

THE MSS LIAISON

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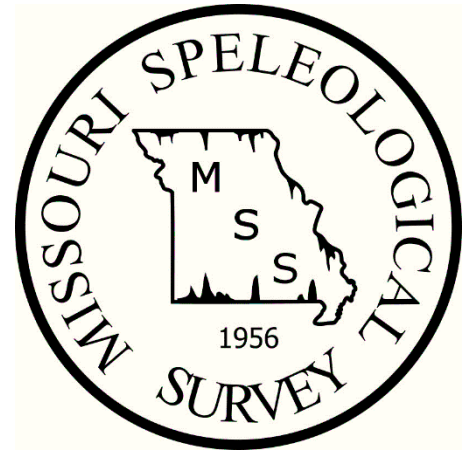
January - February 2020

AFFILIATE ORGANIZATIONS:

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

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Missouri Speleological Survey Files Report for March, 2020. Remember 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. **Kirsten Alvey-Mudd sent:** -A report from Martin Carmichael (see below) of a visit to Railroad Cave in Pulaski Co. Good report and 5 faunal records. -Some 23 faunal records for Mark Twain, Cameron, Underpass and Twin Piney Caves in multiple counties. -Faunal records for Indian Creek Caverns in Stone Co. -140 photos from her monitoring trip with Mark Jones on the Ozark National Scenic Riverways when 185 Faunal Records were also recorded. -7 new cave locations in McDonald Co.: Cord, Shale Climb, Fledermaus, Elk OZar Spring, Rock House, Skylight Slide and Tube Ledge Caves. In addition she provided brief descriptions, photos, faunal records and other notations to fill out the Main Table of the database. There were 38 faunal records additions by MoBat Census in 2020 in McDonald Co. for 12 different caves including those above. -18 new faunal records and photos from two Ralls Co. caves: Bowling and Fisher Caves. -40 faunal reports on 6 caves in Texas Co.: Brayer, Bat, Cathedral, One Room, Potato, Ride-In and “Left” Twin Cave. -9 faunal records and a trip report for Jason Isgrig Cave in Crawford Co. Lots of photos were collected via Facebook. -A nice summary of the Sodalis Nature Preserve, the world’s largest Indiana Bat hibernaculum. -82 faunal records for 10 Caves in Ozark Co.: Bear, Cave Hole, Cave Hole Spring (Bear Spring), Cold, Lion, Dani, Fogey, Frank, Lion and Ship Rock. **Jon Beard sent:** -Two new caves in Christian Co.: Straight and Narrow Cave and Trickling Brook Cave. -A report on the 3 Math Branch Caves in Christian Co. He was the first reporter on these caves, but just can’t seem to find 2 of them again. At least they found one of them and recorded 10 faunal records for the cave. **Mark Brooks sent:** -Report on survey work on Onyx Cave in Howell Co. He also provided faunal records for the trip. **Matt Bumgardner sent:** -A trip report and data for 3 new caves in Barry Co.: Tilted Rock, Notonicks and Pancake No.2 Caves. **Martin Carmichael sent:** -Locations and entrance photos for 13 caves in Boone Co. **Jim Cooley sent:** -A trip report for Joe Cave in Camden Co. and included 10 faunal records for that cave. -A new map for Groundhog Hole Cave in Camden Co. His submittal included all of the survey notes and Xara mapping file. -Locations for a number of mines in Jackson (and surrounding) Co. We are trying to be very selective about which mines to enter into our “cave database.” If we recorded mines too, we’d probably be able to add several hundred. However, all are not significant bat habitat. And so biologic interest is driving whether a mine should be entered into our database. We can still distinguish the new mines from our caves and we can track those counts separately. -A report and photos on Roanoke Park Cave that has been walled up and effectively lost from Kansas City until recently. Someone has broken into and opened up an opportunity to find out more about the cave. And perhaps we may, if the city allows. -Sent a report on Mine A Joe Creek Tunnel; it’s a mine but does have faunal records. -6 older faunal records that somehow got missed/lost for Lewis Cave in Ripley Co. -Black and white and color maps of Spring Creek West Cave (CL=182, VR-25) in Ozark Co. **Spike Crews sent:** -A geologic map that seems to pinpoint two caves in Stoddard Co. Yes, the county does have 3 cave records in the database. One has long been reported as being destroyed; perhaps they just didn’t look in the right location! -Description of a trip to a private cave in Phelps Co. where he also reported one Tri-colored Bat in residence, the first fauna record for the cave even though it has been known since 1967! So much to do...all can help!! **Bill Gee sent:** -7 pages of survey notes from

Geronimo Cave in Camden Co. Due to wet conditions and landowner changes, the survey was never completed.

