CENTRAL
OKLAHOMA
GROTTO
OF THE NATIONAL
SPELEOLOGICAL SOCIETY,INC

C.O.G.nizance

Inside this Issue

Announcements ……..……..…....……..……..2
Minutes ……....……..…….…….…..... 2
Treasurer's Report …...……...…….....……..3
Trip Reports:
Broken Horn Survey, September 26, 2009; written by Mary Hicks ….. **4**
Potpourri
Gear Review; Fluke 411D Laser Distance Meter:
by Dale Amlee ……..……..…….....**4-5**
Rabid bat bite cases increase in state; Reprint from
The OKLAHOMAN, Friday, Oct. 2, 2009, pg. 13A ……..…….....**5**
California Cavern; written by Lil Town .....……..…….....**6**
White Nose Syndrome Page;
A Project of the Liaison on White Nose syndrome; NSS …**7**

The October COG meeting will be at Art Wallace's house.

CAVE FORMATION IN CALIFORNIA CAVERN TAKEN BY DALE TOWN

ANNOUNCEMENTS

*Northwest trips are scheduled the third Saturday of every month. Contract Sue or John Bozeman for details.

*The October meeting will be 7:30, Friday, October 9th, at Art's:

MINUTES

CENTRAL OKLAHOMA GROTTO

Minutes of the meeting of September 18, 2009

Host: the home of Kelley and Jon Woltz, where we ate good
Attendees: Dale Amlee, Anne Ault, John and Sue Bozeman, John Talbot, Lil and Dale Town, John and Jeremiah Van Dyke, S. Beleu
Guest and prospective member: Mary Hicks

The Honorable Jon Woltz began the meeting at… sometime or the other, I didn't remember to ask anybody what time it was, much less record it.

This was our "In Memorium Meeting" for Gary Harrington, COG member (1948 – 2009), and Frances Town (1931 – 2009; Dale Town's mother). I had brought 10 photos of Gary that I took of him from our various hikes during 1993 to 2008 in Colorado, New Mexico, and Utah; and a log of the times that he caved with us and the names and dates of the 14ers that we/he climbed (peaks in Colorado that are over 14,000 feet). Dale had brought several copies of the funeral service remembrance for his mother.

OLD BUSINESS

We're all old business, but otherwise, none.

NEW BUSINESS

Joe Looney sent a letter to Sue Bozeman in which he proposed to set up a fund in remembrance of his caving family to which he would contribute money each month (between $20 and $50) that COG members, or cave researchers not COG members, could use to help them do cave research with an emphasis on the caves in Oklahoma. These funds could go to something as simple as paying for their gas as they drive to and from caves to as complicated as purchasing technical equipment, paying for data gathering and delivery, operating mist net surveys, etc. A COG officer or board of COG members would have to administer the funds, including posting requirements for applying for and receiving grant money, generating fund-use requirements, making sure that recipients comply with those requirements, and making sure that the fund is in compliance with IRS 501C3 regulations and general accounting procedures. I foolishly volunteered to begin researching the IRS requirements for such a venture. It will take several months to ascertain all of these, and COG should also seek legal advice and continuing advice and assistance from a certified accountant.

Jon asked if COG has a policy of working with Boy Scouts, Girl Scouts, Royal Rangers, etc. COG has no such policy.

We noted the death of Jack Burch, one of the founders of caving in Oklahoma. NSS members can read his obituary in the September issue of the *NSS News*. He was a Fellow of the NSS, and is most noted for developing The Caverns of Sonora. *Read more about it at:* http://www.cavernsofsonora.com/index.php

We noted the death of Don Russell, a landowner and caver who donated his property in northwest Oklahoma, land that has caves with several species of bats in them, to The Nature Conservancy. This land is now known as the "Donald R. Russell Nature Preserve". *Read more about it at:* http://www.caves.org/preserves/drrcp/drrcp.html

Kelley reported that she taught four Weatherford Rotary Club members to place some type of graspable object into their cattle watering tanks so that bats that fall or slip into the tanks can climb out of them and not drown. So far seven tanks have been "batproofed". We all thought this a good idea that we should promote wherever we cave.

