

# THE MSS LIAISON

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## AFFILIATE ORGANIZATIONS:

CHOUTEAU-KCAG-LEG-LOG-MMV-MSM-MVG-OHG-  
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**Missourians bring home NSS Awards at Waynesville Convention.** Many Missourians were recognized at the 2015 NSS Convention held July 13-17 in Waynesville, Missouri in the fields of cartography, artistic design, history, photography and service caves and to the NSS. **For some years** the Cartographic Salon has had several entry levels, to encourage new mappers doing excellent work, without directly competing with mappers who have 30-40 years of experience. Simply being picked for display is also considered an award. Winners this year included: Jeff Crews - Honorable Mention, Carlson Caverns. Scott House - Merit Award, Main Corridor Sheet, Carlsbad Caverns. Dan Lamping - Merit Award, Lawrence Hollow Pit Cave. Chad McCain and Kris Hartmann - Merit Award, Black Fathom River Cave System. Chad McCain - ribbons for two Illinois caves. Ben Miller - Merit Award, Bluff Dwellers Cave. Rich Raber - Chosen for display, Rollins Cave #2, a map he completed in the 1960s. Bryan McAllister, received Best of Show and Caver's Choice for the Spring MVOR 2015 T-shirt. In the Symbolic Emblem Salon, he also received a Merit Award for the Convention Patch and pin, and the Caver's Choice Award for the Convention Patch. **Dwight Weaver** received the Society's Peter Hauer Spelean History Award, which is given for outstanding work in the field of cave history. Dwight's award was a lifetime achievement



award for contributions to Missouri cave history. **Derik Holtmann** had two photos accepted for show in the photo print salon, and received a Blue Ribbon for his image of a Bat. Jo Schaper had 5 paintings accepted for show in the Fine Art Salon and received a certificate of excellence for an acrylic looking down the hole at Devil's Well. **Jon Beard** received a Certificate of Appreciation from President Wm. Shrewsbury for his tireless work in cave restoration. Jim Huckins and Rich Raber were awarded Fellows in the Society, and Bill Palmer, former Missouri State Parks director, received his 50 year NSS pin. **It would** be impossible to name the dozens of the Missouri cavers who helped at the convention, presented a paper, led a field trip,

chaired a session or who was simply in the right place at the right time to get things done. You all know who you are! **Outstanding** efforts above the call of duty needing to be recognized are Joe and Kris Nicolussi, convention chairs; Alicia Wallace and her MVG logistics crew coordinating just about everything behind the scenes; Kirsten Alvey who obtained access permission for hundreds of local caves and coordinated trips; the numerous folks who made sure almost everyone who wanted to visit Carroll Cave could do so; Dan Slais (a retired schoolteacher, geologist, and Onondaga Cave guide) who got his first taste of organized caving by building the 352 page guidebook from scratch in 4 months; and Scott House, who educated, edified and entertained the crowd as the banquet speaker. **If someone** was inadvertently missed, please contact Gary at gzumw@aol.com for the next Liaison.—Jo Schaper

**Titans of Cartography or Our Last Name is Survey, Statistics and Damned Statistics!** Recently, I was tasked with bringing the MSS map archive up to date, really, tasked with consolidating all the sources of maps and inventorying everything to make sure that no files are missing and that we preserve the best quality documents for the future. When I started this summer, there were 3543 map records in the database. **Today**, we have over 4400 digital (jpeg) map documents or records as of 7/23/15, but this is not the number of caves we have mapped because some caves have many documents and sometimes multiple versions by different authors. Crevice Cave, for example, has 25 documents that are primarily an artifact of how the very large original documents were cut into pieces before scanning (without any overlap). One task we need to consider is re-scanning these documents as a single document so that there are no gaps at the edges or rather no seams at all. I have “restored” many of these cut up panels as a single composite and the seams are generally evident. Multiple documents also result from separate black and white, color, biological (restricted) and archaeological (also restricted) versions of the same map. **There are** approximately 3300 caves that have at least one map with length attached to them, either through survey or by estimating from the map itself. Each cave gets only one length for this analysis. Of those with length attached, we can say that we have over 370 miles of passage mapped. By far, the greatest length of passage is of course in Perry County which has about 28% of the 370 miles. Of the top 5 longest caves (except Carroll Cave), 4 are in Perry County which help to put Perry County over the 100 mile mark of passage length. Shannon County with our second highest cave count and highest mapped cave count, also has our second highest footage of mapped cave, about 9% of the 370 miles. Pulaski County, which for a long time had the most caves in the state, has the third longest sum of cave length and has 8% of total length. (Spike Crews presented a nice talk on the significance of Pulaski at the NSS Convention in July of this year.) When you look at mapped cave count and total mileage for a county, you’ll find that Perry County has an average of 1821 feet per map (obviously slanted by the very long caves), Shannon only has an average of 381 feet per map and Pulaski has 1286 feet per map. This is just one of those damned statistics: Marion County with 3 mapped network/maze cave systems has an average cave length (for its 8 mapped caves) of 6175 feet per map. **Thinking of length**, we have less than 70 caves with surveyed passage over a mile, while almost half of the mapped caves with footage are less than 100 feet long. **There are** 5 principal authors (Titans of Cartography) who have over 100 cave maps (not counting variations like color or biology) to their name: Scott House (561), Bob Taylor (252), Ben Miller (233), Mick Sutton (193) and John Schwartz (126). Tex Yokum missed by 4 caves; Jonathan Beard by 14. Besides Beard and Yokum, 6 other authors submitted more than 50 maps (ordered by number of maps): Ken Thomson, James Potts, Paul Hauck, Lang Brod, Dan Lamping and Dwight Weaver. Rounding out to the top 15 authors would include Jim Cooley, Don Baker and Eric Hertzler (last 2 tied at 15th). Almost half of these authors are actively mapping today. If you think of significant contribution to cartography, you also have to consider the authors of the top 5 longest caves, each over 10 miles of surveyed passage: Crevice Cave with cartography and updates by Paul Hauck; Berome Moore Cave by Tex Yokum (and remapping by S. House); Rimstone River and Mystery System by Joe Walsh; and the ongoing mapping of Carroll Cave by the Carroll Cave Conservancy. **There are** over 70 counties with maps, about half of these counties are 50% complete. That is, 50% of their accession numbers have maps. Surprisingly, there are 5 counties that have every cave mapped, which is really driven by low cave counts and short caves, 59 accession numbers and 59 maps in the 5 counties. With only 10 more cave maps, we could map 100% of 4 more counties. Of course, our able cave finders might also keep all these counties growing in cave count...just takes a little footwork. **Of the 32** counties where a single author submitted more than 10 maps, several authors championed (published the most in) more than one county: S. House (6 counties), B. Miller (5), R. Taylor (5), M. Sutton (3), J. Potts (2) and Don Myers (2). Another 10 authors championed a single county with more than 10 maps are alphabetically: Matt Beeson, L. Brod, Charles Coatney, M. Fuller, George Kastler, Adam Marty, Chad McCain, J. Schwartz and D. Weaver. Although not the single biggest producer in a given county, significant contributions were made by a second place author (and his map count): T. Yokum (70 maps), D. Lamping (36), S. House (33), K. Thomson (31), Ron Martin (26), James Corsentino (23), Kris Hartman (20), L. Brod (16), E. Hertzler (16) and J. Beard (12, 2nd place in 2 other counties). **I want** to thank all of those who continue to contribute and who have contributed to the cave archive. And I also have to mention those support teams who pulled tape and took measurements, since without them (including me) we would not have the map archive that we have today. Errors of omission and of commission are mine, sorry...send corrections to

slagrush@gmail.com **And a reminder:** the archive is collecting lots of digital archives including: scanned field notes, Walls data, Adobe Illustrator files, Xara files, etc. Send submissions to slagrush@gmail.com – Ken Grush

**Missouri Speleological Survey. Files Report for January – August 2015.** Wow, such a vast amount of information has come in this year that it is hard to keep track of who sent what and when. And material is still coming in. Major notes include the creation of qualified point locations for the entire state and an updated maps table with over 4200 records. The other huge advancement is the addition of the fully functional faunal records table, which now enables us to enter our own faunal records in our own database and have each occurrence linked to a point location. **Many**, or most, of these records are coming in already in FileMaker format. Expect that we will widen the circle of contributors with run-time versions of the database (NB: training required!) **Here**, in alphabetical order (and no doubt incomplete) are the contributors and their contributions.