Ken Grush sent: -With a strong assist from a Facebook post, a history of the ownership of Pyramid Cave in Ozark Co.; a history that goes back to 1841. The cave was actually acquired in 1946 by the current family. -A new cave location in Ozark Co. for High Hopes Cave. While investigating Pyramid Cave, above, I asked the owners about other caves and this cave came up. Regrettably, my high hopes were not realized, almost didn't justify the 12-15 ft. climb into the cave. -2 new cave locations in Webster Co.: Angel Falls and Valentine Caves. Both are spring caves in essentially the same stratigraphic area. With at least 2 other known springs (in same strata) in this area, perhaps there is the basis for finding more caves in each of the nearby drainages off the "plateau" area. This lead came from Jenna Clouse a contact that was made at the Missouri Natural Resources Conference where Scott House and myself spent a couple of days talking about the MSS and the cave database to conference visitors. -My own database/archive of MoSpeleo cave report transcriptions, Bretz transcriptions, personal cave reports and photos. This also includes a few map files where I started doing my own cartography: Astral Valley, Koester No1 and No2 Caves in St. Francois Co. As part of this transfer, I also tried to preserve the original format in an "archival" pdf format...perhaps it will stand the test of time better!?! -GPS locations to provide decimal latitude/longitude (latlon) for the MSS ArcGis system. -Fielded questions on two caves in Jasper Co., one very private and the other hosts a haunted cave around Halloween. Check out "Haunted Cave of Belleville" on Facebook. This cave has been highly modified for the "haunt." -Fielded questions on two leads on the county line between Webster and Wright Co. And similarly worked two leads in Jefferson Co. -Assisted in clarifying old fauna records with MDC, in particular for bats (Gray and Ozark Big-eared Bats). **Derik Holtman sent:** -Over 40 pictures from 7 Shannon Co. caves on a recent monitoring trip out of Winona. Seven entrances shots were included that provide a great visual image for the cover photo in the database. **Scott House sent:** -3 new maps from Perry Co.: Rousseau Bridge Pi (CL=60, CD=16).t, Cyclists Delight Pit (CL=31, CD=22).and Crucifix Pit (CL=28, CD=16). -An email with a Sculpin Tour Map for Perry Co. with 6 faunal records from Berome Moore Cave. -Updated database from a week-long, joint effort down in Winona. Lots of small changes were made; also additions/changes were made to faunal records. And he spent the next 2 weeks adding more to the "operative" database. We only have one operative version at a time; updates are shared to various cooperators.