Dale Town, who at the same time that you're reading about any new techno gadget whatsoever has already bought it last week, told us about a laser surveying tool made by Fluke Electronics, costing only $99.95, that measures distance. We voted to buy one and try it. John Talbot volunteered to buy it and deliver it to the cavers who would next survey at Broken Horn Cave.

John Talbot moved that COG donate $100 to the Oklahoma Sierra Club in Gary Harrington's name. The motion passed. I volunteered to notify Netta Harrington, Gary's wife, and my Sierra Club contact, David Franklin, about the donation. John will send them the money.

Mary Hicks, our guest and already a caver, introduced herself and told us about her caving experience. We hope and expect her to join COG at our next meeting in October.

TREASURER'S REPORT

John Talbot gave his report.

We concluded the meeting sometime after 9:00, who knows? Steve Beleu

TREASURER'S REPORTS

September, 2009

INCOME		EXPENSES	
DIVIDEND	$ 0.14		
PUBLICATION SALES	$ 7.00		
TOTAL	**$ 7.14**	**TOTAL EXPENSES**	**$ 0.00**
CASH ON HAND	$ 205.88		
CHECKING	$ 642.27		
SAVINGS	$ 2696.90		

PREPARED BY TREASURER JOHN TALBOT

TOTAL FUNDS AS OF 10/06/09 $ 3277.81

TRIP REPORTS

Trip Report: Broken Horn Survey
Date: September 26th, 2009
Personnel: Dale Amlee, Jon Woltz, Sue Bozeman, Steve Beleu, Mary Hicks.
Report by Mary Hicks

My first trip with the Central Oklahoma Grotto was just a week and a day after my first grotto meeting. I had come to the meeting hoping that the grotto would be doing some caving I could join in on in the near future, and I wasn't disappointed. Steve Beleu had warned me that grotto outings are a full day and then some, and I wasn't disappointed on this front either. I was lucky enough to have the wonderfully quirky Steve as a companion from the quiet dark of 6:20 that morning to the louder dark of nearly midnight that evening.

The drive on the property to the cave was beautiful, full of greens, yellows and purples. It was a gorgeous outside, and I wondered why I always tend to disappear underground on lovely days. The call to cave is often stronger than the call to frolic above ground, however, and I was happy to be donning my helmet and pack.

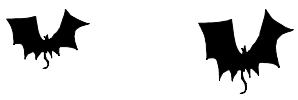
The group decided to try and push a possible new entrance to the cave, and we found the right sink on the second try. It went and we were in, clambering over and around breakdown and navigating a couple of short downclimbs. We hit low bedrock passage and crawled through, Dale and Jon taking the lead. Pretty soon I heard a ruckus about a strawberry yogurt lid, and emerged into the main passage. We had connected a new entrance with an as of then unsurveyed side passage previously pushed only a little ways.

Pretty soon I heard a ruckus about a strawberry yogurt lid, and emerged into the main passage. We had connected a new entrance with an as of then unsurveyed side passage previously pushed only a little ways.

We began the day's survey shooting from the yogurt lid marker into the passage. As a learning surveyor, I was able to try my hand at reading the instruments many times and began to appreciate the delicate dance of positioning your body so that it is able to support you, is able to hold the instrument, is able to hold a light on the instrument, is able to hold an eye to the instrument, and is able to stay in that position without trembling long enough to take a reading you have confidence in. What a tricky job! You surveyors are hardcore. By the end of the day my readings were more consistent and I had gotten valuable practice reading the instruments. I also got to spend time thinking about everything one has to take into consideration when picking new surveying points, a daunting task in itself.

We had hoped to wrap up the survey that day, but a second branch split off and kept going through a low and narrow crawl through bedrock. It veered slightly up and to the right, opening into a small room which led up via three passages to a much larger and quite promising looking room/passage. The end of the room was filled with debris, however, and was met by the ceiling all too soon. A small passage under breakdown looked feasible to me, and I was certain it was going in the direction the room was going. When I checked it out I was met by Sue's knees and found myself in the first small room, and we later dubbed the larger of the rooms Turnaround Chamber.

By the time we wrapped up that branch of the unsurveyed passage is was time to call it a day. The new entrance itself will have to wait for another trip to be surveyed. On our way out we were surprised to find a solitary and singularly chubby big-eared bat flying around us and through the breakdown. What caving trip is complete without a critter!?



