



COG SQUEAKS

November 2000



Wayne County, Kentucky Beauties. Photo by Bill Walden

GROTTO INFORMATION PAGE

THE CENTRAL OHIO GROTTO

The Central Ohio Grotto (COG) of the national Speleological Society meets at 8:00 p.m. at the Worthington Presbyterian Church the second Friday of most months. The church is on the northwest corner of the square in Worthington. Parking is available behind the church. Enter the parking lot from the first side street off State Route 161. Please contact a grotto officer to confirm meeting time and place. The December meeting is not held at the church.

Grotto Officers	Name	NSS #	Telephone
Chairman	Steve Aspery	38931	614-841-1846
Vice Chair	Dick Maxey	28034	614-888-2285
Secretary	Katie Walden	25894	740-965-2942
Treasurer	Karen Walden	15678	740-965-2942

Executive Committee Members:

Don Conover	20386	937-372-7581
Darrell Adkins	29048	740-392-6382
Doug Burke	41817	614-983-9336

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List servers

Cog@ontosystems.com – Central Ohio Grotto

KCS@ontosystems.com – Kentucky Cave Survey

Please join by sending e-mail with the subject **subscribe**.

Grotto Membership Dues \$15 per individual or \$20 per family.

The C.O.G. Squeaks

The C.O.G. Squeaks is the official newsletter of the Central Ohio Grotto. Articles on cave exploration and study, cave trips reports, cave fiction, cave poetry, cave-related cartoons, cave-related art or photographs are encouraged. Please note that I have a 35mm film scanner and a flat bed scanner. I can handle negatives up to 4 X 5 inches. So, please send me your photos, negatives, or slides for inclusion in the Squeaks. Send material to Bill Walden via mail, e-mail, disk, fax, or even dictation.

NSS organizations may reprint material from the C.O.G. Squeaks so long as the author and Squeaks are given credit unless stated otherwise. Send E-mail to Bill Walden if you want a Word file of the Squeaks to reprint.

The C.O.G. Squeaks is mailed to dues paying members and to grottos with whom the COG exchanges newsletters. The C.O.G. Squeaks is also available by E-mail as an Adobe Acrobat file (PDF). Please notify Bill Walden or Andy Franklin if you want the PDF version (It's in full color).

C.O.G. Cabin

The Grotto has a small shelter cabin on the property of Greg and Angela Erisman in Pulaski County, Kentucky for the use of C.O.G. members and friends. The cabin has five bunks and a picnic table. Outside of the cabin and a very short distance from the cabin is a practice-climbing tower for rope climbing. There is plenty of room for tents on the property.

The Central Ohio Grotto Squeaks November 2000

COG KARST CALENDAR

- Nov. 10, 2000 **COG Meeting 8:00 p.m. Election of 2001 officers** at the Presbyterian Church in Worthington, Ohio. Enter from the rear of the church.
- Nov. 11, 2000 **Kentucky Speleological Survey meeting at 7:00 p.m.** in the Mines and Minerals Building at UK, Lexington.
- Nov. 18, 2000 Ohio Valley Region Autumn meeting near Cincinnati, Ohio.
- Nov. 23 – 26 **Thanksgiving in Kentucky.** Survey trips. Surface survey at Redmond Creek. Need a GPS receiver. Thanksgiving dinner for cavers hosted by Tom Crockett at his home in Sloans Valley, Kentucky Saturday, November 25 at 6:00 p.m.
- Dec. 9 **COG Christmas Party** hosted by Kevin Toepke at his home in Columbus, Ohio
- Dec. 29 – 31 Survey trips – Farmers, Redmond and others.
- Dec. 31, 2000 **New Years Eve Party at GSPCP.** Come and celebrate the beginning of the 21st century with cavers. (Remember the year 2000 is the year for which the 20th century was named.)
- July 23 – 27, 2001 **2001: A Cave Odyssey. The NSS Convention at Great Saltpetre Cave Preserve, Mt. Vernon, Kentucky. Visit www.nss2001.com where on line registration is available.**
- June 24-28, 2002 NSS Convention, Camden, Maine
- August 4-8, 2003 NSS Convention, Poterville, Cal.

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Note: Lexington, Kentucky area code is now 895.

When it's Bat Hibernation Season Please Keep Out!

