse Thief Pit	PRY161	no supporting data	3 within quarter mile
Little Sink Cave	PRY162	no supporting data	less than half mile
Merganzer Pit	PRY163	no supporting data	more than half mile
East Pond Pit	PRY165	no supporting data	6 within half mile
South Pond Pit	PRY166	no supporting data	within 100 meters
Twin Pit	PRY167	no supporting data	within 100 meters
Crasty Crack	PRY168	no supporting data	same feature? within 100 meters
Dry Room Cave	PRY170	no supporting data	less than half mile
The Garbage Can	PRY171	no supporting data	3 within quarter mile
Twenty-Fifty Pit	PRY172	no supporting data	2 within quarter mile
Suicide Cave	PRY174	no supporting data	more than half mile
Statler Death Pit	PRY175	no supporting data	within half mile
Jawbone Cave	PRY176	no supporting data	unlikely in flood plain? Half mile
Ed Cave	PRY177	no supporting data	within quarter mile
Wet Angle	PRY193	no supporting data	less than half mile
Three Drop Cave	PRY267	no supporting data	3 about quarter mile
Lowes Pit	PRY274	no supporting data	3 within quarter mile
Busted Rock Cave	PRY278	no supporting data	3 within quarter mile
Roomstone Cave	PRY279	no supporting data	3 within quarter mile

Meramec Valley Grotto (MVG). Dec. 12th – 13th - Several MVG members camped out in Shannon County and ridgewalked. Ten new caves were documented as well as survey and monitoring of others. —Alex Litsch

Lake Ozark Grotto (LOG). Our Grotto has lost a third active grotto member within one year. Following the loss of Kerry Rowland and Bill Pfantz, we now add Dwight Weaver to that list. Dwight passed away on Nov. 27th while recuperating at home from a triple bypass. He was co-founder of LOG and one of the seven people who founded the MCKC. It doesn't stop there. Our Grotto Chairman, Ken Long, suffered a mini-stroke in December and is trying to recover from some vision problems. We are all looking forward to a better year ahead. – Alberta Zumwalt

Kansas City Area Grotto (KCAG). Nov. 1st - Bill Gee, Seth Colston, and Becky Nelson visited Geronimo Cave in Camden Co. (CAM-086). Gee had started a survey of this roughly 2,000-ft-long cave over a decade ago, that ended before completion when the cave changed ownership. Now new landowners are interested in reinvigorating the survey effort to determine where the cave is, being concerned that it underlies their home, before excavating for an addition to their new home. Bill decided to hand project management of this survey off to Seth, as a candidate for his initial big cave survey and cartographic effort. The team entered through the one-ft-high, two-ft-wide concrete mill trace, and surveyed the belly-crawl-high watercrawl, ending up with about 250 ft of survey. They were able to set stations far enough into the cave for Seth to create a KML file and overlay it on a surface map, which showed, as feared, that the cave subtends the landowner's house. The next trip will involve determining the depth below ground of the cave passage under the house. Past the watercrawl, the cave gets larger, so the survey should get easier. Nov. 7th - Jeff Page, long-time KCAG member and current Carroll Cave Conservancy (CCC) president, led a crew consisting of KCAG members Rick Hines, Cliff Gill, Seth Colston (grotto president), Jim Cooley (grotto Vice-President), and Julie Cottrell, as well as Chouteau grotto members Martin Carmichael, Rebecca Carpenter, and George Tengel, in a cleanup of the late Bill Pfantz's trailer site on the farm immediately adjacent to the CCC silo. The landowner provided a dump truck which was filled with scrap steel, and the site clean-up was completed to the landowner's satisfaction. It pays to have – and be – good neighbors! After the cleanup, Colston, Carmichael, Carpenter and Tengel did a short trip into Carroll Cave. Dec. 8th - Colston, Carpenter and Tengel were joined by Cooley and Cottrell to continue the resurvey of nearby Joe Cave (CAM-022), which has reached 914 feet of interior survey. By this trip, all but one gray bat had vacated the cave. Measurements of four piles of moldy guano, totaling just over 73 sq. ft of surface area, suggest that the site may be used by up to 12,417 gray bats in the summer. Nov. 9th - Jim Cooley, Rick Hines and Bill Gee visited an abandoned limestone mine in Atchison, Kansas owned by the Benedictine monastery there. We were asked by a consulting firm, hired by the Abbey to determine possibilities for commercializing the space, to evaluate the extent of the mine, current condition, and the presence of any Endangered Species Act listed species. There were no listed species identified, nor signs of any. A report was prepared on the visit and provided to the consulting firm and the monastery. Nov. 15th - Mill Creek and Allie