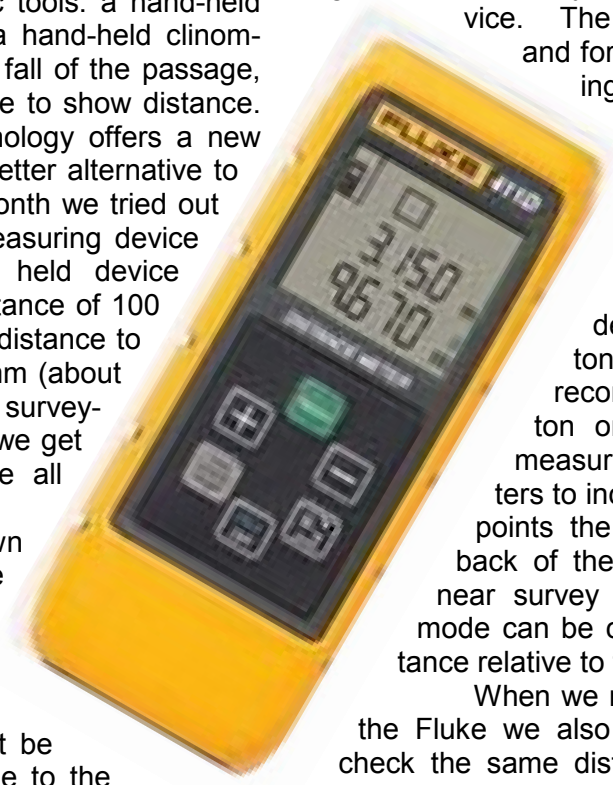
POTPOURRI

GEAR REVIEW

Item: Fluke 411D Laser Distance Meter
Reviewer: Dale Amlee

For many decades, cave surveying has relied upon essentially the same basic tools: a hand-held compass to measure azimuth, a hand-held clinometers to measure vertical rise or fall of the passage, and a flexible cloth tape measure to show distance.

From time to time, technology offers a new device that may prove to be a better alternative to the older methods. This past month we tried out a new toy: a laser distance measuring device from Fluke. This small hand held device shoots a laser beam up to a distance of 100 feet and accurately displays the distance to an accuracy of plus or minus 3mm (about 1/8 inch). If it works for our cave surveying purposes it could mean that we get to stop lugging that damn tape all over the caves.



Tapes offer their own unique frustration in that they are cumbersome, often snag on rocks, it always takes two people to use one accurately, and there are occasionally some very small passages that cannot be measured easily with a tape due to the fact that no human can pass through them.

The Fluke 411D is priced right at $100. It was surprisingly small, being just under five inches in length and about two inches wide, which makes it fit nicely in the palm of the hand during use. Various members of our grotto snickered a bit over the Fluke name, but those of us with experience in the technical world readily recognize that Fluke is one of the premier companies in the field of accurate electronic measurement devices.

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The company has a tremendous reputation for quality and accuracy.

We were a bit uncertain as to how well the Fluke would work in the environment of a gypsum cave, so we took a tape measure along with us during our first foray into a cave with the new device. The Fluke is fairly easy to use, and for the purpose of cave surveying it has many features that we didn't need at all. The large green button on the unit does most of the work: press it once and it turns the laser beam on, when the beam is on the desired target the green button is pressed a second time to record the distance. Another button on the unit will change the measurement units from feet to meters to inches. For most of our survey points the shots were taken with the back of the unit positioned against the near survey point, but if necessary the mode can be changed to measure the distance relative to the front of the unit.

When we made the first few shots with the Fluke we also used the tape measure to check the same distance, allowing us to see if there were any differences between the measurements provided by the two methods. Right away we discovered that the Fluke has a few idiosyncrasies that must be accommodated in order to obtain accurate readings.

The laser light beam makes a wonderfully bright spot on the far target, but holding the Fluke in the hand as steady as possible still meant that the laser spot wiggled about over several inches on the far side of the passage. The longer the shot, the more wiggling there was. If the point being shot at were a perfectly flat wall, a little wiggling of the laser spot wouldn't matter at all, but in all of the years I've spent caving I can't recall very many perfectly flat cave walls. Most of them have angles, rocks, out croppings, etc. that make the geometry anything but flat, and as the laser spot wiggles around it kept giving various readings of the distance.