**Kirsten Alvey** sent:

- Photos of an MDC trip into Coffin Cave.
- A couple of hundred bat records from a variety of counties so we can work on getting those imported into the database. Great work!

**Jon Beard** sent:

- A variety of descriptions of caves in Ozark County.
- An entire data set for Christian County which was integrated into the master file
- A new cave report and a cave map of Bone Holler Cave from McDonald County.
- Ten new cave reports from Barry County and one new cave from Texas County.
- New map of Blakemore Pit in Polk by Jon and Bob Taylor.
- New cave in Christian County.
- Map of Devils Slide Cave in Greene County, started by Taylor and finished by Jon.
- Map of Pump Cave, Dade County, also originally started by Bob.
- Sent many faunal records, like 110 or more which are all now part of the faunal records table.
- Map of Kettle Cave, McDonald County.

**Michael Bradford** sent:

- A new cave location and report in Pulaski County, which they have mapped and he is now drawing. Along that stretch of the Gasconade River, there has not been a new cave reported for many decades.

**Josh Brewer** sent:

- A map of Mosby Cave, Clay County. Jim Cooley had obtained a pencil draft of the cave from one of the people who surveyed it in 1971. Josh agreed to put it in digital form and did a nice job.
- Redrafted map of Wolf Den, Pulaski County, originally drawn by James Corsentino.
- A very nice new map of Mossy Falls Cave, Shannon County, redrafted from an original pencil draft by Tom Panian.

**Shelly Colatskie** of MDC sent:

- Photos of the historic Crevice entrance and photos of Coffin Cave, Laclede County.
- She also passed on the location of a short new crawlway cave on MTNF lands that had a couple of bears denning in it.
- Photos of a trip into Round Spring Cave for a couple of Japanese herpetologists.
- A report of a new cave in Franklin County on MDC land found by MDC.
- New cave location in St. Clair County.

**Jim Cooley** sent:

- two new cave reports for new caves on MTNF land in Oregon County.
- New cave report for Benton County.
- Maps of Turtle Altar Cave in ORE and Vic Nickel Cave in St. Clair.
- Map of Sycamore Bliss Cave map in Oregon.
- Corrections on locations in Benton County.
- Location information on Mosby Cave, Clay County.
- Eight new reports on new caves at Lake of the Ozarks State Park.
- Map of Mosquito Cave, Miller County in Lake Ozarks State Park.

- Forty-five faunal records from caves at Lake Ozarks SP and Ozark County.
- Location, photo and report on a new cave in Washington County.
- New faunal records from Camden and Ripley Counties.
- Monitoring reports from Lake of the Ozarks SP.

**Spike Crews** sent:

- New ArcGIS files for the entire state.
- Several new cave reports and monitoring reports.
- New cave report for Pulaski County.

**Don Dunham** turned in

- A report on a new cave in Jefferson County.

**Tony Elliott** of MDC sent

- Info on a cave in Barry County and on one in Crawford County.
- Results of swabbing for WNS for several caves.

**Susan Farrington** of MDC sent

- Information, photos and location on a new cave in Shannon County.

**Andy Free** turned in:

- Two new cave locations from MTNF land in Pulaski County.
- Map of Great Sprite Cave in Pulaski County on Mark Twain NF land.

**Ken Grush** sent:

- Information on and a photo of a cave in Benton County.
- A complete update on locations from Camden County.
- A revised maps table for the database with over 4700 records. This is a huge amount of work.
- Lots more related description records.

**Paul Hauck** sent:

- Maps of Linter Pit and Grasso Cave from Perry County.
- A photo and location information on a cave in Gasconade County.
- A big pile of trip reports from Crevice Cave, which included detailed faunal counts, something we need even more of.

**Eric Hertzler** sent:

- Five new caves in Christian County.

**Scott House** (yep, me) added:

- Several new cave locations from Perryville and revisions on a dozen more.
- New info on a Pioneer Forest cave in Shannon County.
- Revised locations of approximately 4000 caves in the state, qualifying locations, and making sure we had point locations for the entire state.
- Several maps, but I forget which ones.

**Dan Jackson** of the NPS Omaha office sent:

- A note on the history of Welch Spring Cave which he has been writing up.

**Gary Johnson** sent:

- A nice set of maps of Beck Cave, Hickory County.
- A final draft of Blackwell Cave, HKY County and an archival set of the survey data.
- A really nice map of complex Siphon Cave in HKY which was mapped by Mick Sutton, Sue Hagan, and Mike Beeson in 1998. Ken Grush salvaged the notes and Gary drew the map.

**Mark Jones** sent:

- Bunches of reports from survey and inventory trips to a variety of caves in a variety of counties. Mark always includes great detail and faunal counts.

**Robert Kavaliauskas** sent:

- A trip report on a cave in Cape Girardeau County.

**Dan Lamping** sent:

- A description and eleven faunal records from Creech Cave, Cuiivre River SP and a faunal report from Sherwood Forest Cave.

- Overlay map of Carroll Cave.
- Ninety-seven reports from CCC trip reports of Carroll Cave neatly put into the descriptions table of the database.
- A number of faunal records from trips to caves in Shannon County.
- Information from Ralphord Cave including a report, revised information and faunal record.
- A map of Quarry Spring Cave Texas County in the Ozark Riverways.
- Faunal reports, overlay map, and description from City Park Cave in Perryville.
- Reports, entrance photos, new locations, and faunal reports from two USFS caves in Washington County.
- New cave report in Crawford County that Corey Hart had found.
- Faunal records from a tour trip into Ozark Caverns. (See you don't even have to get wet and muddy to contribute to the cave files – just observe and record and send it in!)
- Records for a USFS cave in Washington County.
- Several newspaper articles on Devils Well, which he transcribed, created new related records for and sent in.
- A map of a new cave from Jefferson County that had dogtooth spar crystals in it.

**Joe Light** sent

- A report on a new (old) cave in the City of St. Louis. Joe has been relocating caves using historical references. Most of the caves, like this one, are now destroyed but they did exist at one time and were reported on. Joe sent this report as an export from a FileMaker runtime, which worked perfectly.
- Report on the entrance of Cave of the Falls in St. Louis County.
- A report on a monitoring trip to Running Bull Cave in PRY and new graphics on how to find that cave.

**Randy Long**, formerly of Mark Twain NF, sent:

- A pile of cave leads and other information on caves in various places.
- A nice report and entrance photograph for a new cave in Shannon County.

**Chad McCain** sent in:

- Completed map of a Mark Twain NF cave from Oregon County plus a photo of a bear print inside the entrance.
- Final map of Lloyds Cave, Ste. Genevieve County with 1800 feet of passage and incredible vertical detail.
- As a result of ridgewalking and location checking he sent new locations and reports on seven caves in Shannon County, mostly in the Alley Spring recharge area.
- Map and new updated report of Skylight Pit, SGE.
- Photo and revised location of Tabor Creek collapse, Howell County, which has filled back up.
- Report on trip into Crevice Cave, Echo Pit entrance, which is closed.
- Informational note, draft map and a lengthy report on Gegg Cave, Ste. Genevieve County.
- A revised report on 10 Degree Pit in SGE and Martin Pit in Perry County.
- More trip reports from Blackfathom plus a nice new overlay map of Blackfathom and the main series of maps as seen at the NSS convention.
- Ten locations, most of them new caves, from USFS land in Howell County, plus reports and photos.
- Information on caves along a stretch of the Katy Trail which more than doubled the number of known caves in Howard County.
- Information on some old copper mines in Ste. Genevieve County, parts of which are caves, which may prove to be good bat habitat.
- Thousands of archival photos, maps, trip reports and lots else. Like 11 gig of data which he downloaded to my archival drive.
- Three new cave locations from Boone County.
- New cave report from Christian County on Mark Twain NF land.