Mark Jones sent: -50 Use Monitoring forms, 52 individual reports and 174 faunal records for work done in January, 2020 during 2 weeks of activity on the Scenic Riverways with a host of other caves including Krista Bartel, Scott House, Kirsten Alvey-Mudd, Andrew Porter and Tyler Skaggs. -About 50 Use Monitoring Forms, 50 Cave Reports, 185 Faunal Records and almost 800 photos from his trips on the Ozark National Scenic Riverways. On most of these caves, Kirsten Alvey-Mudd assisted with identification of faunal records (see above). **Dan Lamping sent:** -A lead from Crawford Co. that will need more documentation to identify as a cave. The lead came from our MoSpeleo.org site. -A new cave location in Jefferson Co.: Spring Forest Cave. This too was lead that came from Facebook. **Joe Light sent:** -A historical entrance photo for Carondelet Park Cave within the St. Louis city limits. Now essential lost! **Alex Litsch sent:** -3 photos of a piebald Cave Salamander in Crevice Cave, Perry Co. The salamander was spotted but lacked all orange color! **Chad McCain sent:** -Trip report for Blackfathom River, Gegg and Thresher Caves in Ste. Genevieve Co.; Blackfathom hit 7.14 mile surveyed length, while Gegg stands at 4.54 miles. Thresher Cave is apparently accessible, but was on this visit and got a new survey. -Photo for a goldfish in Crevice Cave, Perry Co. **Ben Miller sent:** -Entrance photo for Slick Rock Cave along with a GPS location. He also took time out of his dye tracing in Barry Co. to report a new cave, fairly obvious, but not in the database, welcome Greasy Creek Cave, both from Barry Co. **Tyler Skaggs sent:** -Use Monitoring form, 10 faunal records and photos to Merrell Cave in Pulaski Co. **Isaac Smith sent:** -10 faunal records and a Use Monitoring form for Spring Forest Cave (new) in Jefferson County. -30 faunal records and bio-photos for Crevice Cave in Perry Co. He included the monitoring form for the cave too. **Mick Sutton sent:** -A correction to the Turley Cave map in Carter Co. -Monitoring forms for Kelley Hollow, Mine Hollow, Tusher Hill Caves in Oregon Co. and Secesh Cave in Carter Co. Sutton also supplied improved GPS coordinate for 2 of the caves. -About 100 faunal records in Oregon, Carter and Boone Co. A second volley of 85 more faunal records in Oregon, Carter and Shannon Co. A third round of 51 faunals in Christian, Douglas, Howell and Ozark Co. Then 33 more in Douglas, Howell and Ozark Co. The fifth round included 127 faunals in Laclede, Philips, Pulaski and Texas Co. He has been systematically filling in the blanks from old reports on the national forest in Missouri. -110 more faunal additions, mainly in the Cassville/Ava Districts of MTNF. -While in Winona in February he

worked a solid day making adjustments to the database, hard to assess how many additions and corrections were made. -A new copy of Crewse Cave in Ripley Co. An upper level of the cave was finally survey (by Dennis Novicky) and this new map incorporates the addition. -A summary of the 600 faunal additions that he has made to the database by mining old reports on the Mark Twain National Forest.—Ken Grush

Meramec Valley Grotto (MVG). Sept. 13th – 15th - MVG did a trip into Berome Moore Cave. Oct. 8–14th - Several MVG members attended the TAG Fall Cave-in. Several other members attended MVOR. Nov. 2nd - Tony Schmitt, Derik Holtmann, Gary Resch, Ralph Sawyer, and Jeff Gosnell surveyed 600 feet of virgin cave in Pautler Cave in Illinois. Nov. 9th - Alex Litsch and Nathan Durfee finished mapping Cathode Cave / Fluted Rift Cave System. Nov. 16th - Chad McCain and Gary Resch surveyed in Blackfathom Cave. Added 233 feet to the cave and finished a lead. New length is at 7.14 miles. Dec. 21st - Dan Lamping, Tony Schmitt, Joe Sikorski, Derek Holtmann, and Bob Lerch surveyed in Love Cave in Crawford County. Instead of finishing the map, they found more cave than expected. Jan. 5th, 2020 - Chad McCain, Alex Litsch, Nathan Durfee, and Katelyn Schwoeppe added 400 feet of virgin survey to Gegg Cave. Finished off 2 leads. Feb. 15th- Alex Litsch came across a heavily graffiti covered cave along a state park trail. Plans are in motion for a cleanup trip. Also - Nathan Durfee along with MSM Spelunkers explored Roubidoux Cave. Feb. 16th - Jeff Fennell visited Isgrig cave with hockey team. – Alex Litsch.

Lake Ozarks Grotto (LOG). Jan. 5th, 2020 – A meeting at Goodwin Sinkhole was held with six people in attendance: Klaus Leidenfrost (project manager), Scott Doyel (heavy equip. operator), Jean Knoll and LOG members, Ken Long, Gary & Alberta Zumwalt. Topics of discussion were: possible re-location of part of the road down into the sinkhole, a future work plan, diverting water away from the waterfall and a possibility of putting a pipe into the cave to drain the water. Klaus said the last time heavy equipment was able to work was Dec. 2017. Klaus has now secured more grant money which will allow more work to be done, weather permitting. We also noticed that there was more trash visible in the banks in the waterfall area. The very first work trip to the sinkhole was LOG members on Jan. 28th, 2012. It has come a long way with so much trash and tires gone. We have a pavilion, picnic table, port-a-pot and a place for camping. Progress in the cave is slow but it will happen. A cave awaits.....—Alberta Zumwalt.