(CONTINUED ON PAGE 5)

Bracing the laser pointer against a rock or passage wall reduced the wiggling some, but we figured out that the only way to really get a good reading was to provide the laser with a small, flat target plate to shoot at positioned perpendicular to the laser beam. Luckily, the back of a Sunnto compass worked wonderfully for this purpose. The person at the far end of the shot placed the survey point, and then held the compass up flush with the point while the laser shot was made. Using this method we were able to obtain very accurate and repeatable readings with the Fluke.

Any small flat object could be used to serve as the target plate, but it cannot be too shiny or reflective else the beam will scatter back and give erroneous readings.

The unit also worked wonderfully for recording the traditional passage measurements of right, left, up and down made at each survey point to provide us with a record of passage size. Normally, for speed these measurements are just made by guesswork, but the handheld laser made these measurements twice as fast and ten times as accurate.

We did have two survey shots that day that we made with the Fluke that would not have been possible with the tape measure method. We were making our way through a small winding passage with a ceiling height of about fourteen inches when we popped into a larger roughly circular room. This room was about 25 feet in diameter, perhaps 12 to 15 feet to the ceiling, and filled with several very large breakdown boulders that essentially dominated the entire volume, basically turning the room into a pair of passages around to the right and left of the boulders. With the old tape measure method, we would have had to make several survey shots to go up, over, and around the boulders to get to the continuation on the other side, but instead the laser gave us an opportunity that allowed us to survey to the far side of this room in a single shot. We found that there were several small holes and cracks between the boulders, and if we squatted down just right, we could see straight through these holes to a caver positioned on the far side of the room. There would have been no way to fish a tape through this sequence of holes, but the Fluke shot a measurement straight through these gaps without any difficulty at all.

The second shot was through a small mud-filled passageway roughly six inches in height and about twelve inches wide. We could see that it maybe ten or twelve feet before turning off to the side. There was no way for a human to continue down this passageway, but we wanted to map it anyway just to see if there was a possible connection either on the surface or into another side passage. I used the Fluke to take a shot to the far end of the visible passageway. Again, there would have been no way to fish a tape down that narrow passageway to the far end.

At the end of the day, we found that the Fluke had performed quite well. We will continue to take it along on future surveys, but we are still worried about the ability of the unit to survive in truly muddy or sloppy conditions. It may come down to our ability to keep it protected sufficiently during the survey. We will probably stash a cloth tape in our cave packs just in case, but only time will tell if the Fluke meter can truly replace the tape.

Rabid bat bite cases increase in state

Reprinted from THE OKLAHOMAN
Friday, October 2, 2009; pg. 13A
BY BRIAN SARGENT
Staff Writer

Six people have received rabies shots to the past two months after being bitten by rabid bats, state Health Department officials said Thursday.

A dozen rabies cases in bats have been reported statewide this year, up from just one case a year ago, an official said. The cases were reported in nine counties, including two cases in Oklahoma County.

"When a person is bitten by an animal and that animal tests positive (for rabies), we recommend shots for them to prevent any symptoms of illness or problems," said Laurence Burnsed, director of the state Health Department's Communicable Disease Division. "These individuals aren't in a situation where they're recovering from an illness. They've actually been protected from developing illness."

An Oklahoma State University zoology professor said he couldn't explain the large increase of rabies cases in bats this year.

"It could just be chance, I think that's just the case," Ron Van Den Bussche said. "We have no indication rabies has increased twelvefold anywhere in the country."

All bat species native to Oklahoma are insect eaters. Unprovoked bat attacks on humans are extremely rare. Bites usually result from people attempting to handle a bat, he said.

"They are generally more frightened of you than you are to them," Van Den Bussche said.

California Cavern
Written and compiled by Lil Town

This summer we had the opportunity to see our first California cave, California Cavern. I just chose a cave at random, and this one was a State Historical site so I figured it would have something special about it. The flyer also said there was gem digging available! This is what I learned about this cave, and it did have quite a history!

Walk to cave entrance.