**Ben Miller** sent:

- Map of Reeves #2 in Crawford County.
- Map of 100' long Crawl to Glory in Taney County.
- Map of Daylight Cave, McDonald County.
- Map of the show cave Bluff Dwellers Cave in McDonald County.
- Map of Park Cliff Pit in Barry County.

**Dennis Novicky** sent:

-Draft map of Lawrence Hollow Cave in Shannon County, which I am doing the final draft of. Dennis did a really nice job.

**Bob Osburn** sent:

-A set of shape files for Branson Cave in the Ozark Riverways

-A trip report for a survey trip in Crevice Cave.

**Ben Perkins** of OCDA sent:

-A report and photographs from an authorized MTNF monitoring trip into The Gulf, Wayne County.

**Rhonda Rimer** of MDC sent:

-Revised location and other info on Stockton Cave, Cedar County.

-New information and a better location on a cave in Webster County.

**Kayla Sapkota** sent:

-Four cave maps, plus locations, reports, and photographs of several more caves in the Ozark Riverways, along the upper Jacks Fork River.

**Tony Schmitt** sent:

-A map of Pump Lead Spring Cave in the Ozark Riverways

-A location for a new cave in Shannon County.

**Blaine Schubert** (via Jim Cooley) sent:

-A trip report on Perkins Cave.

**Stan Sides** sent:

-Two cave reports from Perry County plus copies of survey notes.

-An old article he wrote "Caves of Perry County" from 1962.

-Photo of an entrance to Berome plus survey from another nearby cave, and part of Pot of Gold survey.

-Selections of digitized slides from Perryville.

-A historic newspaper article on Devils Icebox from 1926.

-Old photo of Dorothy Taylor Cave in Perry County.

-Information on caves, geology, and dye tracing from Cape Girardeau County.

-Information on a cave in Bollinger County.

**Joe Sikorski** sent

-A map of McCubbin Spring Cave in the Ozark Riverways.

**Marion O. Smith** of TN sent:

-Several reports of Civil War use of caves, including apparently, Cliff Cave in St. Louis County, as well as caves in Maries and Crawford Counties (unsure what cave these might be).

**Mick Sutton** sent:

-new cave species table and numerous revised faunal records.

-Report on Hedley Cave, Crawford County.

-Fifty new faunal records from numerous caves in numerous places.

-Another 40 faunal records including a bunch from Jack Reynolds ~1959.

-Another 117 or so records gleaned from old Missouri Speleology issues, other sources, and his field work.

-Map of Dry Creek Cave, Howell County.

-Revised point location files

**Angie Trombley** of MTNF sent:

-Faunal counts and other information on a Forest Service cave.

**Dwight Weaver** added:

-Tidbits of history to several cave records - always fascinating stuff.

**Richard Young** sent:

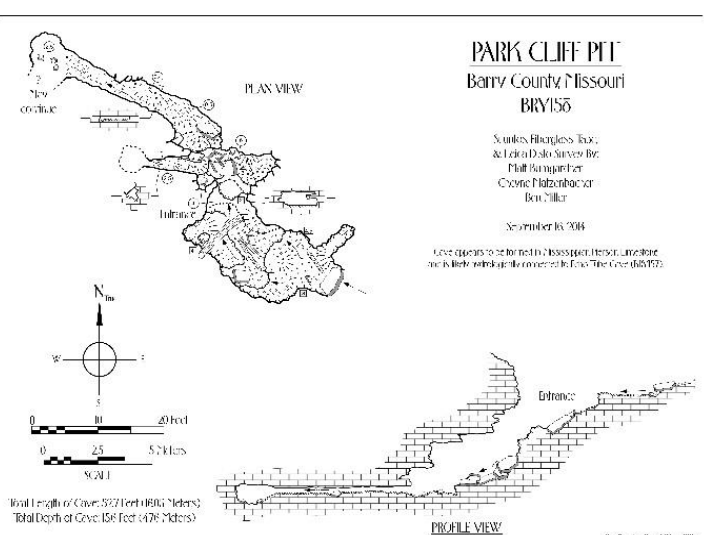
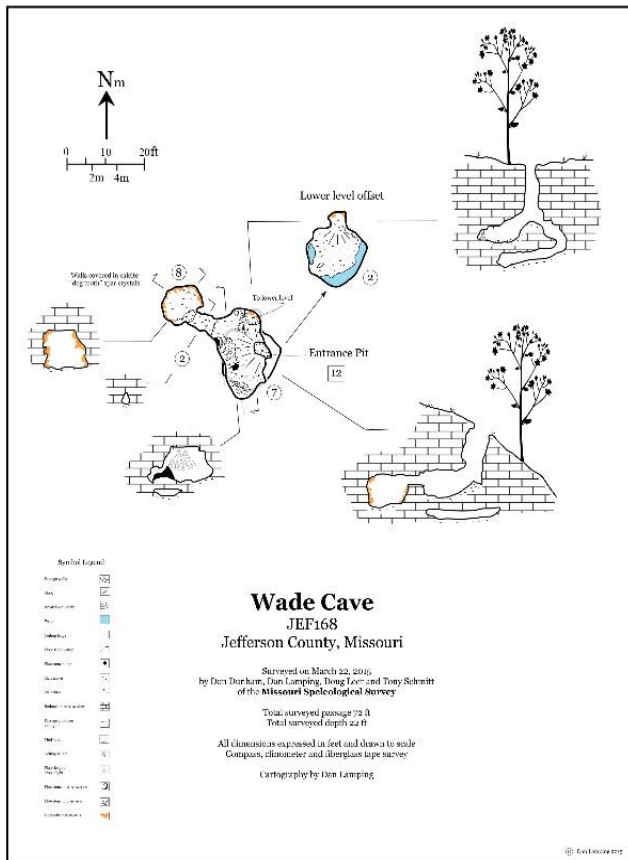
-Historical accounts of caves in Perryville.

-A faunal count from a trip in Crevice Cave

-An improved location for a cave in Cape Girardeau County.

-A detailed report on Streiler City Cave in Perryville, for the files.

