CENTRAL
OKLAHOMA
GROTTO
OF THE NATIONAL
SPELEOLOGICAL SOCIETY,INC

# C.O.G.nizance

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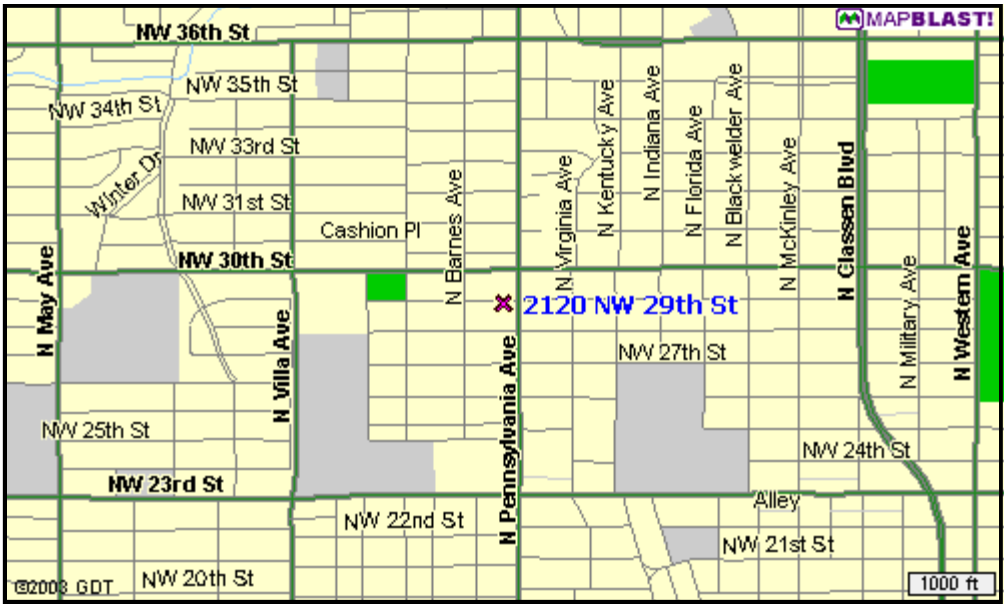
The October COG meeting will be at 7:30pm on Friday, Oct. 12 at Art Wallace's house. I hear that's a pretty batty place!

**Address:** 2120 NW 29th Street, OKC, OK

**Phone:** 405-557-1056

**Directions:** Art's house is west of Pennsylvania Avenue on NW 29th Street. There is a Round-Up Cleaners on the NW corner to give you a clue. The Wallace home is on the south side of the street.



## ANNOUNCEMENTS

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

*The October meeting will be 7:30pm, Friday, Oct. 12th, at Art's: 2120 NW 29th St., Okla. City, 405-557-1056.

## MINUTES

**CENTRAL OKLAHOMA GROTTO**

Minutes of the meeting of 8 June 2007

Attending: Dale Amlee, Anne Ault, John & Sue Bozeman, John Talbot, Lil & Dale Town, and Jon & Kelley Woltz

Meeting called to order at 8:18 p.m. by Jon Woltz at his new home abode; namely, Kelley's 'old' home (a really neat place with a two-level back yard!). Roy's absence in light of several members reporting having received emails from him saying "I'll be there!" remains a mystery.

**Old Business:**

Carlsbad Caverns - the trip and the final installation of the net under National Geographic Pit successfully and with approbation from several NPS personnel was discussed. We all patted ourselves on our backs for a job well done and plan to cash in on the one business that has offered us a free meal next year.

**New Business:**

No caving until October - too wet. Under house caving only -- smells the same except for all those spider webs - so that's a guys-only opportunity!

Stock tanks and mesh netting: Lil and Sue brought up the article published in a prior C.O.G.nizance about bats and other animals that die while trying to get water from the many stock tanks all across the country. Dredging (aka: tank mucking) has revealed many bats among these lost critters. The article suggested that a simple net or mesh draped across the tank, dipping into the water, would provide an 'out' for accidental swimmers. Would it be a worthy project for the COG when wet weather otherwise keeps us from caving? Several sources from whom to inquire: County extension agents; cave landowners; Dr. Caire.

Chris Heis, a Nature Conservancy manager in the western part of Oklahoma (4 Canyon Preserve), has indicated he'd like to talk with the group about our thoughts concerning wind power companies in the vicinity of bat caves. He said that about six companies have contacted TNC to see what their thoughts are on proximity to caves and they just said an arbitrary FIVE mile circumference. TNC would like to know our thoughts. Sue Bozeman invited him to the September meeting, but he could not make it. May come in the future.

The grotto cave video Gypsum Caves of Oklahoma is now on CD and the website, available for download by anyone. Our thanks to Duane Del Vecchio.