Native Americans knew about this cavern for quite some time even though it is unclear when it was discovered by westerners. Many grinding rocks were found on the property indicate that a large number of Native Americans once lived there. It is believed that the cave was used as a "dungeon" by the Native Americans because the few bones that were found were in the fetal position. This indicates a death by hypothermia rather than a fall. The average cave temperature is 55°F.

Some evidence found show that westerners arrived there about 1849 to 1850. However, the cavern discovery is attributed to Captain Joseph Taylor who was target practicing on a rocky outcropping. And he noticed that his targets were being moved by a breeze which seemed to come from the rocks. When he looked to see where the breeze was coming from, he discovered the entrance to the cave. He later discovered other entrances that had been used by Native Americans.

California Cavern was the very first cave in the state to be opened to the public for guided tours in 1850. In the early days, the cave was known as "Mammoth Cave." During this time many famous visitors toured the cavern**,** including John Muir, Mark Twain and Bret Harte. John Muir wrote about his visit in his 1894 book "The Mountains of California."

" we lingered and reveled, rejoicing to find so much music in stony silence, so much splendor in darkness, so many mansions in the depths of the mountains, buildings ever in process of construction, yet ever finished, developing from perfection to perfection, profusion without overabundance;"
John Muir

Many signatures dating back to the 1850's are visible. John Muir, the founder of the Sierra Club, was reputed to have left his signature but it has not been found. If you look closely, there is even a Chinese signature. The guide said that when tours were given in the early days of the cave, the guests were encouraged to leave their signatures.

The original tours, though impressive, were shorter than they are today, since more of the cave system has been discovered over the years. The guide said that Taylor first thought he would find gold in the cave and he made the opening bigger to get in and explore. He did not find gold but found he could get gold by charging a pinch of gold dust to give a guided tour. Thus it became the first commercial cave in California!

A mining camp, called Cave City, was established around the cavern, between 1859 and 1875. There were approximately 20 wood framed buildings, hundreds of tents, and a school district. The population of Cave City reached a peak of 400. Residents of Cave City used the cavern for dances, religious services, town meetings, weddings, and there was even a bar inside.

In 1910 "Mammoth Cave" closed and remained abandoned until 1980, when it was reopened as **California Cavern**. It is located in Calaveras County, approximately 12 miles east of San Andreas For 150 years, visitors have enjoyed the unique delicate beauty of the cavern's crystalline formations. Some speleothems, such as the beaded

helictites found in the Middle Earth area are very rare. Others are so numerous as to be spectacular, such as the "Jungle Room's" array of stalactites. Now, besides 2 fun walking tours, there are professionally guided wild cavern spelunking trips - the Mammoth Cave Expedition and Middle Earth Expedition. These start at $130 per person.

And to think, we get to do it for nothing! What a life!

Lighting in one part of the cave

White Nose Syndrome Page

A Project of the Liaison on White Nose syndrome
National Speliological Society

Fall Update
Sept. 29, 2009

Dear NSS Members,

With bats not in hibernation during the summer, WNS efforts have focused on developing science and management strategies, pursuing research funding, and performing summer maternity colony and acoustical monitoring surveys.

In the northeast, where WNS has ravaged bat populations for three winters, reports came in of devastated maternity colonies and almost no signs of affected species in the night skies or in mist nets. In Peterborough, NH, a sixteen-year longitudinal study of *Myotis lucifugus* (little brown bats) came to an end after the entire bat population disappeared. In Strafford, VT, an annual mist net survey that normally captured 900 bats caught 1 (one). The NY acoustical monitoring project found so few bats of hibernating species that NYDEC is planning to file to add the Little Brown Bat and others on the state's Endangered Species List.

As I mentioned, the summer has been full of planning for WNS. In May, I participated in the Second Science Strategy Conference in Austin, Texas, a follow-up to last year's meeting in Albany, NY. The full proceedings spell out WNS research priorities for the coming year.

In June, I had the honor of representing the NSS before Congress as part of a four-person expert panel testifying for a national focus and increased research funding for WNS. As I write this update, Congress is still deliberating the Interior Appropriations bill. The Senate currently has added $500,000 to the 2010 federal budget, and we're hoping for an increase in the conference committee with the House. Please respond quickly and strongly if we send an alert for you to contact your Representatives. It does make a difference.