-Photos of cave entrances near Sereno, Perry County



**Right now**, there are 6972 records for cave entrances in the state. As in the past, this includes disparate entrances to the same cave, such as three entrances to Crevice and three for Onondaga. It also includes, sadly, a few caves that have no locations other than county, which have been in the files for years. And many locations, frankly, are little better than cave leads – such as those which have a section (one square mile or 640 acres) for a location. Little better are those which have one quarter section, which is 160 acres,

and no report. As I audited the locations I removed over 20 records which had either no location or were duplicates of another cave in the files. That process is ongoing. However, we have also added over 70 new caves.-- Scott House, Missouri Cave Database, 1606 Luce St., Cape Girardeau MO 63701. 573-651-3782 scott\_house@hotmail.com

**Kansas City Area Grotto.** Since we did not turn in a report for the last reporting cycle, this information represents two reporting cycles' worth of KCAG project-caving activity. **April 16<sup>th</sup>** - Jim Cooley, Ken Grush, Dennis Novicky and Brenda Goodnight checked out Coakley Spring Cave (CAM-030), as part of the Cave Research Foundation's (CRF's) Lake of the Ozarks State Park survey initiative. We found the roughly 1,000 feet of low passages reported by D. Weaver in 1983 after digging out a trench through gravel and lowering the water level in the spring cave, are again completely sumped, leaving only about 30 feet of accessible cave. We then continued to Perkins Cave (CAM-027), where we replaced defective locks and photographed tri-colored bats fully infected with visible White Nose Syndrome fungus. Dennis Novicky also demonstrated some significant deficiencies in the gate engineering by passing easily through it while it was locked. **April 17<sup>th</sup>** - Jim Cooley, Ken Grush and Dennis Novicky pushed the survey for another 289 feet in Pin Oak Cave (CAM-113), which is also located in Lake of the Ozarks State Park. **April 30<sup>th</sup>** - Jim Cooley, Pic Walenta, Andy Free (MSM) and Jessica Self (MSM) joined Ron Moon (Forest Technician), Daniel Jordan (District Biologist), and Tamar Manniko (District Archeological Technician) of the U.S. Forest Service (USFS), Mark Twain National Forest (MTNF), to review trail-blazing requirements at the Silver Mines Recreational Area near Fredericktown, Missouri, for a four-entrance mine closure project at the end of May. **May 2<sup>nd</sup> - 4<sup>th</sup>** - Jim Cooley and Pic Walenta hiked out onto the Irish Wilderness to verify the location of the unsurveyed Lagoon Cave (ORE-136) and Accident Cave (ORE-137) and to determine availability of water sources to support a future backpack survey initiative. Walenta encountered a maternal turkey buzzard (*Cathartes aura*) nesting on two eggs in the mouth of Lagoon, to their mutual consternation. **May 28<sup>th</sup> - 31<sup>st</sup>**, Jim Cooley led a project team including Pic Walenta, Joe Williams (MSM), Mark Jones, Dennis Novicky, Brenda Goodnight, Dave Mead, Larry Shaffield (photography), Ron Moon (MTNF), Scott

Pierce (MTNF), Becky Ewing (District Ranger, MTNF), Daniel Jordan (MTNF), Tamar Manniko (MTNF), Bree McMurray (Missouri Department of Transportation bat biologist, MODoT), Bill Wilder (MODoT), and six Ameri-corps volunteers (Chelsea Catalano, team lead, plus Emma Lena, Kelsey Anderson, Paul Lewis, Scott Frey and Sean Kerr), to gate the Gabriel Mine on the Silver Mines Recreational Area. Assisting with rigging a high line to send equipment across the river were Dr. Jay Kennedy, Terry DeFraties, Rita Worden (Chouteau), and Cliff Gill. **June 1<sup>st</sup> - 7<sup>th</sup>** - Elements of this team removed the gate in front of the Einstein Mine and regated it, gated the Einstein Mine adit, and gated the Apex Mine #1. During the course of the project, Dennis Novicky shot video of about 800 feet of the main trunk passage of the Einstein Mine, documenting conclusively that the mine needed to be closed for public safety. During the gating of the Gabriel Mine, once the equipment was across the river, torrential rains caused the St. Francis River to jump 10 feet, greatly complicating the extraction of the generator back across the river from the Gabriel Mine entrance. Walenta and Goodnight did yeoman service on the culinary front. **June 8<sup>th</sup>** - Jim Cooley delivered gating gear to and assisted in an SPG project to regate Crystal Caverns (BRY-002) in Cassville, Missouri, which had been recently breached. **June 13<sup>th</sup> - 17<sup>th</sup>** - Jim Cooley led a project team consisting of Ken Grush, Mark Jones, Dennis Novicky, and Brenda Goodnight to continue the KCAG survey project at Cloud 9 Ranch in Ozark County. Dennis Novicky and Mark Jones surveyed in the far reaches of Cold Cave (OZK-008), in virgin passage discovered by KCAG, wrapping up this survey. Meanwhile, Cooley did map cartography quality control (QC) checks on Ship Rock Shelter (OZK-104) and Dani Cave (OZK-048). Cooley, Novicky and Jones surveyed in Fogey Cave (OZK-012), while Grush and Goodnight did map QC in Spring Creek Cave East (OZK-099) and Spring Creek Cave West (OZK-100). Buzzards (*Cathartes aura*) are again nesting in Spring Creek Cave East. Novicky, Jones and Grush continued the survey in Fogey Cave



*Generator evacuation across flooded St. Francis River, Silver Mines Rec Area gating project.*

(OZK-012), while Cooley fixed a flat tire and did map cartography. Cooley, Jones, Grush and Novicky did map QC on Dani (OZK-048) and Frank Caves (OZK-049). Then Novicky, assisted by Jones, Grush and Cooley, discovered virgin passage beyond a tight lead and pushed the survey in Make Your Mark Cave (OZK-107), an artifact-rich cave discovered on the ranch by KCAG. This cave also had what we believe to be a large and spectacularly fragrant otter (*Lontra canadensis*) latrine in it, just full of half-digested, rotting crawfish. Novicky and Jones performed map QC in Lion Cave (OZK-095) and Moonshine Cave (OZK-024). **June 22<sup>th</sup>** - Jim Cooley, George Bilbrey (CRF) and Kay Foglesong welded up and reinforced the gate at Perkins Cave (CAM-027), after multiple detours and distractions caused by encountering two bridges washed out by high water, a road nearly destroyed by flooding, and a flat trailer tire. A big thanks to Dennis Novicky and Brenda Goodnight for retrieving the generators and other gating gear from the gear depot at the Powder Mill Research Center on Owl's Bend in Shannon County, and bringing this equipment up to Camden County to make this project possible. **A number** of KCAG cavers made major contributions to the NSS convention July 13<sup>th</sup> - 17<sup>th</sup>, including Dr. Jay Kennedy, M.D., who ran the medical tent, Shelly Fields, a registered nurse who assisted, and DJ Hall, who performed a number of functions including setting up the website and on-line trip reservation system, facilities management, and scheduling salons and presentations. Rick Hines, Bill Gee and many other cavers ran a BUNCH of trips into Carroll Cave, even though the cave was severely flooded the first half of the week and Thunder Falls was effectively Thunder Pond, with lower Thunder backed up so high that overflow ran down the Carroll River passage. Jim Cooley and Crash Kennedy evaluated Roubidoux Cave (PUL-001), a privately owned cave, for a cave gate, at the behest of Kirsten Alvey-Mudd. **During the NSS Convention**, July 11<sup>th</sup> - 18<sup>th</sup>, Jim Cooley and Ken Grush hosted a pre-camp and cave trips into the two caves located at Big Caverns Ranch, near Dixon in Pulaski County, where KCAG has two ongoing survey projects. Allie Spring Cave (PUL-317) was sumped through Wednesday, but a trip was able to visit Mill Creek Cave (PUL-012) on Tuesday. Then, on Saturday, Dennis Novicky and Brenda Goodnight led six Austin, Texas cavers (Galen & Ellie Falgout, Richard Zarria, Guin McDaid, Gary Donham, and Scott Walquist) on an exploration trip into Allie Spring cave (PUL-317) that discovered a



number of apparently virgin passages, an unexpected cairn, a bear skeleton (probably *Ursus americanus*), previously unsuspected formation-laden sections, 60-foot domes and 40-foot or deeper pits that will require vertical gear to descend. The cave seemed to get bigger and more complex the deeper the team penetrated into it.