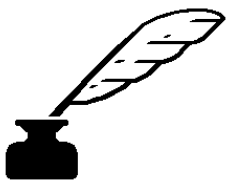
**Publication:**

Everything is in but the introductory article from Roy Diehl, who was to write a 'walk-through' of Cattle Cave. Hope to get that soon.

Off Topic Subjects: I-Phones, high school football, Thrift drain cleaner (which Kelley has agreed to sell shares of!) bought off eBay, and hot sauce. You missed some interesting conversation and treats if you missed this meeting!

Treasurer's Report: By John Talbot

Meeting adjourned at 9:05 p.m.



Respectfully submitted,
Sue Bozeman

# TREASURER'S REPORTS

## September, 2007

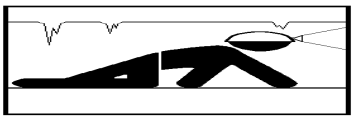
| INCOME | | EXPENSES | |
|---|---|---|---|
| DIVIDEND | $ 0.11 | | |
| **TOTAL** | **$ 0.11** | **TOTAL EXPENSES** | **$ 0.00** |

| | |
|---|---|
| SAVINGS | $ 2,654.38 |
| CASH ON HAND | $ 43.54 |
| CHECKING | $ 579.89 |
| **TOTAL FUNDS AS OF 9/7/07** | **$ 3277.81** |

***PREPARED BY TREASURER JOHN TALBOT***

# TRIP REPORT

Once again there are no trip reports to publish. The drought has made the caves too wet to want to enter. (Does this mean the drought may be over)?



# POTPOURRI

## Baby bats hit by cold, wet summer

**By Steven McKenzie**
Highlands and Islands reporter, BBC Scotland news website

**Bats have been abandoning their young as the mammals struggle to survive during a cold and wet summer.**

Calls to the Bat Conservation Trust's UK helpline about baby bats have more than doubled this year.

The number of calls about grounded and injured bats over June and July - the trust's busiest period - also went up from just over 500 to more than 630.

A shortage of insects has left adults battling to find enough food for themselves and their young.

Anne Youngman, BCT's Scottish officer, said people who know they have bats roosting in their homes have been finding starving youngsters.

She said: "People have been noticing babies which have been abandoned because there is not enough food.

"Some have found five babies walking about the floor. It's heartbreaking.

"The trust's helpline has been flooded with calls.

This happened during a cold, wet summer four or five years ago, but it was not as bad as this year."

**Abandoning babies is a really desperate last measure**
Anne Youngman, Scottish bat officer
BBC News

Between June and July last year, the BCT helpline received 67 calls about baby bats.

In the same period this year, the calls increased to 166.

Mrs. Youngman said this may only be the "tip of the iceberg" as other people may have contacted other wildlife organizations and as a result have not been recorded by the trust.

She said: "For bats it's very bad news.

"It means we have probably lost a good proportion of these year's young. The mothers only have one baby a year and must wait until next year to breed again.

"The pregnancy birth and lactation make huge demands on the mothers, in terms of the time, energy and care that goes into bringing up a youngster so abandoning babies is a really desperate last measure."

Ideally, bats need a warm spring followed by a summer without heavy rain and high winds and a steady cold winter so they remain in hibernation.

Mrs. Youngman said a recent scorching hot summer led to the young of one colony emerging onto a sticky felt roof where many of them became stuck and perished.

*(continued on page 4)*

**Bat detectors**

The poor breeding season has also been noticed by Highland Council's countryside ranger service.

Its staff have been leading a series of walks where the public were given bat detectors to help spot the animals.

Ranger John Orr said: "What we have heard across the country is that there seems to be less bats returning to summer roosts.

"People who have bats in their homes and buildings have noticed the bats have not come back or are staying for only a short-time which means they are not raising young."

**NASA Orbiter Finds Possible Cave Skylights on Mars**

http://www.nasa.gov/mission_pages/odyssey/odyssey-20070921.html

**Editor's note: Go to the site above to see the pictures that have been taken of these possible caves.. I wonder which grotto will get to go map them? Think COG should take this on as a project?**

PASADENA, Calif. -- NASA's Mars Odyssey spacecraft has discovered entrances to seven possible caves on the slopes of a Martian volcano. The find is fueling interest in potential underground habitats and sparking searches for caverns elsewhere on the Red Planet.

Very dark, nearly circular features ranging in diameter from about 100 to 250 meters (328 to 820 feet) puzzled researchers who found them in images taken by NASA's Mars Odyssey and Mars Global Surveyor orbiters. Using Mars Odyssey's infrared camera to check the daytime and nighttime temperatures of the circles, scientists concluded that they could be windows into underground spaces.

