

CENTRAL  
OKLAHOMA  
GROTTO  
OF THE NATIONAL  
SPELEOLOGICAL SOCIETY, INC

# C.O.G.nizance

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The April meeting of the Central Oklahoma Grotto had been changed to Anne Ault's house and Dale Amlee will host the May meeting. The meeting is at 7:30, Friday, April 8, at Anne's house.



## Test Your Bat Knowledge with this True-False Quiz.

- 1.) The largest bats have a wing span up to 6 feet.
- 2.) The smallest adult bat weighs less than a penny.
- 3.) Bats are found in only a few regions of the world.
- 4.) Some bats can live as long as 30 years.
- 5.) Bats can be dirty and filthy spreading disease.
- 6.) All bats use sonar (echolocation) to find food.
- 7.) Some bats can eat up to 600 insects an hour and 3,000 in a night.
- 8.) Bats are harmful to the world's rainforests.

*(Answers on page 2)*



## ANNOUNCEMENTS

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

\*Southwest trips are scheduled the first Saturday of every month. Contact Lil Town for details.

\*Answers to the Bat Quiz on page 1: Questions

1,2,4,7 are true answers. Questions 3, 5, 6, 8 are false answers.

\* Mark White is interested in joining us to learn more about caving. He went through Wild Woman a few years ago. His address is 7345 N.W. 126th, OKC, 73142

## MINUTES

### CENTRAL OKLAHOMA GROTTO

Minutes of the March 11, 2005 meeting

*Host:* Lil and Dale Town

*Other members present:* Dale Amlee, Anne Ault, Sue and John Bozeman, Duane Del Vecchio, Becky Hunsinger, John Talbot, Steve Beleu

*Honored guest:* Elaine Talbot

Vice-Chairman Amlee began the meeting at 8:37

### OLD BUSINESS

1. The COG Invitational Jester Cave Trip is scheduled for March 26. COG will be joined by members of Texas's Maverick Grotto and Bowling Green University's Green River Grotto.
2. Lead Officer Roy Diehl didn't attend the meeting, so we had no update about a potential fun trip to Arkansas that might possibly be hosted by the Boston Mountain Grotto of Fayetteville, Arkansas. But Dale Town reported on behalf of Roy that The Grotto was scheduled to discuss our trip on their meeting night, which was the same night of March 11 as was ours.
3. Lead Officer Duane reported that the tentative dates for our trip to Carlsbad Caverns is currently June 3-5. This may change.
4. We had a general discussion and all-purpose yakfest about this year's bat count and future bat counts.

### NEW BUSINESS

1. Sue passed about the Karst Field Studies brochure from Western Kentucky University that centers on Mammoth Cave. Here is its web address—  
<http://caveandkarst.wku.edu/classes2.htm>
2. Sue then lined up cavers for the next trip to Cattle Cave on March 19 to investigate a narrow and tall canyon passage that I and Shawn Thomas discovered about five years ago: an entrance that leads via passage large enough to stoop-walk through, but in the usual wandering manner of all gypsum, towards Cattle Cave, but after about 100 feet stops, and continues as canyon passage that only the skinniest of cavers can negotiate and then not if they've had breakfast that morning.

### TREASURER'S REPORT

John Talbot read his report, which is included in this newsletter.

Vice-Chairman Amlee concluded the meeting at 9:22:41.

The thanks of The Skillful Ogre goes out to Anne Ault, De Facto Assistant COG Secretary, for filling in for the creature at last month's meeting as it wandered around in our state's northeast counties.

Minutes by The Skillful Ogre again this month, which accounts for their quality drop-off and low level of literacy and bad spelling.

## TREASURER'S REPORTS

### INCOME

DIVIDEND	\$ .09
DUES	\$ 12.00
<b>TOTALS</b>	<b>\$ 12.09</b>
CASH ON HAND	\$ 35.98
CHECKING	\$ 494.39
SAVINGS	\$ 2,591.22
UNDEPOSITED FUNDS	\$ 12.00
<b>TOTAL FUNDS AS OF 3/07/05</b>	<b>\$ 3,134.67</b>

### EXPENSES

POSTAGE	\$ 13.18
<b>TOTALS</b>	<b>\$ 13.18</b>

PREPARED BY TREASURER  
JOHN TALBOT

## TRIP REPORTS

**Trip Report: Survey of Potential Cattle Cave Spur**  
**Date: March 19, 2005**  
**Personnel: Sue Bozeman, John Bozeman, Dale Town, Jon Woltz, Tomas Izo, and Rob Jagnow**  
**Written by Rob Jagnow**

"Just one thing. I'm don't really know if I'm claustrophobic."

At this point, Tomas and I were already several hours into our drive from New Mexico to Oklahoma, so we weren't about to turn around. "I'm sure that if you ARE claustrophobic, you would have figured that out by now," I said reassuringly.