**July 31<sup>st</sup>** - Jim Cooley met with Jon Beard (SPG), Spike Crews (an MSM member also employed as a geologist by the Missouri Department of Natural Resources), plus members of the U.S. Fish and Wildlife Service, the Missouri Department of Conservation, and MODNR's Division of State Parks. This large team visited the two-sinkhole-entrance, both-entrances-gated River Cave (CAM-003) at Ha Ha Tonka State Park. The purpose of the visit was to assess flood damage to the gates at River Cave, and suggest remediation and repair strategies. **Aug 1<sup>st</sup>** - Jim Cooley and Krista Bartel assisted OCDA divers and support personnel (Ben & Amanda Perkins, Dirk Bennett, Travis Strickland, and Konstantin Chartkov), as well as the landowner Zach Worrell and his brother-in-law Jason House, to dive the sump at the back of Lewis cave (RIP-001) in Ripley County. The dive team of Ben Perkins and Dirk Bennett transited a 75-foot-long sump, discovered 341 feet of new passage, transited a 50-foot-long second sump, and discovered another 1,000 feet (estimated) of air-filled going borehole, with a waterfall in it. A major find was the verification, in two separate places, of the blind, stygobitic Eigenmann's cavefish (*Typhlichthys eigenmanni*, formerly classified as the southern cavefish, *Typhlichthys subterraneus*). This was the first confirmed sighting of this creature in Lewis Cave, although there were old, unconfirmed historic reports. After the dive, the Lewis Cave landowner (and MSS cooperator) Zach Worrell led Cooley & Bartel to a sinkhole cave forming in the drainage of Big Barren Creek on the MTNF. So far, it is not an MSS-reportable karst feature or cave, but looks like it could open up at any moment. **Aug 2<sup>nd</sup>** - Jim Cooley and Krista Bartel visited the entrance to Coalbank Cave (CTR-023) on the Ozark National Scenic Riverways (ONSR), a major gray bat maternity colony with a vulnerable, small entrance located at the bottom of a sinkhole, to see if recent catastrophic rains had blocked the entrance. Such events have happened before at Coalbank, and had happened at River Cave (CAM-003) in early July. Fortunately, Coalbank was fine. **Aug 15<sup>th</sup>** - Jim Cooley



*Damaged chute gate at River Cave after sinkhole collapse secondary to flood events. Before sinkhole collapse, this chute was ten feet above the sinkhole floor! Cooley is standing on a ten-foot-deep detritus field.*

trained OCDA divers Ben Perkins and Dirk Bennett in cave survey techniques in Mill Creek Cave (PUL-012), to better prepare them to survey beyond the sump in Lewis Cave in a couple of weeks. Afterward, Dennis Novicky took Perkins and Bennett back to the sump in Allie Spring Cave (PUL-317), to evaluate whether it was a candidate for a dive trip. It is not: Too far to go, too silty, and it does not have a wide enough submarine passage to enter safely. **Aug 16<sup>th</sup>** - Jim Cooley and Dennis Novicky continued the survey of Pin Oak Cave (CAM-113) at Lake of the Ozarks State Park, netting another 171.6 feet of wet, muddy sketches. **Aug 17<sup>th</sup>** - Jim Cooley met with two representatives of the Missouri Department of Natural Resources, Division of Land Reclamation, to evaluate four mine shafts for closures at the privately owned Valle Mines property southwest of St. Louis. Afterward, Cooley met with Ron Moon (MTNF) at his property in Washington County north of Potosi, where he was shown Moon's Cave (WSH-053), previously unknown to the MSS, and four mine shafts dating to the early 1700s. Dennis Novicky and Brenda Goodnight led landowner Bruce Archambault and two of his friends into Allie Spring Cave (PUL-317), where they made even MORE new discoveries of ever larger, going virgin borehole. **Aug 18<sup>th</sup> - 19<sup>th</sup>** - Jim Cooley and Shawn Williams evaluated a cave for the Department of Natural Resources for a possible gate, and visited several other caves. **Aug 28<sup>th</sup>** - Ken Grush, Alex Roberts (Chouteau), landowner Zach Worrell and his wife Stephanie, friend Dustin Ritter, and others supported an OCDA dive and survey trip into Lewis Cave (RIP-001) to follow up on the project a month before. OCDA divers were Ben Perkins, Chris Hill, Konstantin Chartkov, and Bob Koch (videographer), supporter by OCDA Sherpas Amanda Perkins and Vic and Diana Bentele. Perkins reported: "A crew of four divers and 10 Sherpas assembled at the entrance to Lewis Cave at 7:00 a.m. Briefing and the route to the first sump (SP1) were uneventful, but laborious. We stopped about 100 feet before the start of SP1 to protect the water conditions and geared up. Divers divided into two buddy teams and the first team, which included the videographer, started the dive at about 10:20 a.m., and the second team followed in five minutes, to allow for camera set up in Dry Section 2. This section greeted the divers with a highly decorated passage with a sandy bottom and banks of an underground

stream passage. We transported our gear to a patch of dry area and took some time to look around and develop the strategy for trying to capture as much as we could on video. This type of approach was necessary because as soon as we started breathing, the room started filling with fog created by our breath. This was expected, as divers on previous expedition had encountered the same problem. Videographer Bob Koch had brought a snorkel to divert his own breath away from the lens. At this point, anywhere we would look we saw cave formations. The ceiling was partially covered with white crystals that from the distance resembled layers of cotton. Speleothems hanging off the ceiling were predominantly white and were growing in all directions. When light was placed behind one of the bigger white stalactites, it would glow translucently with a yellow light. We enjoyed the view as much as we could until Bob notified us that he was done filming and we transported our cave diving gear across about 350 feet of partially water-filled passage and, as before, stopped well short of the opening of second sump passage. After a short break and preparing for our second dive of the day, I went in first. After a short but tight underwater passage we came out in a large room of Dry Section 3. Moving as little as possible, the first two divers got out of the water so as not to destroy visibility for the following team. We placed our gear on a rocky bank and looked around. Although this was also a well decorated large room, the white crystals were not present. We waited for the other team, then gave Koch the lead on moving forward with the camera while other three divers started surveying. After a short, partially water-filled crawl we ended up in yet another room and noted the sound of flowing water. To our right we noted large breakdown that appeared fresh but after looking around we did not see the continuation of passage. To our



*OCDA Cave Divers & support team enter Lewis Cave. Landowner Zach Worrell & wife are 3rd & 4th from left. Not shown: Ken Grush.*

left, where the sound of the water was coming from, we found a beautiful waterfall about three feet high. The passage above the waterfall continued, but it looked low over rocks that appeared extra sharp. It would require a tough army crawl to penetrate. To our right we noticed a dry passage which was leading up through yet another breakdown pile. We finished our survey for the day at the waterfall, and decided to take a peek at that passage. We finally were in never-seen-before territory. When we squeezed through the breakdown, it opened

up into a parallel of the spring passage and terminated up a 25-foot-high clay hill with signs of surface water intrusion. One team moved up the waterfall passage and one along the newly discovered parallel passage. The waterfall passage was low with sharp rocks, while the parallel passage was smoother, but lower, requiring belly crawling. The parallel tunnel had more open area to the one side but the vertical clearance was so low that it was impassable. Crawling forward the two passages connected and continued as one for about 100 feet. At that point, the water was getting up within four inches of a very muddy ceiling, making further progress impossible at this time. Further exploration will require scuba gear, which would be very difficult to transport to the location, or a prolonged drought. Furthest point of exploration is approximately 200 feet upstream of the waterfall. After returning back to our gear at the inbound exit of Sump 2, we saw we had been in the cave past the sumps for six hours, so we decided to head back to civilization. After getting out of the sumps and taking off our dive gear, cave exit was unremarkable, with a lot of help from the support crew. Everyone did a great job of keeping attitudes good despite it being the end of the day and everyone being tired.” An added bonus to this trip was another confirmed sighting of the blind, stygobitic Eigenmann’s cavefish (*Typhlichthys eigenmanni*). While the divers were in the cave, the Lewis Cave landowners (and MSS cooperators) Zach and Stephanie Worrell led Ken Grush onto a neighbor’s land, where Grush recorded two new caves previously unknown to the MSS, Jack’s Cave (RIP-020) and Big Barren Church Cave (RIP-021). **Sept 5<sup>th</sup> - 7<sup>th</sup>**- Jim Cooley organized a

series of survey trips into Allie Spring Cave (PUL-317) to continue the survey there. Dennis Novicky, Shawn Williams and Brenda Goodnight entered the cave for a two-day camping and survey trip, and completed 761.3