Evidence that the holes may be openings to cavernous spaces comes from the temperature differences detected from infrared images taken in the afternoon and in the predawn morning. From day to night, temperatures of the holes change only about one-third as much as the change in temperature of surrounding ground surface.

"They are cooler than the surrounding surface in the day and warmer at night," said Glen Cushing of the U.S. Geological Survey's Astrogeology Team and of Northern Arizona University, Flagstaff, Ariz. "Their thermal behavior is not as steady as large caves on Earth that often maintain a fairly constant temperature, but it is consistent with these being deep holes in the ground."

A report of the discovery of the possible cave skylights by Cushing and his co-authors was published online recently by the journal Geophysical Research Letters.

"Whether these are just deep vertical shafts or openings into spacious caverns, they are entries to the subsurface of Mars," said co-author Tim Titus of the U.S. Geological Survey in Flagstaff. "Somewhere on Mars, caves might provide a protected niche for past or current life, or shelter for humans in the future."

The discovered holes, dubbed "Seven Sisters," are at some of the highest altitudes on the planet, on a volcano named Arsia Mons near Mars' tallest mountain.

"These are at such extreme altitude, they are poor candidates either for use as human habitation or for having microbial life," Cushing said. "Even if life has ever existed on Mars, it may not have migrated to this height."

The new report proposes that the deep holes on Arsia Mons probably formed as underground stresses around the volcano caused spreading and faults that opened spaces beneath the surface. Some of the holes are in line with strings of bowl-shaped pits where surface material has apparently collapsed to fill the gap created by a linear fault.

The observations have prompted researchers using Mars Odyssey and NASA's newer Mars Reconnaissance Orbiter to examine the Seven Sisters. The goal is to find other openings to underground spaces at lower elevations that are more accessible to future missions to Mars.

"The key to finding these was looking for temperature anomalies at night -- warm spots," said Phil Christensen of Arizona State University, Tempe, principal investigator for the Thermal Emission Imaging System on Mars Odyssey. That instrument produced both visible-light and infrared images researchers used for examining the possible caves.

"No other instrument at Mars could give the thermal information crucial to this research," said the project scientist for Mars Odyssey, Jeffrey Plaut of NASA's Jet Propulsion Laboratory, Pasadena, Calif. "This is a great example of the exciting discoveries Odyssey continues to make." Mars Odyssey reached Mars in 2001, years before any of the other spacecraft currently examining the planet. Its predecessor, Mars Global Surveyor, ended its mission last year.

Mars Odyssey is managed by JPL, a division of the California Institute of Technology, Pasadena, for NASA's

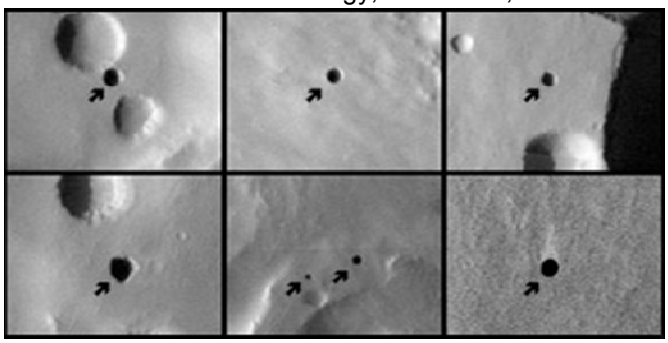


Image above: The discovered holes, dubbed "Seven Sisters." Image credit: NASA/JPL-Caltech/ASU/USGS

Science Mission Directorate, Washington. Lockheed Martin Space Systems, Denver, is the prime contractor for the project and built the spacecraft. The orbiter's Thermal Emission Imaging System was developed by Arizona State University, Tempe, in collaboration with Raytheon Santa Barbara Remote Sensing, Santa Barbara, Calif., and is operated by Arizona State University. For additional information about Mars Odyssey and the new findings, visit: http://www.nasa.gov/mission_pages/odyssey.

**BATS**

**Contributed by Lil Town, found at**
http://store.thanksgivingcoffee.com/product_info?products_id=30

**While we were in Fort Bragg, California, we stopped in a little café for something warm to drink. They had some great coffee! (I had some that was called Songbird that supported bird conservation projects). When I looked at their site on line, I found this coffee that seemed made for us!**

**This is their website and I printed the information I read about the importance of bats and coffee.**

**Does this mean without bats, we wouldn't have coffee or margaritas!**

The Zotzil Maya people of Mexico revere bats. They take their name from "zotz," the Mayan word for bat. Their capital in Chiapas, Mexico, is called Zinacantan Nauat for "place of the bat." While the Mayan people appreciate bats, most people around the world, especially in the U.S., still fear and shun them. Many of the world's bat species now face extinction because of unfriendly attitudes and the expansion of human development in bat habitat.