By Jackie Belwood, Cincinnati Nature Center, 10/17/00

It's that time of year again the days are getting shorter, temperatures are dropping, and members of many bat species are in the final stages of an annual return to the caves and abandoned mines in which they will spend the winter. In response to predictable food shortages caused by the onset of the first frost, this is the season when about half our bat species seek out the relative safety of a sheltered overwintering roost where they will be protected from extreme temperatures and other hazards. The rest of our bats migrate south to the Gulf States, Mexico, or the Caribbean where they will remain more or less active all winter.

The bats that enter caves will soon enter into hibernation, a long-term lethargic state that resembles very deep sleep. During hibernation, bats conserve energy by reducing their metabolic rates (all their normal body functions) to the lowest levels possible to sustain life. For example, a Little Brown Bat with a resting heart rate of about 100 to 200 beats per minute, and a flying heart rate of about 1,000, can reduce its heartbeat to about 5 per minute during hibernation. This is accomplished by lowering the body's temperature to near freezing, a feat that is facilitated by the choice of an overwintering site (called a hibernaculum) that is itself just slightly warmer than freezing. Bats are unusual for mammals in that their body temperatures can be raised or lowered as a function of ambient, or surrounding, air temperatures. In other words, the colder a roost, the colder the bats in it are likely to be. (Conversely, this is why female bats choose particularly warm roosts in summer to sustain warm body temperatures and hasten the development of their young.) During hibernation, bats are more or less helpless as they hang torpid, and as such are extremely vulnerable to disturbance and vandalism. Depending on latitude, bats can stay in a state of hibernation for weeks or months at a time. In Ohio, Indiana, Kentucky, and West Virginia this period lasts from about late October to early April and typical hibernation sites include caves, abandoned mines, and cracks and crevices in large rock outcrops. To a much lesser extent attics and tree cavities are also used as bat hibernacula.

During hibernation, bats survive on fat reserves they accumulate in late summer or early fall, in the weeks after they have arrived at an overwintering site but before they enter hibernation. Prior to entering hibernation, a bat increases its summer body mass by as much as 25 to 40% to survive winter. Studies have shown that mortality rates can be particularly high for juvenile bats overwintering for the first time, suggesting that they may not be as efficient as adults in accumulating fat reserves for their first winter. Relatively constant temperatures and high humidity are requisite conditions for most hibernacula. These sites are usually species specific in terms of their temperature and humidity and reflect optimal environmental conditions that allow resident bats to optimize their restricted fat reserves. With this in mind, it should not be surprising that some hibernation sites, particularly

those of cave- and mine-dwelling species, are used year after year by the same bats. Further, in some species such as Indiana Bats, only a handful of caves in any geographic area provide the bats with the overwintering conditions they need. Consequently, the bat populations they house can be enormous, numbering in the hundreds of thousands.

Hibernating bats arouse spontaneously only a few times during winter usually to urinate, fly briefly, or drink. It takes 30 to 60 minutes for a hibernating bat to arouse and raise its temperature to about 40 C (104 F) in the cool environment of a hibernaculum. In doing this, the bat uses enough fat to sustain itself in undisturbed hibernation for 10 to 30 days, or more.

Consequently, it only has enough stored energy to arouse a few fixed number of times every winter. Repeated arousal, and the energy used in this process, is the single most important factor that causes winter mortality in bats. If they arouse too often, bats will deplete their energy stores and freeze to death. Given the energetic costs of hibernation, it is not surprising that bats choose hibernation sites that allow them to optimize their stored fat reserves. If a hibernation site becomes too warm or cool, bats will move. If hibernacula are not humid enough, they will have to arouse periodically to drink to avoid dehydration. Clustering in some species is believed to reduce water loss in some hibernating bats and the need to arouse.

Recent studies have shown that bats arouse every time they are disturbed during hibernation. Disturbance factors include loud noises, lights, touch, and the minor fluctuations in temperature associated with the presence of people, even if they are just passing through a hibernation site. In controlled experiments in an abandoned mine in Quebec, repeated visits over a period of months, by one or two people who scanned hibernating bats with a flashlight, resulted in a marked increase in arousal and flight activity.

This began within 30 minutes of a visit and peaked 1.0 to 7.5 hours after the visit. This means that the effects of disturbance were not visible at the time of the actual disturbance, but took place several hours later.