*Landowner Bruce Archambault at Allie Spring Cave, or rather, spring, at flood stage, June 16th. Fully sumped cave entrance is five feet below gate.*

feet of survey (the E survey) in two days, in an area called the Salt Cellar passage. Bill Gee, Rita Worden (Chouteau) and Joe Williams (MSM) surveyed the FA survey for 490.1 feet of survey, to link up with a team heading out from the sump (a.k.a. the Blue Pool), composed of Jon Beard and Max White, who netted 273.4 feet on the complex FB survey. Gee and Worden netted 238.6 feet of survey on the G survey, while Ken Grush and Alex Roberts (Chouteau) did photography. The total new survey in Allie Spring Cave for the weekend was 1,763.4 feet, bringing Allie Spring Cave to just short of a mile. **Sept 7<sup>th</sup>**- Jim Cooley trained Alex Roberts (Chouteau) and Sara Delight (novice) in survey techniques, then took them into Mill Creek Cave (PUL-012) for map QC and pushing some tight passages, at which Roberts excelled. Pic Walenta and Cheryl Paulson fed the teams throughout the weekend, many of whom stayed in the landowner Bruce Archambault's cabin, which he has graciously made available to our gating and survey teams, as well as during the NSS convention. Archambault is an enthusiastic independent member of the MSS – for now, anyway, while there still is such a thing as an “MSS membership.”-Jim Cooley

**Chouteau Grotto. Sept 6<sup>th</sup>** – Allie Spring Cave, Pulaski County. Rita Worden and other members of CRF made a survey trip into Allie Spring Cave with dry weather above. Three survey teams entered the cave and were through the 800ft + water crawl well before noon, proceeding to various assigned tasks. Worden and Joe

Williams took readings in the main passage as Bill Gee produced sketch. We surveyed inward to meet another crew surveying out from the 'rise pool' at the terminus of the right fork. A third crew of three had entered the Salt Cellar passage and would be remaining on an overnight camp. Work was completed and an uneventful exit made by nightfall. The camp crew was encountered on our way out and looked to be dry, warm and rested after a nap and were starting their evening survey. Conditions were as expected and no wildlife was seen in the cave. **Sept 7<sup>th</sup>** -Rita Worden and Bill Gee made a survey trip into Allie Spring Cave to complete the survey up the left fork of the main passage. Shortly after starting the survey a left-side canyon passage was found and surveyed, eventually connecting back to the main passage. During our survey, we encountered Ken Grush and Alex Roberts who had entered to do some survey orientation for Alex, but ended up doing a fair amount of photography. We heard from them that Brenda Goodnight of yesterday's camp crew had been exiting the cave as they came in. They went up the right fork to take photos of the bear bed there. Our survey of the canyon passage consumed a substantial amount of time after which only four more stations were established before it was time to exit. We saw several very old 'coon scat stains with blackened persimmon seeds the main indicator of source. Upon our exit we caught up with Grush and Roberts and we all saw a bat flying while still in the back of the cave. They had brought a couple of gallons of water and treatment tablets for the camp, to be left at the mouth of that side passage. We all missed seeing the side passage, so the jugs were left in the main passage in plain sight as we were aware that the water was intended for future use. A salamander was seen in the stream at some point but it was too fast to identify; it was a large adult, possibly dark sided, but definitely not grotto or cave salamander. Exit was accomplished without incident and plenty of light remained in the evening.-Rita Worden

**Middle Mississippi Valley Grotto. June 6<sup>th</sup>** - Jim and James Sherrell Jr, Shelly Colatskie and Adam Marty visited Garrity Shaft near Valles Mines and did bat banding to ID bats within a Gray Bat maternity colony.

**July 1<sup>st</sup>** - The Sherrells visited Discovery Shaft of Cornstalk Cave near Valles Mines. They also visited Big Lode Shaft. In this area of caves and mine entrance shafts, there is an effort underway, by the DNR, to fill specified shafts. There have been nine filled. Three of the shafts are set to be gated. **July 13<sup>th</sup> - 17<sup>th</sup>** - During the NSS Convention, Brian McAllister visited Railroad Cave which was a through trip to the second entrance. He also

visited Miller cave and viewed the rock art. He noted that the view of Fort Leonard Wood was very enjoyable. Lois Walsh noted that the Speleo History Session was excellent. **July 18<sup>th</sup>** - During a post NSS Convention trip, Jo Shaper, Eugene Vale and Ron Jones visited Stone Mill Spring located on the Fort Leonard Wood grounds. It is the 23rd largest spring in Missouri. **Aug. 22<sup>nd</sup>** - Jim and James Sherrell Jr, Sara Garing (sp?), Richard Young, and Ray Shaw did a photo trip in Garrity Shaft near Valles Mines. **Aug. 23<sup>rd</sup>** - Lois Walsh participated in the Fisher Cave Restoration Project at Meramec State Park. The continued goal is to clean and restore damaged speleothems. It was noted that, since the project began, 235 formations have been restored.-Doug Leer

**Lake Ozarks Grotto.** Our July meeting was held at Fantasy World Caverns with a tour of the cave with the owner, Curtis Whitman who told about the effects of all the rain on the cave. Those in attendance were: Dwight & Rosie Weaver, Karen Weaver, Ken Long, Kerry & Kira Rowland, Krista Bartel, Linda Marg, Cliff Gill, Travis & Kathy Zumwalt, Derek & Brandon, and Gary & Alberta Zumwalt. Ken Long has done an excellent job on the grotto website so if you haven't been on it lately, check it out. **Dwight** Weaver gave a talk at the NSS Convention, "Searching for the spelean history of Missouri." He also received the NSS Peter Hauer Spelean History Award for his contributions to Missouri cave history. Congratulations, Dwight! **Goodwin project.** **July**



*The cave is somewhere on the left side of the picture under about 15' of water- Klaus Leidenfrost*

**5<sup>th</sup>** - Ken Long and Klaus Leidenfrost download the camera and replaced the batteries. There was 10.5 more inches of rain since Klaus had been there the weekend before. Total rainfall since May 25<sup>th</sup> was 24.5 inches. **-Aug. 2<sup>nd</sup>** -Ken and Klaus checked on Goodwin and downloaded the cameras. The sinkhole totally filled with water on July 1<sup>st</sup> and July 10<sup>th</sup>. They entered the cave on the sump side and walked all the way to the sump, which was filled with material. The passage beyond the sump was only about 4" high. (Last December someone crawled 80' past the sump until a tire stopped them!) The ceiling within the first 10' of the cave that was about 10' high in July is now 6' high. **Aug. 4<sup>th</sup>** - Klaus and Jon Beard picked up all the loose pieces of wood which had washed into the sinkhole, some 8" diameter, to keep them from washing into the cave. **Aug.**

**17<sup>th</sup>** -Klaus reported removing about 4-5 dump truck loads from the upper sediment trap and hauled off all the bagged trash on site, aided by Chuck Lahmeyer. Material removed from Goodwin Sinkhole and Cave between 2012 & Aug. 31<sup>st</sup>, 2015: clean fill - 3,197.50 tons; trash laden material - 142.98 tons; trash - 31.78 tons; metal - 1.25 tons; tires - 7.37 tons. Workdays: 30 (2012-13); 24 (2014); 8 (2015); total- 62. Volunteers: 562 (2012-13); 150 (2014); 53 (2015); total- 765. The rainy weather this year has definitely taken its toll on the sinkhole and workdays. There is a great potential here but money and volunteers are needed to make this happen. (And good weather!)- Alberta Zumwalt