SHN-706: A New Cave in Shannon County

Spring Caves' landowner Bruce Archambault (a member of both KCAG & Roubidoux Grottos) conducted a bat survey in 1,725-ft-long Mill Creek Cave, with five-year-old and 15-year-old grandsons, Noland and Bruce IV. The troupe surveyed out to Jesse James Base Camp and then 50 yards down the left branch, but were disappointed to not see a single bat. Fifteen years ago, it was commonplace to easily see a couple dozen bats this time of the year. But since a confirmed case of WNS was reported during KCAG bat survey years ago during this same timeframe, bat numbers have been consistently declining. Mill Creek and Allie Spring Cave are managed for Archambault by the MCKC. Allie Spring, with currently over two miles surveyed, is a rather sporty cave that is dying for attention. These caves are available for grotto visitations by

permit, with an appropriate, experienced guide. **Nov. 26th** - Jim Cooley led a six-person team of KCAG cavers to the Irish Wilderness in Oregon Co., where we monitored seven caves and surveyed in an eighth, an obscure vertical-entrance cave which we had discovered in 2008. Participating were Ginny Friedrich, Becky Nelson, Hou Zhong, and Nathan and Sam Taylor. **Dec. 9th - 12th** - Cooley led Bill Gee and Matthew Miguel Hernandez on a survey trip on private property in Shannon Co. We continued the mile-long half-survey of one cave, and discovered two new ones. Our trip was cut short by an inbound snowstorm. **Dec. 26th - 27th** - Cooley led a team of surveyors back to Joe Cave in Camden Co., where we completed the field work on a cartographic survey of this 960-ft-long cave. Included in this trip were Seth Colston, Ginny Friedrich, Vona Kuczynska, Florian Weller, and Tyler Skaggs. –Jim Cooley

Springfield Plateau Grotto (SPG). **Nov. 3rd** - Nathan Burton led Dr. Doug Gouzie and his MSU Speleology Class on a trip through Old Spanish Cave (Stone Co.) **Nov. 10th** - Brandon Van Dalsem (Crystal Cave Manager) and Nicole Ridlen went to Crystal Cave (Barry Co.) to lead Dr. Doug Gouzie's (SPG member, Karst Geologist at MSU) Speleology Class on a tour of the cave. Upon arrive they found the cave gate had been breached and the cave vandalized. Brandon and Nicole led the students through the cave, Nicole gave a Speleology lesson and Brandon took a few photos of damage. Brandon and Nicole later met with deputies from the Barry County Sheriff's Dept. to make a full report of the break-in and vandalism. **Nov. 19th** - Brandon Van Dalsem and Nicole Ridlen visited Sarcoxie Cave, checking the gate and noting that there were goldfish outside in the caves emerging stream. --Report by Max White. Materials provided by Nicole Ridlen. **Dec. 22nd**—Brandon Van Dalsem, Nicole Ridlen and Jon Beard were joined by Shawn Williams (Eureka Springs, AR) in a trip to Crystal Caverns (Barry Co). Brandon replaced the lock at the internal gate of the cave, then the four walked the old tour path through the cave to look at and take photographs of the passages and speleothems along the way. The group did a side trip through the Aragonite Loop, but otherwise stayed on the trail. The former show cave is leased by the MCKC. Later in the day, at the invitation of a landowner, Jon was shown a karst feature in western Greene Co. near Clear Creek. After wet weather, it issues water, but at the time of the visit it was dusty dry. Beyond three feet it becomes too low to enter, so no new cave for the Missouri cave database. The feature was formed in the Eley Limestone and has alternating beds of chert and micritic limestone. Jon suspected the feature is a wet-weather overflow of a more extensive hydrologic system. Report by Max White. Materials provided by Jonathan B. Beard.

MSS OFFICERS: Note: New email for President Dan Lamping

President – Dan Lamping, 4501 Clarlane Dr., St. Louis, MO 63128 314-775-8584 danieljlamping@gmail.com
Vice-President – Krista Bartel, P.O. Box 974, Osage Beach, MO 65065 816-812-5206 kbartel1088@gmail.com
Treasurer - Don Dunham, 147 Ron de Lee, Arnold, MO 63010. 402-203-3191 don_g_dunham@yahoo.com
Secretary - Alberta Zumwalt, 1681 State Route D, Lohman, MO 65053. 573-782-3560 Gzumw@aol.com

MSS DIRECTORS:

CAIRN – Craig Williams, 2865 Laclede Station Rd., Apt. 25, Maplewood, MO 63143 314-695-1012
cwilliams@cairstl.org
CCC – Bob Lerch, 407 Maplewood Dr., Columbia, MO 65203 lerchr@missouri.edu 573-397-1898
Chouteau – Rita Worden, 22762 Valley Dr., Jamestown, MO 65046. 573-673-3388
wordenrl2323@yahoo.com
DAEDALUS – Jeff Fennell, 3344 Dakota Hills Dr., Pacific, MO 63069 636-575-0669 kavman87@yahoo.com
KCAG – Jim Cooley, 819 West 39th Terrace, Kansas City, MO 64111-4001. 816-763-8111 coolstoi@kc.rr.com
LEG – Al Quamen, P.O. Box 292, Carbondale, IL 62903. 618-549-2550 qallan28@gmail.com
LOG – Gary Zumwalt, 1681 State Route D, Lohman, MO 65053. 573-782-3560 Gzumw@aol.com
MCKC – Alicia Wallace, 600 Ellwine Dr., St. Louis, MO 63125 314-892-4351 caversquirrel1@aol.com
MMV – Doug Leer, 730 Lakeshore Meadow Dr., Wildwood, MO 63038. 636-207-8468 dogleer@gmail.com
MSM – Jessica Self, 6 Karen Ann, Sullivan, MO 63080 573-587-2794 Gneiss.self@yahoo.com
MVG – Alex Litsch, 2156 U.S. Hwy 61, Festus, MO 63028. 314-914-7010 alitsch6@gmail.com
OHG – Bill Heim, 2025 W. FR 178, Springfield, MO 65810. 417-889-0640(H) 417-861-6716(c)
build_it@juno.com

PEG – Lorin O’Daniell, 4515 Faraon-Apt. F, St. Joseph, MO 64506. 816-273-4634 lorinodaniell@gmail.com

RBD - Andy Free, 129 Hull Dr., Waynesville, MO 65583 573-528-7506 freea@embarqmail.com

SEMO – Gary Resch, 6151 Farthing Rd., Odin, IL 62870 681-780-3799 gjresch@gmail.com

SPG – Max White, 2748 W. Maplewood, Springfield, MO 65807. 417-880-8475 bildmwc@aol.com

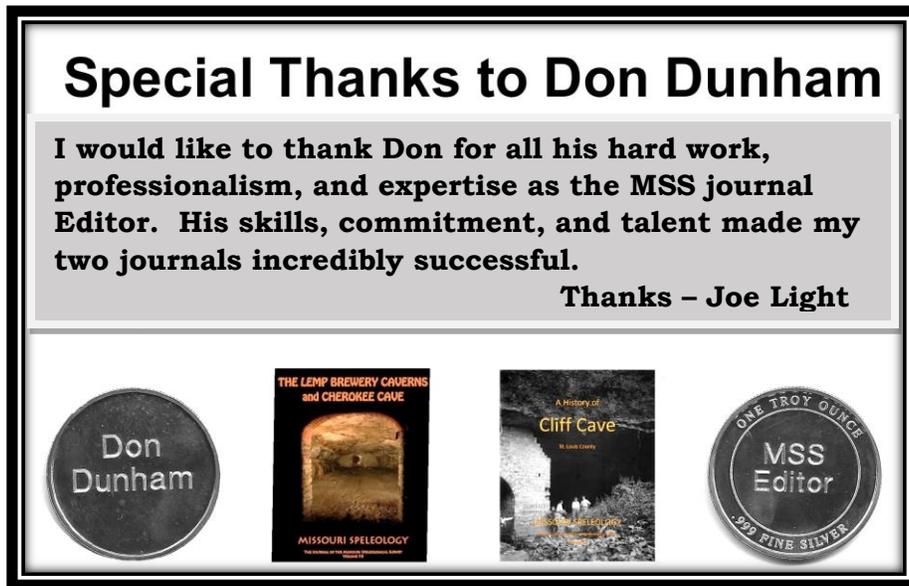
ADDRESSES:

Missouri Speleology circulation & MSS store –Don Dunham (information under MSS Officers list)

Cave Files – Ken Grush, 32 Circle View Dr, Fenton, MO 63026. 636-600-0369 slagrush@gmail.com

MSS Liaison Editor - Gary Zumwalt, 1681 State Route D, Lohman, MO 65053. 573-782-3560 Gzumw@aol.com

Research committee -Dr. Robert Lerch, Dr. Michael Sutton, Dr. Doug Gouzie and Jeffrey Crews



Jan. 23rd – The Winter MSS Meeting scheduled for this date has been cancelled. MSS Affiliate fees for 2021 are due in January. Organizations paid: CAIRN, KACG, MCKC, SEMO & LOG. Everyone else needs to send a check or money order for \$25 to: Don Dunham, 147 Ron de Lee, Arnold, MO 63010.

Jan. 23rd – MCKC Meeting – If anyone wants a link to the virtual meeting, please email Alex Litsch: alitsch6@gmail.com