Tomas was visiting me for his Spring Break, so at my suggestion, we decided to accept an invitation to assist with surveying Cattle Cave in Northwest Oklahoma. Although Tomas had been in a few commercial caves in the past, he was a little intimidated by the knowledge that the invitation to participate had only been extended to "skinny people."

The survey of Cattle Cave was all but complete. The last step was to try to tie a nearby entrance into the main passageway. At the end of the potential spur is a narrow slit that drops down into the cave floor and heads directly for the surveyed portion of the cave. On the day of our survey, we could feel a breeze blowing from the unexplored passage - a sure sign that there's a large expanse of air on the other side. However, noone is really certain where it might merge with the main system.

After taking some quick cave-mapping lessons from Sue, the group split up into two teams. John, Sue and Tomas started from the crack and surveyed toward the entrance. Dale and Jon and I slid down into a narrow crack in the floor and worked their our into the unknown.


With the exception of some poor compass readings caused by John's glasses, team one had no problems and managed to quickly complete their survey. For

the rest of us, it was slow-going from the very start. The slot starts out about 10 feet high and 18 inches across - at least large enough for us to turn around.

As we moved north, the crack grew in height, but rapidly narrowed to about 10 inches. We could see where we wanted to go, but our helmets were simply too wide to get there.

After surveying for about 50 feet, it was too tight to continue. The three of us slowly backed out, unable to even turn our heads until we were within 20 feet of the opening.

Had the weather conditions been such that the passage was sucking air rather than blowing it, we could have placed a smoke bomb in the crack in an effort to find where it connects with the main passageway. But that will ultimately have to wait for another weekend.

And Tomas, by the way, is most decidedly NOT claustrophobic. 

### Carlsbad

Written by Steve Beleu

Here beneath this desert sand  
 Sprawls a vast wonderland  
 As ancient as we are recent,  
 Eons to our seconds.

The movement up of sulphuric acid  
 And movement down of Night  
 Created a vast abyss  
 That expands ever faster out

Even as we continue to map  
 Its farthest, deepest grottoes.  
 As it slowly grows away from us  
 Our surveys follow where it goes.

**Trip Report: South West Oklahoma Bat Count**

**Date: February 12, 2005**

**Personnel: John Talbot, Mark and Becky Hunsinger, John Talbot and John VanDyke, and Rob Jagnow**

**Written by Rob Jagnow**

Mangum, Oklahoma: population 2,758. Not exactly a bustling metropolis. But if you want to count bats (and boy howdy, do I ever), this is the place to be. Every February, a handful of devoted cavers from the Central Oklahoma Grotto spread out across the state to take a census of the bat population. During this time of the year, the bats are in hibernation, so we go into the caves with large populations and count the bats where they roost.

Inevitably, whenever I tell anyone that I'm participating in a Bat Count, they reply, "So is that like, 1 bat... 2 bats... 3 bats...?" That's not too far from the truth, but it's actually more akin to, "18 inches by 12 inches myotis... Three single pipistrelles... One plecotus..."

Specifically, in the caves near Mangum, there are three common bat species. The most common, cave myotis (*Myotis velifer*), usually roosts in groups, sometimes packed together with more than 200 individuals per square foot. Eastern pipistrelles (*Pipistrellus subflavus*) roost alone and are smaller than the myotis with light-colored fur. Townsend's big-eared bats (*Corynorhinus townsendii*) also roost alone. These bats have long ears that they may roll up as a mechanism for regulating their body temperature. When both ears are tucked down next to the body, this species can be difficult to distinguish from the myotis.

Bats are, without a doubt, one of the world's most maligned and misunderstood creatures. The reality is that they're smart, docile, and a vital component of the ecosystem considering that they consume 30-50% of their own body weight in insects each night.

Unfortunately, many people are driven by ill-founded fears. During a previous bat count, we encountered a couple of cowboys near the cave. One was carrying a long metal rod, and the other had a large white bucket. Intrigued, we asked what they were up to.

"We're catchin' rattlesnakes for next week's round-up. What y'all doin' with all them helmets and lights?"

"We're studying bats." "Y'all go in there with all them bats?! Yer crazy!"

That same year, upon entering the cave, we found hundreds of bats that had been torched off the ceiling. They lay on the ground, dead or dying, and squealing out in pain. This highlights one of the unfortunate reasons why monitoring the population is so important.



Becky in Train Tunnel

The cave that our team chose to visit is known as Jester. It's the longest known gypsum cave in the western hemisphere with more than 5 miles of surveyed passages. The cave is very familiar to Mom, who spent 134 hours in the cave, mapping the narrow passageways in the mid-80s. The name comes from the neighboring town of Jester, which, up until the mid-90s, actually had inhabitants.

On Saturday morning, Mom, Mark and I were instructed to meet up with John Talbot and John VanDyke at "the gravel pile," which is as good a landmark as any in a maze of indistinguishable unlabeled farm roads. As it turns out, the gravel pile doesn't actually exist anymore. Who knows how long it's been gone - months... maybe years. But in the absence of any other discernable landmark, it's still "the gravel pile," and the cavers who come here year after year know how to find it.