**Springfield Plateau Grotto.** **July 3<sup>rd</sup>**—Max White and Matt Bumgardner monitored Horseshoe Cave and two other caves in Arkansas as part of a CRF project at Buffalo National River. **July 5<sup>th</sup>**—Alicia and Jon Beard visited Ha Ha Tonka State Park (Camden Co) to see the effects of copious rains and flooding the past month. The entrance complex to River Cave had been totally inundated (including the picnic area nearby). The upper entrance is completely covered with flood debris (silt, gravel, boulders, tree limbs) and the lower entrance is half buried. Ha Ha Tonka Spring was issuing 2 to 3 times its usual water, silted and boiling from its depths. Alicia and Jon also photographed the Natural Bridge. **Also**—Max White and Matt Bumgardner tried to clean up data on caves at Buffalo National River. They found four short caves, but only one matching the descriptions which they were given. The area was a jungle of poison ivy. Matt vows to only return during the months when the ivy doesn't have leaves. **July 9<sup>th</sup>**—Brandon Van Dalsem visited War Eagle Cavern (AR) and took some nice photos of the cave. He drove down to Arkansas for a hike, but the weather was not wanting to cooperate. He tried three different roads into the area he planned to hike, and all three were flooded. So he went for a tour of the cave. It's a neat cave that he wants to see further when they start the wild cave tours back up. **July 11<sup>th</sup>**—Brandon Van Dalsem and Jon Beard photographed and cleaned the entrance steps (of mud and gravel) to Crystal Caverns (Barry Co). This was Brandon's first visit to the cave, so he spent hours photographing the

cave's delicate features (aragonite, soda straws, biota). Five cave salamanders were seen and some giant fishing spiders including one carrying a large sac of spider eggs. **Also**—Charley Young, Max White and Matt Bumgardner with Kayla Sapkota and other Arkansas cavers did some CRF project work in Fitton Cave (Arkansas). Charley, Max and Matt monitored the upper level from the Bat entrance to the Round Room. That was Matt's first trip in the Bat entrance. The crawl at the beginning was a wee bit annoying, but the tall winding canyon passages were quite amazing. They didn't see the Round Room from below, but peeking over the edge from above was pretty neat. The 40' waterfall on the way had a decent amount of water going over it. There was another section where they could hear quite a rumbling from below but never made it down to that point.

**July 13<sup>th</sup>-17<sup>th</sup>**—Some 19 SPG members attended part or all of the NSS Convention in Waynesville. They include: Dave Ashley, Jon Beard, Matt Bumgardner, Jim Cooley, Roy and Judy Gold, Doug Gouzie, Bill and Bonnie Heim, Jim Huckins, Melvin Johnson, Bill Palmer, Charley Rey, Jack Rosenkoetter, Clayton Russell, Cynthia and Grant Spoering, Paul Wightman and Charley Young. They participated in several sessions and workshops, visited Maramec (Phelps Co), Toronto (Camden Co) and Roubidoux springs, and visited Finley #1, Goodwin Pit (Laclede Co), Living (Laclede Co), Miller, Onyx, Railroad, Roubidoux, Saltpeter (Laclede Co), Skaggs, Tunnel/Spring and other caves (all Pulaski County except as noted). Among the many attendees recognized with awards were Bill Palmer (50 years an NSS member), Jim Huckins (NSS Fellow of the Society) and Jon Beard (Certificate of Appreciation). Hope everyone had a productive, educational and entertaining time. Next year: Ely, Nevada!

**July 16<sup>th</sup>**—Brandon Van Dalsem took the tour through Marvel Cave (Stone Co) in Silver Dollar City. **July 17<sup>th</sup>-18<sup>th</sup>**—Matt Bumgardner joined Arkansas cavers in mapping in Tony Barnes Cave (BNR in Arkansas for CRF). **July 19<sup>th</sup>**—Paul and Jenna Folbre and Jon Beard photographed aragonite crystals, helictites and other speleothems in Crystal Caverns (Barry Co). While there, they surveyed and sketched a significant cross section in the Aragonite Passage. The helictites were photographed by Paul in the Dripstone Attic, a rarely visited upper level passage. A dark-sided salamander was seen in the entrance passage. **July 21<sup>st</sup>**—Brandon Van Dalsem and Jon Beard spent the day continuing the restoration project in Pearson Creek Cave (Greene Co). Brandon spent the day collecting small pieces of glass and trash hidden under rocks while Jon split his time between trash collecting and removing small bits of spray paint from delicate cave coral. Quantity of trash removed was 12.8 lbs. bringing the year's total to 30 lbs. **July 22<sup>nd</sup>**—Brandon Van Dalsem and Jon Beard met with a landowner about some karst she knew on her rural property in Texas County. One looked like a varmint hole under a rock ledge that might be something after a serious dig effort, but without anything else, it was perhaps dubious. The second feature was a small spring, but it issued from a low opening only six inches high by four feet wide. Within 10 feet its dimensions reduced to four inches high. The third feature was a 10-foot diameter sink about four feet deep. Brandon and Jon did some probe digging to see if anything looked promising, but not that day. Some leads result in caves, some don't. It was a great hike in the forest anyway! **July 25<sup>th</sup>**—Jon Beard hosted Boy Scout Troop 210 in the initial restoration project for Eagle Scout candidate Matthew Zimmerman in the lower level of Fitzpatrick Cave (Christian Co). The objective is to clean speleothems stained during the span of 100 years by muddy hands. **July 27<sup>th</sup>**—Jerry Vineyard, Roy Gold and Jon Beard discussed caves with a landowner, photographed his cave with potential plans to map the cave, perhaps next year. **July 28<sup>th</sup>**—Brandon Van Dalsem, Grant Spoering, Cynthia Spoering, Paul Folbre, Luke Buzzard, Lance Butler and Jon Beard conducted continuing restoration of Fitzpatrick Cave (Christian Co). While Grant collected stream gravel from nearby James River and made a non-slip narrow path in the cave's southern section, the others cleaned speleothems and reattached a four-piece drapery stalactite about 18 inches long plus two small stalactites. Work began about 10am and ended about 7pm. Brandon, Paul, Luke and Jon also spent some time afterwards in Breakdown Cave where Jon took some photos to illustrate an article about the silt in the cave for an upcoming issue of SPG's *Subterranean Journeys* while the others explored much of the northern section of the cave. **July 29<sup>th</sup>**—Jon Beard returned to Fitzpatrick Cave to retrieve clamps and tripod from the rejoined stalactites and to photograph the repaired speleothems. **July 30<sup>th</sup>**—Brandon Van Dalsem, Tom Morton, Corey McCraney and Roy Gold assisted Jon Beard in the continuing survey of Carrico Cave (Dade Co), a cave estimated to be 1,200 feet in length. Nearly all of the main passage is mapped now with just four side passages remaining plus some cross sections to do. Eleven bristly cave crayfish were counted in the Pool Room and cave stream. **July 31<sup>st</sup>**—Jim Cooley, Jon and Alicia Beard (representing CRF, SPG and KCAG) attended a meeting of representatives of the Missouri State Parks, Ha Ha Tonka State Park, Missouri Department of Conservation and U.S. Fish and