Later in June, the National Institute for Mathematical and Biological Synthesis (NIMBioS), at the University of Tennessee, Knoxville, invited 35 of us – NGOs, wildlife managers, and scientists – including mathematicians and epidemiologists for the first time – to bring mathematical modeling and infectious disease perspectives to predicting the progress of WNS. We provide two links for you: a Pre-Workshop Webinar Presentations and the Post Workshop Summary Report.

In July, the 15th International Congress of Speleology/NSS Convention in Kerrville, Texas hosted a Special ICS Session on WNS. Many of the leading scientists, federal, state, and NGO individuals working on WNS made presentations, and we have them all for you.

July 31st was the application deadline for $800,000 of USFWS funding for WNS research. They received over $5 million in proposals – a sign of how lacking federal funding has been for investigating and combating WNS. Originally set for an early September announcement, awards have now been delayed until the end of October.

Thanks to your generous donations, the NSS WNS Rapid Response Fund has grown, and we've made two new awards. Read all the WNS grant details here. From one of our funded projects, Dr. Hazel Barton released the first WNS Rope and Webbing test results.

Finally, after a series of meetings and an August conference in Pittsburgh, PA (proceedings not yet available), the US Fish and Wildlife Service has just issued a USFWS Draft National WNS Plan. Public comment is supposed to occur later this year, and while the title says draft, this document will become the focus of most WNS activities. Please study this document carefully. We hope it will lead to effectively combating WNS and the return to normal for bat populations and caving.

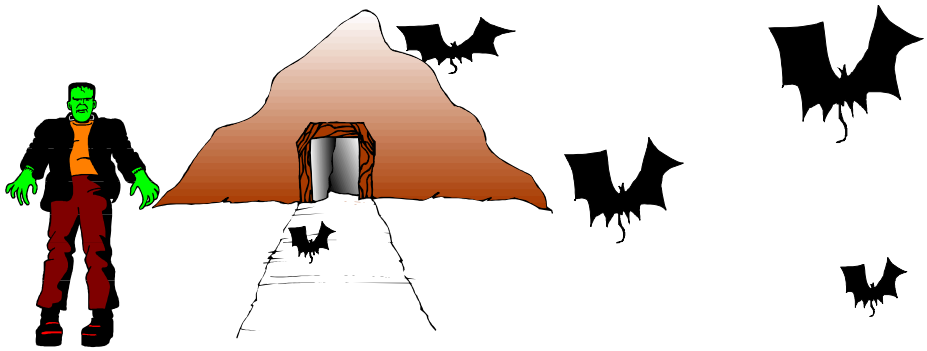
Please feel free to contact us with any questions regarding WNS via e-mail at wnsliaison@caves.org.

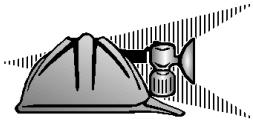
Peter Youngbaer
NSS 16161
NSS WNS Liaison

CARTOON BY LIL TOWN?

Central Oklahoma Grotto is a non-profit organization and a chapter of the NSS (National Speleological Society), Cave Avenue, Huntsville, AL., 35810. Dedicated to cave conservation and safety, C.O.G. published general information in a monthly newsletter ($6.00/year) and detailed cave surveys and related Speleological items in a yearly publication, *The Oklahoma Underground* ($3-$8/issue) Membership is by sponsor and is $12 per year for adults, $6 for spouses and students, and $3 if under 18. Central Oklahoma Grotto meets once a month on the second Friday of each month. For information, write 3208 Gettysburg Dr., Altus, Oklahoma, 73521. All submissions to the newsletter should be sent to the editor: Lil or Dale Town, 3208 Gettysburg Dr., Altus, OK 73521: Telephone: (580)477-4027: E-mail: oklmt@cableone.net. The deadline for submissions for any particular month's issue is the 20th day of the previous month. If you wish material returned. Please include a SASE with submission. All materials in this newsletter is available for reproduction, provided proper credit is given with the article when you print it. Trade publications are welcomed. *Cave softly and safely!*

The October meeting will be at the home of Art Wallace, Friday, October 9, 2009.





Central Oklahoma Grotto
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