Middle Mississippi Valley Grotto (MMV). Nov. 11th – 15th - Don Dunham, Scott House, Matt Beeson, Mark Jones and Jon Beard did surveying in Tumbling Creek Cave. The group surveyed over 7,000 feet of passage. Nov. 16th - Don Dunham and Jon Beard visited Clayton Cave with the purpose of monitoring the cave. Nov. 24th - Don Dunham visited Mud Cave #2 in Crawford County. This was a monitoring trip with bat counting. Seven pips were counted. Note on above trips: Someone wrote in the margins of the trip log book "Don't Follow Don's Lead". I don't know exactly what that means, but as someone who has caved and hiked with Don over the years, it is probably a valid warning as Don has gotten us lost on multiple occasions. There was even a poem written about it called "Never More". Nov. 16th - Michele Leicht, Larry Abeln and Jim Sherrell did some ridge walking, in the Sullivan area, for possible caves. They found several holes that have potential with a little digging. Jan. 31st, 2020 - Jim and Jimmy Sherrell and Larry Abeln visited Sandland in Arkansaw, Wisconsin. This is a tunnel system dug out by hand and was considered very impressive by the group given that the entire structure was done painstakingly by hand with meticulous planning and forethought. Feb. 14th - Jeff Coleman and Eric Sutterlin did some surveying in Valles Mines. This was done in the Rocky Digs Section. They added about 200 feet of additional survey. It was noted that this part of the cave was actually pretty wet, which is unusual for the cave system. Unreported date - Jim Sherrell and Ken Grush Surveyed Koester Cave #2 near Astral Valley. During the trip, they noticed web worms morphing into adults. Also of note were some bear beds. Feb. 22nd - Michele Leicht and Larry Abeln did some ridge walking at cooper hollow in Meramec State Park. In

addition to the ridge walking, they were following a very old lead. There were no caves located. The group also visited Sheep Cave in the Park.—Doug Leer.

Kansas City Area Grotto (KCAG). Jan. 13th, 2020 - Jim Cooley joined a trip led by Kathryn Bulliner, Resource Scientist for MDC (i.e., MDC's head bat biologist), Jeanette Bailey (MDC), Vona Kuczynska (USFWS), Krista Noel (MDC), and Addison Banks (a Land Trust Coordinator for the Heartland Conservation Alliance), to census hibernating bats in the city-owned and substantially flooded LaFarge Mine in Kansas City, MO. Some 343 big browns (*Eptesicus fuscus*) but only 17 tricolored bats (*Perimyotis subflavus*) were counted. Prior to WNS, this site had been the largest *Perimyotis subflavus* hibernaculum in western Missouri, with 2,388 tricoloreds hibernating there in 2016. **Jan. 25th** - Bill Gee led a Stream Flow Monitoring to Carroll Cave. Participants included Seth Colston, Tyler Skaggs, Martin Carmichael, Ginny Friedrich, Rebecca Carpenter, Micah Bogart, and George Tengel. Because of the size of the crew, Kristen Godfrey served as a second trip leader. The team entered the cave at 9:30 a.m. and exited at 3:30 p.m. Carroll Passage, UL2, and Thunder Falls were visited. This trip was the annual data logger collection trip. The goal was to download data from every data logger. The trip was originally scheduled for Jan. 11th. Due to bad weather (snow-packed and icy roads), it was delayed one week to Jan. 18th, and then for the same reason to Jan. 25th. Analysis of the data showed that a major flood had happened just two weeks before the trip, so cancelling on the 11th was definitely the right thing to do. A flood peaked at the ladder of just over 13 ft. early morning of Jan. 12th and another smaller flood pulse of about three ft. occurred on Jan. 18th. For comparison, normal water level at this logger is about 1.0 or 1.1 ft. The data from the logger downstream of Thunder Falls showed peak flood just over 24 ft. on the 12th and 8.5 ft. on the 18th. It got rowdy down there! Full stream flow data can be found at:

<https://carrollcave.org/wpcontent/uploads/2020/01/2019-CarrollCaveStreamFlow.zip> **Feb. 1st** - Bill Gee, KCAG's Stark Caverns survey manager, led a survey trip into the commercial Stark Caverns in Eldon, MO.