Declines in the size of cave-dwelling bat populations, including members of several endangered species (Indiana Bats) has been attributed to repeated disturbances at overwintering sites. With this in mind, the protection of hibernacula should be a high priority in regard to bat conservation efforts in Ohio and elsewhere. Human disturbance, including seemingly harmless visits by well-meaning recreational cavers who do their best to cause the least impact to cave environments, should be kept to an absolute minimum.

If necessary, bat-friendly gates should be installed at cave and mine sites used by overwintering bats to prevent seasonal disturbances.

Selected References

Davis, W.H. and H.B. Hitchcock. 1965. Biology and migration of the bat, *Myotis lucifugus*, in New England. *Journal of Mammalogy* 46:296-313.

Thomas, D.W. 1995. Hibernating bats are sensitive to nontactile human disturbance. *Journal of Mammalogy* 76:940-946.

Thomas, D.W., M. Dorais, and J.M. Bergeron. 1990. Winter energy budgets and cost of arousals for hibernating little brown bats, *Myotis lucifugus*.

Journal of Mammalogy 71: 475-479.

Minutes for 10/13/00

By Katie Walden

Treasurer's Report: \$ 564.14

Squeaks Report: Bill Walden was in Mexico at the time of the meeting and sends his thanks for the articles that were sent to him.

Conservation Committee: OVR project camping at Monroe County Campgrounds Saturday November 4 8AM to dark.

Website: Doug has something written up to give Bill and wants each committee to write a description to go on the website. Steve wants upcoming meeting programs on the website. Doug would like photos for the website.

Kentucky Speleological Society: Send money for KSS to Lee Florea. The next meeting is Nov. 11.

Trip Reports:

Lou Simpson says that he has a blowing hole that should only require a half-hour of digging to get into something. Do you hear a sucking sound?

Dale Andreatta went to Jarvy Roarks Cave with the Columbus outdoor pursuits on a 3 to 4 hour trip.

Dick Maxey and Cheryl went caving with Roger Smith

Bruce Warthman saw some Florida cavers and went to Wacoula Springs. They saw lots of alligators there. He also went to TAG where he went into WarEagle a cave with 50' borehole and lots of formations and he also did Neversink a pit south of Pittsburgh. About 1500 people showed up to TAG. The weather started out warm but got nice and chilly.

Nominations (Anyone else is welcome to run for an office)

Chairman: Darrell Adkins

The chairman is responsible for running the meetings.

Vice Chairman: Kevin Toepke

The vice-chairman is responsible for coordinating with others

Secretary: Katie Walden

The secretary takes minutes at the meetings.

Treasurer: Karen Walden

The treasurer is responsible for the grotto's money.

Executive Committee (2 elected members): Lacie Braley, Dale Andreatta, and Don Conover.

The executive committee is the governing body of the grotto.

The COG's 50th anniversary is coming up. We need to compile a history of the COG.

Discussion: How to make the meetings more accessible. Maybe move meeting time to Sunday or Thursday evenings.

C.O.G. WEB Site

By Doug Burke

I am preparing to re-write and modify the web pages that will become the grotto's official site. Currently I have very generic information on it. I would like to have a group of pages that are dedicated to all the committees we have in the grotto. Would each chairman of his/her committee please write up an explanation of the committee that they chair and any other pertinent information they would like to have presented on this page. This could be contact names, pictures, etc. The site of the page will be at the following location:

<http://www.netmarkweb.com/cog/>

As I start to get information from the grotto committees, I will add it. So over the next few months the web site should expand in size dramatically. Please e-mail your committee descriptions, photos, etc. to Doug Burke at burkes@mail.com. I would also welcome any other information or photo that someone would like to see on the web site.

If you have any questions, drop me a line. Thanks, Doug

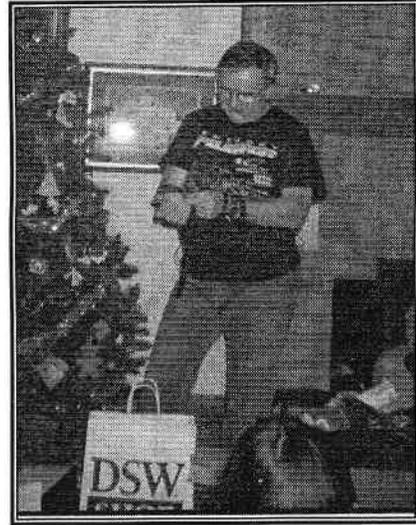
John Crockett died. John, Tom's father, was 95. I'm sure most of us who visit the Crockett family will miss John.