From there, we walked to the far south end of the cave, and subsequently visited each of the major cave entrances where bats are expected to congregate. These population surveys have been taking place for long enough that we not only know where to expect certain species of bats, but we have even come to recognize a few individuals that hibernate in the same spot every year.

So how many bats did we actually count? 203 pipistrelles, 17 big-eared, and 17,839 myotis. (I bet that's more than you expected.)



South Entrance of Jester



## POTPOURRI

### Vampire Bats Keep Out of Trouble by Running

Contributed by Anne Ault, from the Cave Digest

Newswise - Although most people think of bats as stealthy mammals that flit about in the night sky, at least one species has evolved a terrestrial trot never before seen in bats, according to a recent Cornell University study.

It's known that the common vampire bats of Central and South America behave much more like four-legged terrestrial mammals, in that they like to walk around on the ground; other bat species fumble helplessly when left to walk.

But researchers in Cornell's College of Veterinary Medicine have discovered that these bats not only walk but run. The unprecedented gait of *Desmodus rotundus* is described in a brief communication in this week's issue of *Nature* magazine (March 17, 2005) from Daniel Riskin, Cornell graduate student in zoology, and his adviser John W.

Hermanson, associate professor of biomedical sciences.

What seemed like a crazy idea -- challenging these bats on an increasingly speedy treadmill -- revealed a novel ability which the researchers believe evolved independently to facilitate feeding behavior. "What we observed was like a horse going from a walk to a gallop over a very short amount of time," Riskin explains. The researchers kept increasing the speed of the treadmill and, much to their surprise, their subjects broke into a run.

"They just seem to do everything a little differently from the general bat rule," Riskin says about what he refers to as the "cute, adorable, big-eyed and family-oriented" vampire bats.

Not only are vampire bats unusual because they run, but also in the way that they power their gait. "Unlike most animals which use their hind legs as a source of power, these exceptional creatures power their run with their forelimbs," Hermanson explains. Getting most of the push from their long forelimbs -- actually their wings and therefore very strong -- the bats run more like a small gorilla than a comparable four-legged creature like a mouse. They run up to about 2.5 miles per hour. Although many of the 1,100 species of bats are known to walk, the common vampire is the only one so far to pass Riskin and Hermanson's treadmill test and break into a running gait. With the introduction of large herds of livestock into their native environments of Central and South America, these bats don't need to hurry to catch the cattle from which they extract perhaps a tablespoon of blood at a time for sustenance. They feed while their prey are sleeping, spending perhaps

10 minutes drinking from the small cuts they make. However, running may help them avoid being stepped on, Riskin suggests. More likely, the researchers say, the ability to run evolved long ago, when vampire bats had to prey on faster South American athletes such as the agouti, a rodent about the size of a hare, which might wake up and take a swipe at the nocturnal visitor. It remains unclear exactly what the native prey were before the introduction of cattle, he adds.

The Cornell zoologists plan to go a step further and compare the vampire bat to another species of bat endemic to New Zealand. Riskin explains, "The vampire bat is good on the ground because when you feed on the hoof of an animal that weighs 14,000 times more than you do, it's dangerous." Also, there are and always have been a variety of predators in the Western Hemisphere environment. In contrast, Riskin says, the bats and birds of New Zealand had no predators to keep them flying. Many of the birds became flightless walkers, and the bats walk more than others, as flight is energetically very expensive.

"Vampire bats in Latin America are good on the ground because it's a very dangerous place, and bats in New Zealand are good on the ground because it's a very safe place," Riskin says. While New Zealand bats definitely don't run -- they failed the treadmill test -- Riskin wants to compare the walking gaits of the two species.

Cornell undergraduate Gerald Carter contributed to the study.

**This release was prepared by Cornell News Service science-writing intern Sarah Davidson.**



### Golden Drool

Copied from AARP Bulletin March, 2005, Pg. 8

Paion, a German biotech company, has developed a stroke-treatment drug derived from the saliva of vampire bats. Clinical trials suggest that Desmoteplase, which dissolves blood clots, can be safely administered up to nine hours after a stroke-- three times the limit for the current leading treatment.



### FRINGE-LIPPED BAT The Encyclopedia of Weird, pg. 9

"Bat, come! Bat, stay! Bat, fly to the right!" Sound far-fetched to think you can teach an old bat new tricks?

Believe it or not, this species of bats has learned verbal and hand signals in as little as two hours! The fringe-lipped bat has a three-and-a-half-inch-wide body and lives in parts of Mexico, Peru, and Brazil. Bat, do my chores!



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@cablone.net](mailto:oklmt@cablone.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 April Meeting has  
been moved to the home  
of Anne Ault,  
Wednesday evening at 7:30,  
April 8, 2005.*



Central Oklahoma Grotto  
C/o 3208 Gettysburg Drive  
Altus, Oklahoma 73521