Participants included Kristen Godfrey, Seth Colston, Mandi Alexander, Marcus Brown, Nathan Taylor and Sam Taylor. Colston and Godfrey had been on previous survey trips. The others were new to Stark Caverns and cave survey. A good day of work was accomplished by dividing into two teams. They were in the cave by 10 a.m., and out and on the road home by 5 p.m. **Feb. 8th** - Bill Gee finally was able to lead the annual bat survey trip to the Mountain Room in Carroll Cave. Participants were Seth Colston, Kristen Godfrey, Hou Zhong and Morgan Carson. The team entered the cave at 9:40 a.m. and exited at 7:10 p.m. The team also went halfway from the Mountain Room to the natural entrance, where water was unusually deep. Only three bats were seen anywhere. But there were many cave fish in the Water Barrier and also in the stream around several guano piles. Many grotto salamanders were seen as well, with an especially big bunch around guano pile 6. The group returned to the ladder via The Turnpike. **Feb. 12th** - Jim Cooley and Ken Grush braved the rain and cold to start the survey of a newly discovered cave in Ozark County. We were directed by friends at MTNF/Ava to a lovely, remote, "dispersed" roadside location we are naming Log Bench Camp. We met a very accommodating landowner, who not only shortened our hike to the cave by half a mile by letting us cross his property, but who also insisted we stay for free in his vacant, just remodeled rental property on our next survey visit. Lastly, our new host said he'd introduce us to several other large landowners in the area with caves on their land – caves apparently unknown to the MSS. **Feb. 14th – Feb. 17th** -

Jim Cooley led a trip to Cloud 9 Ranch in Oregon County for the annual bat survey. The census effort was spearheaded by Kirstin Alvey-Mudd (MOBat), assisted by her husband Jim Mudd, and included Seth Colston,



Rustic accommodations at Log Bench Camp



KCAG continues to find new caves (Ozark Co.)

Kristin Godfrey, Ginny Friedrich (all KCAG); Vona Kusczyńska and Laurel Hill (USFWS); Paul Scheiter and Zach Buck; Aaron Thompson and Claty Barnett (BMG); Treavor Bussard, Candace Walden, and Hannah Sanders (SPG); and Tyler Skaggs. Caves visited included Cave Hole, Bear #1, Bear #3, Bear, Lion, Cloud 9 Bat, Cold, Frank, Dani, and Fogey. In addition, Cooley, Colston, Godfrey and Friedrich completed a map QC check of Spring Creek West Cave. Thompson and Barnett completed a map QC check WAY in the back of Fogey Cave, while Mudd & Alvey-Mudd counted bats. High water in Spring Creek prevented us from getting to Fogey for three days. Once they did get in, high (but slowly receding) water in this spring cave with an 800-foot watercrawl required an ear-dunk to get to the back room. **Feb. 22nd** - KCAG Acting President Seth Colston led a novice trip to Perkins Cave in Camdenton, MO. Thirteen novices went all the way to the back, entering the cave at 10:30 a.m. and exiting at 3 p.m. There were some problems getting the lock off – it was sticky, and needs some maintenance.--Jim Cooley.




KCAG continues to develop new covers (Perkins Cave)

The Kansas City Area

Grotto is deeply saddened by the death of our grotto president, Pic Walenta, on Jan. 22nd. She was 63. Pic had been an active caver, cave surveyor and cave gate builder since 2007; her name is on 11 cave maps on file with the MSS, and will be on many more as cartography is completed and more maps are turned in. More recently, she had turned her attention to cave restoration and supporting cave-oriented youth work. Pic was also an avid hiker,




backpacker and canoer, a superb camp chef, and an expert cave-trip sommelier. Pic had been vacationing in the Dominican Republic at the villa of long-time grotto Member Rick Hines when she suffered a ruptured cerebral aneurysm on Jan. 16th. She survived for a week in a medically induced coma, and was beginning to rally, when she died suddenly due to unexpected complications on Jan. 22nd. Interment of Pic's ashes will take place at Terrace Park Cemetery in Kansas City, MO on April 4th at 2 p.m. A party celebrating her life will be held afterwards, beginning at 3:30 p.m. at the home of Kathy Munn-Bovard, 5301 Riggs St., Mission, KS. The fall MVOR, hosted jointly by KCAG, MO Bat Census, and Bluff Dweller's Cave, will also be dedicated as a memorial to Pic. This MVOR will be held at Eagle's Nest Campground in Ginger



THE KANSAS CITY AREA GROTTO
M.S.S. N.S.E. D.I.O.