Bill Walden

2000 COG Christmas Party

Bill and Karen Walden will not be hosting the Christmas party this year. After hosting it since 1972, Bill thought it time to pass the privilege on to another member.

After some discussion among Bill Walden, Steve Aspery, Kevin Toepke and Alice Woznack, it was decided that Kevin Toepke will host the 2000 Christmas party at his home in Columbus, Ohio. Although Darrell and Alice volunteered to host the Christmas party, we thought it best to keep it close to Columbus. Bill thought his location in Galena to be a borderline location for getting a good turn out. The party is scheduled for Saturday, December 9, 2000. Get your devious minds working for that most humorist yet inexpensive gift.



George Hagen puzzles over 1999 gift

2000 OVR Cleanup

By Kevin Toepke

This week I was so bored at work that after 3 hours, I asked my boss if I could take the afternoon off. So one hour later I left. I did about 15 minutes of work during the 4 hours I was there. Because I was so early, I decided to take US 40 to Indy instead of I-70. I only was on 70 long enough to get around Richmond, IN. I got to the Monroe County Fairgrounds in Bloomington, IN at about 4:30. No one was there, so I headed out to Sam's club to buy trash bags—just in case there weren't enough for the OVR Cleanup that I was attending. Then I spent a couple hours reading a book in my car in the Wal-Mart parking lot. Just before 6 p.m. I went back to the Fairgrounds—still no one there, so I drove around a little then sat in the Wal-Mart parking lot for another ½ hour with my book. At 7 p.m. I returned to the Fairgrounds to find no one there. As I'm leaving I spot Kriste Lindberg from IKC/OVR in her truck. As we are the only ones there, we decide to head to the store to buy materials for signs. We get back, set up the signs and our tents and sit around my electric lantern talking and enjoying our beers. At about 9 p.m., we notice the Wittenberg (WUSS) van driving around the parking lot looking for us. They keep driving back and forth, obviously lost. It took them about 5 minutes to find us. John Cole and Katie Walden also show up later in the evening. We spent the evening huddled around my electric lantern for warmth. Kriste left early to go home because she wasn't prepared for camping in 30 degree weather. Don Conover arrived some time after I hit the sack.

At about 6:30 a.m. Saturday, Kriste returns to camp and she and John go off to breakfast and leave the rest of us to prepare our own breakfasts. Kriste and John return from breakfast at about 7:30. Kriste headed out to set up the site. At about 8:00 we all head off to the cleanup site. Depending more on the route taken than the time we left the Fairgrounds, we all make it to the cleanup site. We all sign the necessary waivers and then grab our trash bags and our orange vests and start picking up trash up and down the street and the really steep hill. We were warned about

the most "interesting" trash we found—gallon milk jugs filled with sewage (don't ask!)

We finished the roadside at about 2 p.m. and were went around the nature trail. We didn't find much trash. The park is well maintained (mostly by Kriste!) While the rest of us were on the hillside and on the nature trail, one group was in the cave. They came out with about 2 bags of trash. The WUSSes went into the cave to explore and returned with another small bag of trash. When the WUSSes got out of the cave, we decided to call it a day (at about 4 p.m.).

The WUSSes also went to Buckner's Cave. The rest of us returned to the Fairgrounds to prep for dinner. Before she left the cleanup site, Kriste talked to the park's neighbor (who happens to be the grounds person at the Fairgrounds) and got permission for us to have a campfire on Sat night—we were even given firewood for the campfire.

Kriste, Don Conover, myself and some IKC cavers all got back to the Fairgrounds without any trouble. John Cole, Katie Walden and an IKC caver got lost on the way back. After we got the transportation situation sorted out, we went to dinner in town and had a good time. After dinner we had the usually post-caving antics around the campfire. A good time was had by all. Sun morning we were up fairly early (eightish.) We took our time packing up and we left the Fairgrounds at about 10 a.m. Don Conover was still asleep when we left. I joined Kriste and John for breakfast in Bloomington. Then we took a quick tour of the IU campus, including their very nice art museum. I think its better than the Columbus Museum of Art. I wound up hitting the road at about 2 p.m.