Wildlife Service at the entrances to River Cave in Ha Ha Tonka State Park to discuss remediation of the flood-damaged entrance sinks and possible preventive measures to keep flood damage from happening again (it has happened twice since 2008). **Aug 1<sup>st</sup>**—Bill Heim and Jon Beard guided Craig Williams and Susie Jansen of C.A.I.R.N. through Fitzpatrick Cave (Christian Co) where a number of chert workings were found, a possible petroglyph plus various small animal bones. Next, Jon took Craig and Susie to check out a possible mortar (of grinding stone fame) near Road Cave (Greene Co) before checking the documented mortar at the entrance to Giboney Cave (Greene Co). Nearby, they checked the environs around Doling Park Cave #2 including two very old drinking fountain supports, one with pieces of speleothems in its build. **Aug 4<sup>th</sup>**—Jon Beard joined project leader Klaus Leidenfrost in collecting and burning tree branches that had washed into Goodwin Sink (Laclede Co) to prevent this material from washing into the cave at a later date. July floods filled the sink full of water from 92 acres of drainage, adding a quantity of gravel, cobble and mud to the main sediment trap. **Aug 8<sup>th</sup>**—Jon Beard removed the last (?) of the black spray paint graffiti from the Paul's Gallery section of Fitzpatrick Cave (Christian Co). The spray paint had been applied in 1981 on flowstone with a most peculiar dimpled surface resembling minute pin cushions. **Also**—Matt Bumgardner participated in cave entrance reconnaissance in the Buffalo River area of Arkansas. **Aug 11<sup>th</sup>**—Paul Folbré, Luke and Karli Buzzard and friend Garrett Black spent an evening exploring some of the passages in Breakdown and Fitzpatrick Caves (Christian Co). Lower Level Maze Loop, Fourth Level and Handshake Hall were among the side passages seen. This is one cave system listed as two caves because of a flowstone constriction between the two parts. **Aug 12<sup>th</sup>**—Roy Gold assisted Jon Beard in a survey session in Lowell Cave (Wright Co) as part of a CRF project for the Missouri Dept. of Conservation. Detail was added to both upper and lower levels of the cave as well as biological monitoring. **Aug 15<sup>th</sup>**—Brandon Van Dalsem, Grant Spoering, Cynthia Spoering, Clayton Russell, Lance Butler and Jon Beard monitored biology and photographed the entrance and main passages in Dream Cave (Ozark Co), a cave co-managed by SPG and MCKC and owned by the ORLT—about 4,000 feet of cave was visited. Twelve adult grotto salamanders, seven salamander larvae, 25 pips and 30 northern bats were counted (winter quantities of these bats average a total of 1,000-1,500). **Aug 15<sup>th</sup>- 16<sup>th</sup>**—Max White and Matt Bumgardner joined others in CRF projects at the Buffalo National River in Arkansas. **Aug 18<sup>th</sup>**—Charley Young assisted Jon Beard in the completion of the survey of the upper level of **Lowell Cave** (Wright Co) as part of CRF survey of the cave. The bizarre upper level is over 1,000 feet in length, much of it directly over the lower level. While Jon sketched, Charley took several photos of speleothems and passage. **Aug 20<sup>th</sup>**—Brandon Van Dalsem, Corey McCraney and Jon Beard surveyed 317 hard-earned bellycrawl in the lower level streambed of Lowell Cave (Wright Co). The passage is 30 feet wide but only 12 inches high. Most of the time they could keep out of the stream, but a few crossings got them wet enough. After Brandon and Corey became cold, the survey was ended for the day and all checked out the remaining cave to be mapped including some impressive dome rooms. **Aug 22<sup>nd</sup>- 23<sup>rd</sup>**—Max White and friend Cheryl, Brandon Van Dalsem, Lance Butler and Jon Beard joined Lois Walsh, Jessica Tygett-Self, Alex Litsch, OCTF president Kathy Kriska, son Aaron, Paul Hummel and his brother and family and others in the continuing restoration of Fisher Cave (Franklin Co) of Meramec State Park. Several speleothems were cleaned and three speleothems were rejoined, the last two being stalagmites within 10 feet of one another next to the visitor path. The rejoined speleothem total for the project is now at 235, more than 200 of them just in the Ballroom. **Aug 26<sup>th</sup>**—Charley Young and Jon Beard continued the survey project in Lowell Cave of the Fuson Conservation Area (Wright Co) adding another 285 feet of passage to the map. This is the first area past the wet bellycrawl that is dominated by well-developed solutional ceiling channels. The survey is now over 3,400 feet with lots remaining to be mapped. Twelve larval salamanders and six pips were noted. **Aug 29<sup>th</sup>**—Brandon Van Dalsem and Jon Beard extended the survey of the lower level of Lowell Cave (Wright Co), adding 412 feet of passage consisting of alternating crawls and walking passage along the stream. Survey total is approximately 3,600 feet thus far. One more bellycrawl stands between the survey and large domed passage. Four adult grotto salamanders, five pips and a stygobitic amphipod were noted along the way.—Report by Max White. Material provided by Jonathan B. Beard.

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**MSS web site** –www.mospeleo.org

**Ozark Caving web site**– www.ozarkcaving.com

**Carroll Cave Conservancy website** http://www.carrollcave.org

**MCKC website** – http://www.mocavesandkarst.org

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

**Petroglyphs, inscriptions, & pictographs:** rockartmo.com

**Information on MoCaves**, contact Joel Laws, 479 Glen Echo Cir., Prescott, AZ 86303 or Joel@Ozarkcaving.com

Note: To subscribe to MoCaves: send the name and email address of the person that wants to be subscribed  
to: Joel@ozarkcaving.com

**Sept. 27<sup>th</sup>** – MSS board meeting at Berome Moore Pavilion, 10 am. Directions: From Perryville, go to the  
junction of MO Highways 51 and 61, go north on Hwy 61 approx. 1.5 miles to County Road V. Take a right on  
Hwy V. Go about one mile to County Road 906, on left. Go approx. one mile on County Road 906 to the  
third house on right. Pull in the gate at the driveway on right just before the pole barn. You should be able  
to see the green pavilion, before you arrive. GPS settings: latitude 37-46-26 Longitude 89-53-04. –Jim Sher-  
rell. There will be work-related activities during the weekend.

Sept. 27<sup>th</sup> – MCKC board meeting at Berome Moore Pavilion, 7 pm. MCKC will provide dinner for everyone including the cavers who will be helping with Berome & Perry Co. cave surveys for the weekend.

Oct. 2<sup>nd</sup> – 4<sup>th</sup> – Fall MVOR, hosted by Daedalus Grotto near Steelville, MO.

Oct. 30<sup>th</sup> – Next Liaison deadline.

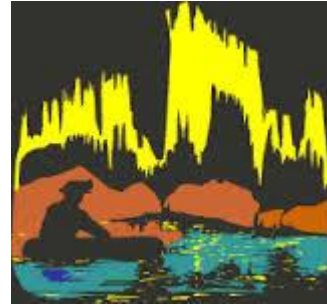
# Missouri Speleological Survey

**Fall 2015 Board Meeting Agenda**      *Sunday, September 27 2015*

*Llyod and Ethel Hoff's Underground Nature Preserve - Perryville, Missouri*

*Hosted by Middle Mississippi Valley Grotto and Missouri Caves and Karst Conservancy*

Start time 10:00 AM



## Administrative Business

- Roll call – Officers and Board
- Secretary's Report and approval of last meeting's minutes – Alberta Zumwalt
- Liaison – Gary Zumwalt
- Treasurer's Report – Don Dunham
- *Missouri Speleology* – *Missouri Speleology* Editorial Board
- Affiliate Organizations – Jon Beard

## Old Business

- Membership

## New Business

## Projects and Announcements

- Cave files / Database
  - New caves
  - Cave maps
  - Cave reports
- Agency Reports
  - *Mark Twain National Forest*
  - *Ozark National Scenic Riverways*
  - *Missouri Department of Conservation*
  - *State Parks*
  - Others
- Affiliate Organizations Project Reports
  - Carroll Cave
  - Berome Moore
  - Others
- Public Outreach
  - Facebook & Website
- Announcements
  - Thank you to MMV & MCKC

## Next meeting & Adjournment