TAKE YOUR PIC CAVE
(OZK-105)
Tape & Sonnet Survey March 18, 2013 by
Ken Grush & Mark Jones of the
KANSAS CITY AREA GROTTO
& CAVE RESEARCH FOUNDATION




CLOUD 9 RANCH
OZARK PARADISE

0 5 10 15 ft
0 5m

SYMBOL LEGEND


Map dimensions given in feet

In Memoriam



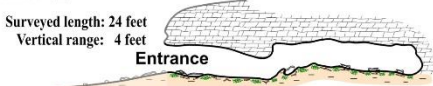
**Cave was discovered on
January 31, 2013 by
Virginia Kay "Pic" Walenta
July 3, 1956 - Jan. 22, 2020**

PLAN VIEW



Entrance 2

Surveyed length: 24 feet
Vertical range: 4 feet



Entrance

**Pic Walenta was a major contributor to KCAG's
Cloud 9 Survey Project**



**Virginia Kay "Pic" Walenta
July 3rd, 1956 – January 22,
2020.**

Blue, MO on Sept. 18th – 20th, 2020. Pic was serving as chairwoman of the MVOR Planning Committee when she died. Please attend to help celebrate Pic's life and her extensive contributions to Missouri caving. Pic's full obituary may be found at: <https://www.legacy.com/obituaries/kansascity/obituary.aspx?n=virginia-walenta-pic&pid=195425903> --Jim Cooley

Springfield Plateau Grotto (SPG). Dec. 29th - Jan. 1st, 2020 -- Matt Beeson supported the New Year's Expedition at Mammoth Cave. Matt did three days of surveying in Kentucky Avenue around Grand Central and from the New York Hippodrome down to Sand Avenue. **Jan. 12th**—Unable to get into his vehicle (where his cave gear was) due to frozen doors, Jon Beard had to cancel a survey trip. Eric Hertzler felt pity, and invited Jon for a day of MTNF ridgewalking on behalf of the CRF. The two hiked four miles, finding two undocumented caves in Christian Co.: Straight and Narrow Cave and Trickling Brook Cave. Both are low and narrow, and due to a recent heavy rain, were quite wet. Christian Co. is now up to 353 caves. **Jan. 15th**—Jon Beard did some finishing touches on two stalactites rejoined previously in Fitzpatrick Cave (Christian Co), then did some photography of critters and speleothems. **Jan. 18th**—Eric Hertzler and Jon Beard hiked nine miles in Mark Twain National Forest in Christian Co. in hopes of finding two long-lost caves. Jon had briefly visited these caves over 30 years ago, but haven't been found since. Eric and Jon were unsuccessful, but along the way, they conducted a bio-monitoring of Math Branch Cave, a cave SPG members had surveyed some years ago. **Jan. 21st**—Jon Beard fitted two broken stalactite pieces to their original places in Paul's Gallery of Fitzpatrick Cave (Christian Co). While there he also did some cleaning of other rejoined stalactites repaired several months ago. Folks are welcome to participate in this cave restoration project by contacting Jon. **Jan. 30th**—Nicole Ridlen and Jon Beard of SPG and Kirsten Alvey-Mudd of MoBAT led a group of eighth grade students on a cave restoration workshop in Daylight and adjacent Hobo Caves (McDonald Co). The two caves have seen more than their share of trash and graffiti through the years, but have recently been acquired by a new landowner who wants to see them protected. Gates are planned, but a locked fence is helping to keep trespassers out from Hobo. Roughly 25% of the graffiti and virtually all trash was removed during the day. **Feb. 1st**—Steph McCarty, Mark Collier, Treavor Bussard and Jon Beard accompanied Springfield-Greene County parks staff in conducting bio monitoring in Giboney, Junction, Ritter Bat, Possum Pit and Cricket Hole caves (Greene Co). A few dozen entries will be made in the state cave fauna database. While in Ritter Bat, Jon found a 200-300 lb. stalagmite piece laying on the floor and determined where it belonged. Next trip: reattachment! **Feb. 8th**—Dillon Freiburger, Matt Bumgardner and Jon Beard traveled to Barry Co. to check on some leads Matt determined. The first lead was a 20-ft long, 4-ft wide gash in the hillside at least 10 ft. deep. No cave, just a remarkable gash in Reeds Spring Limestone. The next lead was a 24-ft. cave they named Pancake Cave, a one-room cave in the Reeds Spring Formation not more than 2.5 ft. high. Dillon mapped the one-shot wonder. The next several leads were just shallow sinks with no cave entrance, but two of them were short caves. The first of these, near Onyx Cave, was named Notonicks Cave (get the pun?), a 26-ft. cave in the Reeds Spring. The last lead was a cave named Tilted Rock Cave, a 43-ft. cave sandwiched between the Pierson Limestone above and the Compton Limestone below. It flowed water and had the only bat (a pip) seen during the day. While in the area, Jon checked the condition of the gate at the main entrance to Onyx Cave. The gate was sound, and the lock felt intact. **Feb. 11th**—Jon Beard, using his 2019 map of Fantastic Caverns (Greene Co), marked drip zones in the cave at the request of Tom Aley. The most active drips were marked in green, occasional drips in orange and wet speleothems not dripping were red. **Feb. 14th- 16th**---Matt Beeson supported the President's Day Expedition at Mammoth Cave. Matt did 2 days of surveying including Kentucky Avenue from Sand Avenue down to Frozen Niagara Room and also a resurvey of College Heights Avenue. **Feb. 23rd**—A ten-member team visited Dream Cave (Ozark Co), a 6,000-foot cave owned by the Ozark Land Trust and co-managed by SPG and the MCKC. Participants included Tyler Skaggs, Hannah Sanders, Nicole Ridlen, Brian Moore, Chris Gertson, Cindy Darrow, Matt Cruise, Jenna Clouse, Jerry Bratton and Jon Beard. Jon noted the biota while a number of others took many photos. The group counted only 13 pips. Before WNS, it was typical to see 1,500 bats wintering here including a few hundred northern long-eared.--Materials provided by Jonathan B. Beard and Matt Beeson. Report by Max White.