Many thanks to Kriste, the Monroe County Solid Waste people, the City of Bloomington, IN and everyone else that collaborated to make this year's OVR project a resounding success!!!

More on the 2000 Ohio Valley Region Clean Up Project on page 5.

Election of officers for 2001

The election of our year 2001 officers will be held at the November 9th meeting. Our nominating committee has selected the following slate. Please be prepared to make nominations of your own at the meeting.

Chairman: Darrell Adkins

Vice Chairman: Kevin Toepke

Secretary: Katie Walden

Treasurer: Karen Walden

Executive Committee (2 elected members): Lacie Braley, Dale Andreatta, and Don Conover.

INDIANA FIELD TRIP?

Many of us C.O.G. cavers are so wrapped up in Kentucky caving and to a lesser extent West Virginia that we tend to forget the caves and Karst of Indiana. Indiana's Lost River Karst System is one of the most interesting karst features in the country. We may want to consider a grotto field trip to take advantage of the Lost River tours.

LOST RIVER FIELD TRIPS FOR 2001

All trips are on a Saturday: March 31, June 2, and September 29, 2001.

The Lost River Conservation Association is offering tours of Indiana's Lost River Karst System. These tours are free, open to the public, and will be done in your own car. Tours are "GO! ESPECIALLY IF IT RAINS" and include moderate hiking. Recommend (that you wear) sturdy footwear, long sleeve shirts and pants even if hot weather, camera, sunscreen, bug repellent, binoculars, etc.

These field trips will feature an "orientation of Indiana's Lost River Karst System." The tours depart at 8 a.m. from the southeast corner of the Town Square in Orleans, Indiana (Junction of IN 37 & 337) and end at the rise spring in Orangeville. Orientation is at 7:45 a.m. The tours include stops from the vicinity of the "First Sink" to the Orangeville Rise. The route provides views overlooking the valley of Lost River in the Mitchell sinkhole plain and of the Chester escarpment.

The tour organizers believe the "Classic Portion of Indiana's Lost River Karst System" must be viewed in the context of the total river system to be fully appreciated and add samplings of

the area's historic heritage to broaden your horizons. The goal is to promote the idea that the entire drainage basin of Indiana's Lost River is so unique and so rich in overall heritage that it is worthy of being designated a "Wild and Scenic River."

You may choose to do the tour in 2 half day increments also. For information on the Lost River offerings or to arrange other tours, please contact: Lost River Conservation Association (LRCA) C/O Robert Armstrong, Chairman, 3101 North Washington Blvd., Indianapolis, IN 46205 or call or leave a message on the answering machine of Dee Slater 317-253-6951. To be placed on the mailing list for event notices --- send a written communication to the above address.

LRCA is a designated Conservation Task Force of the National Speleological Society.

Clean-up Project in Bloomington Indiana

The 2000 Ohio Valley Region Conservation Project

By Katie Walden

"The easiest project ever" is how John Cole described the clean up. We walked through the park along the edge of the road and picked up all the trash that had been dumped there. This included about twenty tires, some appliances, a broken up kitchen sink, and the usual garbage. A man from the waste-management services in the area helped us by supplying a dumpster, bags, and gloves for us to use. Some of the stuff such as the tires and appliances couldn't go into the dumpster so we put them alongside of the road so he could pick them up and take them to the landfill. He warned us not to pick up any gallon milk jugs with stuff in them. Many of these were full of human waste. These were something else that could not be disposed of in the dumpster. After walking along side of the road we walked through the park and cave and picked up trash there. We were all done by early afternoon. By that time we had to search for trash and dig it up.

Kriste Lindberg, an Indiana caver, manages the small park and organized this project. The park is in land that was a reservoir, which supplied Bloomington's water. The reservoir has been drained and it is now a nice park with wetlands in the center. Lunch was supplied for us and we had free camping and use of bathroom and shower facilities at the county fairgrounds. Kriste did a nice job organizing this all for us. About twenty cavers came. There were more Ohio cavers than cavers from any other state. A group of students from WUSS came and helped out.

More on the 2000 Ohio Valley Region Clean Up Project on page 4.