What's so magical about bats?
Why should we care if they're endangered?
You might be surprised to learn that bats provide an impressive array of agricultural services…

**Scientific Name:** *Glossophaga soricina*

**Common Name:** Pallas long-tongued nectar

**Description:** Pollinating tricanthera flowers

**Bats in the ecosystem**

Bats account for nearly one quarter of all mammals, with almost 1,000 species worldwide. Bats have a rapid metabolism and consume a lot of food for their size. The effort of flight, and the need for some species to migrate or hibernate during the winter, contribute to their large appetites. About 70 percent of the world's bats eat insects. Small bats live in cooler to moderate climates such as the U.S. and Europe and, for the most part, feed on insects that fly at dusk or dark. Some bats eat small aquatic animals like fish and frogs.

About 20 percent of the world's bats eat ripe fruit and the nectar from night blooming flowers. These tend to be the larger bats that live in warm tropical climates and can have a wingspan of up to six feet.

There are only three species of vampire bats, which drink the blood of large animals. The saliva of vampire bats contains a blood-thinning agent that is 20 times stronger than any other known anticoagulant. This agent may one day help thin the blood of people who are at risk for heart attacks or strokes.

Although bats have reasonably good eyesight, many have the added skill of echolocation. Similar to the sonar used by whales, porpoises, dolphins, seals, shrews, and some birds, bats also let out ultrasonic (high-frequency) pulsing sounds from their mouth or nose. The sound bounces off obstacles and food and echoes back to the bat giving it information about the size, shape, identity, and location of the object. Modern radar used by highway patrol personnel is based on this same principle.

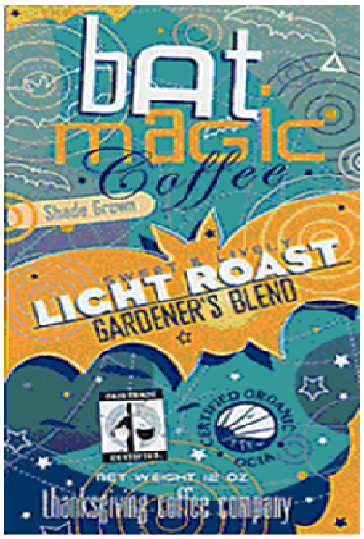
## What do bats have to do with coffee?

While bats do not pollinate or disperse the seeds of coffee plants, they do help disperse other seeds, pollinate flowers, control insects, and fertilize the soil. This helps to regenerate the rainforests where traditional "shade-grown" coffee is grown.

**BAT Magic**

While bats do not pollinate or disperse the seeds of coffee plants, they do play a key role in maintaining ecological health and diversity, making them valued residents on coffee farms around the world. Unfortunately, many bat species are in decline as their habitat is increasingly threatened.

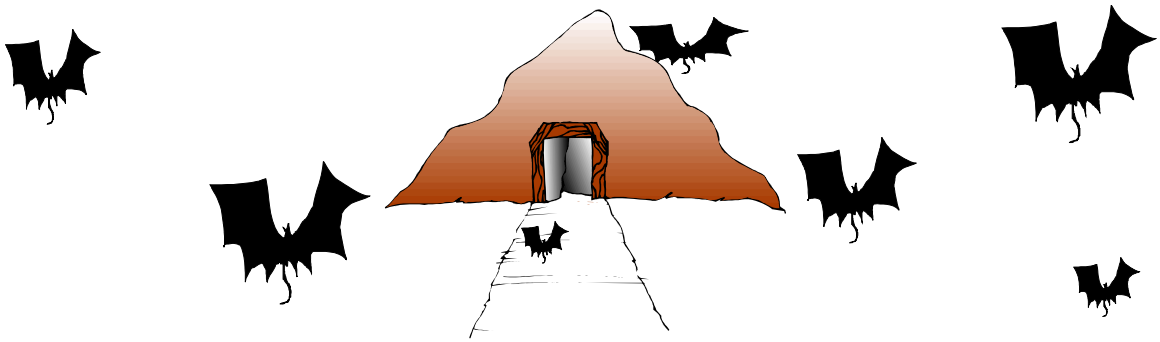
Thanksgiving Coffee Company works with Wildlife Trust and Bat Conservation International to protect bats and their habitat from extinction. A portion of Bat Magic Coffee sales support the bat conservation efforts of the Wildlife Trust.

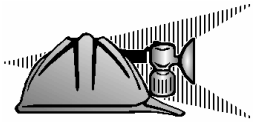



LIGHT ROAST

**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 12, 2007





**Central Oklahoma Grotto**
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