MSS MINUTES. The Winter 2020 Board meeting of the Missouri Speleological Survey was called to order by President Dan Lamping on January 25th, at the DGLS Annex Conference Room in Rolla, MO. **Introduction of**

Officers: Dan Lamping, President; Scott House, Vice-President; Don Dunham, Treasurer; Alberta Zumwalt, Secretary. **Roll Call of Directors:** Al Quamen, LEG; Craig Williams, CAIRN; Max White, SPG; Doug Leer, MMV; Bill Heim, OHG; Andy Free, RBX; Julie Cottrell (Proxy for Lorin O’Daniell), PEG; Jim Cooley, KCAG; Alex Litsch, MVG; Jessica Self, MSM; Gary Zumwalt, LOG. Absent were: Chouteau, Daedalus, MCKC, SEMO and CCC (vacant at this time). **Secretary’s report.** Alberta Zumwalt reported that the minutes of the Fall 2019 meeting were distributed after the meeting to the Directors and Officers and were printed in *MSS Liaison*. The minutes were approved. **MSS Liaison.** Gary Zumwalt reported cash on hand of \$321.49; Sending out 37 paper copies and the rest as electronic copies, the next deadline is March 1st. **Treasurer’s Report.** Don Dunham had sent out the report electronically before the meeting and copies were distributed at the meeting. **REPORT OF THE TREASURER – December 31, 2019 - ACCOUNTS:** General fund \$10,427.29; Subscriptions/Donations *Missouri Speleology* \$9,405.27; Research Fund \$9,224.78; Anne Johnson Data Fund \$18,154.77. Affiliation fees \$450.00; Subscriptions *Liaison* \$311.00; Total \$47,983.11. **ASSETS:** Savings bonds \$2,000.00; Interest checking \$9,983.11; Certificates of deposit \$36,000.00; Total \$47,983.11. **INCOME STATEMENT** for the year ending December 31, 2019. **INCOME:** Individual membership dues/subscriptions \$10,358.15; *Missouri Speleology* \$2679.49; Organizational Affiliation fees \$400.00; Liaison Subscriptions \$140.00. Total \$13,577.64. **EXPENSES.** *Missouri Speleology* \$10,187.64; *Liaison* \$500.00; Anne Johnson Fund \$1,329.00; Bank fees \$130.00; General Fund \$19.04; Research Fund \$3,500.00. Total \$15,666.64. Net Loss \$2,089.00. Don reported selling approx. \$2,000 of *Missouri Speleology* since it went up on the website. He sold over \$800 in merchandise and \$500 of *Missouri Speleology* in Perryville. **Old Business – none. New Business – none. Cave Files.** Ken Grush reported 7700 records including mines with biological info, 20,000 written reports, and 7,475 caves. He said a full report was printed in the Nov.-Dec. issue of *MSS Liaison*. Scott House reported the new filing cabinets, authorized by the MSS Board, purchased from money out of the cave files fund, are now in place at Winona. They are locking and protected. **Agency reports.** Mark Twain National Forest – Scott House reported a lot going on, including ongoing bat counts. They continue to operate out of Winona. MDC – Pres. Lamping said they have applied again this year for permits to work in MDC caves. Perryville project – Scott House reported on the sign project. He said MSS, MCKC, SEMO, CRF, LAD Foundation, City of Perryville, MMV, and MVG are joining in on the project. The city and LAD will pay for the mounts for the signs. **Affiliate Organizations Project reports.** Kansas City Brownfield restoration project – Jim Cooley reported on the mines along the Blue River. He also reported on a walled up cave near his home where a wall cinder block wall was torn down. Carroll Cave – Jim Cooley reported the CCC owns 6 acres with a road to the silo. The crapper was moved across the road but it is not functional yet. CCC members can apply for a permit to camp. No CCC rep at this time. Rick Hines is stepping down as CCC President to Vice-President. Pres. Lamping reported still surveying in the cave with 1 or 2 trips per year. Not quite 21 miles mapped. Berome Moore Cave – Jim Sherrell reported 21.12 miles mapped. **Public Outreach.** Pres. Lamping reported there is a Facebook page and a website. He puts *MSS Liaison* on the website. Scott House reported that there will be a MO Natural Resources Conference coming up at Margaritaville (Tan-Tar-a) at the Lake of the Ozarks on Feb. 4th-6th. There will be a booth with MSS stuff. Workshops will include: Butler Hollow – Scott House; Database – Ken Grush; Cave Biology – Mick Sutton; Water Issues – Tom Aley; Bats – Shelley Colatskie; Denise Vaughn’s video on Perry Co. Scott said he could show the video after the meeting if anyone is interested. **Next Meeting – Sunday, May 31st, 10 am, Current River State Park.** In order to have overnight camping and the meeting there, volunteer work on Saturday, the 30th will be expected. Discussion on the need for two port-a-pots. MCKC will pay for one. Jim Cooley made a motion to authorize Scott House to get a port-a-pot to be paid for by the MSS. Seconded and passed. In the event that we are unable to have the meeting at Current River State Park, Scott said he will find a place. **Announcements.** The secretary reminded the Directors that MSS affiliate organization fees of \$25 are due at this meeting. Bill Heim said that Memorial Day Weekend will be the Kerry Rowland Memorial at Ennis Cave in Arkansas. Jessica Self announced the Spring MVOR will be May 1st-3rd at Lost Hill Resort, St. Clair, MO (a wedding & event venue). **Meeting adjourned.** The meeting was followed by a showing of Denise Vaughn’s video on Perry Co. –Respectfully submitted, Alberta Zumwalt

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MSS web site –www.mospeleo.org **Carroll Cave Conservancy website** <http://www.carrollcave.org>

Ozark Caving web site– www.ozarkcaving.com **MCKC website** – <http://www.mocavesandkarst.org>

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

Petroglyphs, inscriptions, & pictographs: rockartmo.com

Notice: State Park Graffiti Removal Project. The cave is located on Washington State Park and is badly graffiti covered. A tentative date is April 18th. At this point I am looking for a rough head count of anyone willing to help. For more information, contact Alex Litsch or follow this link:

https://docs.google.com/spreadsheets/d/1dU_1QZiyqwaa_SDUTPDe6Lg03lwCIF4oR3taQLrsCo/edit?usp=sharing

Calendar: May 1st – Next MSS Liaison deadline.

May 1st – 3rd –Spring MVOR - Lost Hill Lake Resort, St. Clair, MO. Hosted by Jessica Tygett-Self.

May 30th -31st – MSS Weekend. Meeting on Sunday, the 31st at 10 am. Current River S.P.