



C.O.G.nizance

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The February meeting will be Friday, February 10, 2017 at 7:30 p.m. The meeting will be at the home of John Van Dyke.



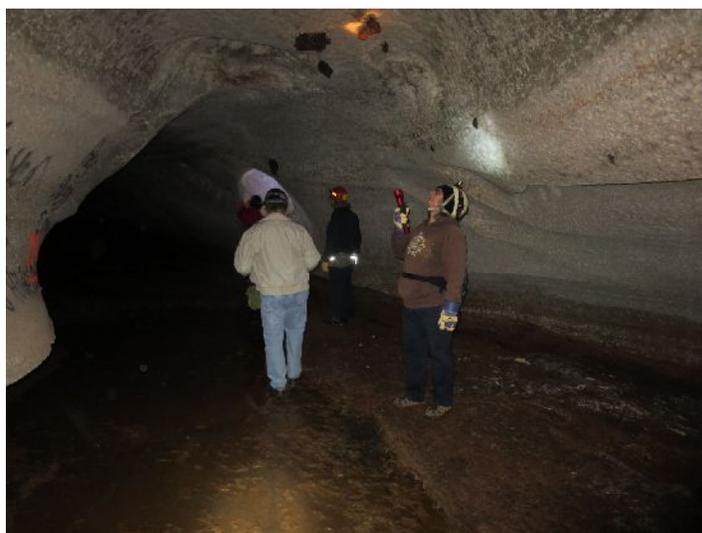
BIG EAR BAT IN JESTER



MAT OF MYOTIS



LOTS OF WATER IN JESTER



STROLLING DOWN THE RESURGENCE

ALL PICTURES TAKEN BY DUANE DEL VECCHIO 2017

MINUTES

CENTRAL OKLAHOMA GROTTO Minutes of the meeting of November 11, 2016

Host: the home of Matt Brasher
Attendees: Dale Amlee, Anne Ault, John and Sue Bozeman, Matt Brasher, Jason Talbot, John Talbot, The Skillful Ogre

The Honorable Dale Amlee began the meeting at 8:00

OLD BUSINESS
None

NEW BUSINESS
None

2017 OFFICERS BEATEN INTO OBEDIENCE
We forced these sorrowing individuals into these officer posts for 2017 –

Chair – Jon Woltz (notice that he didn't attend, so he's Chair)
Vice-Chair – Dale Amlee
John Talbot – Treasurer
The Skillful Ogre – Secretary and Sergeant-at-Arms

TREASURER'S REPORT
John Talbot gave his reports for November.

We ended the meeting at 8:25

TRIP REPORT

January 21, 2017
Dale Amlee, John Woltz and Sue Bozeman
Greene's Cathedral Bat Count
Written by Sue Bozeman

Results: 20,322 *Myotis velifer*
5 Tricolor (aka *Pipistrellus subflavus*)
1 Tiger Salamander -- imposter bat status

No evidence of any White-nose Fungus.

Internal temperature:
Back of Narthex Entrance Room = 39 degrees F at 11:10 a.m. both air and rock temperatures
Back of this arm of the cave = 49 degrees F (and the location of ALL of the Pips)
Uneventful survey this year. We did notice that the clusters were smaller and more strung out, rather than huge batmats as in some prior years.

We were done before 2 p.m. and tried to visit our dear cave owner, Betty, but she was feeling poorly and declined to visit.

We wish her good health again soon.



Jester Bat Count 2017
Date: 2/4/17
Participants: Duane Del Vecchio, Cole Talbot, Carole & Dale Town, John VanDyke

The forecast said rain, wind, and cold. But the actual day we had wind, a little cool, and thankfully no rain! We all agreed on meeting at our usual parking place at 11 a.m. After everyone signed the land owner's release we started the long trek to the resurgence part of the cave to start our winter bat count. Again, this year we would take swab samples of the bats in the cave and send them off to be analyzed for any signs of WNS or other pathogens. We had a returning guest with us this trip. Cole Talbot who had joined us back in 2010 came to help us again and earn some volunteer credit hours

for his National Honor Society and get some science bonus's in school!

It was a pretty stiff wind we walked into on the way in. When we got to the pool at the resurgence, it was quite full (as well as the entire cave this year)! We



took initial readings at the entrance and then went in. John was the recorder while Carole, Cole, and Dale counted the main passages. Duane documented the trip with pic-

tures and counted in the side tunnels.

Inside just past twilight zone was our first set of mats. We did a packing check and got 18x20 in the square foot. We even brought a flex measure tape to be accurate. That's a rate of 360 a square foot. As usual we had almost 100% myotis until we got to the pip room.

That's the area that usually has water but if you try you can stay dry by crawling on a ledge to go around the pool. Not this year...



you had to wade at least 30 feet (about knee deep) to even get to the ledge. The middle of the pool was waist deep and VERY COLD! Both Dale and Duane said they were going numb after about a minute in the water. We crawled out of that area into Pip Hall (as it is usually filled with Pips). Yeah, I know... they are not pip's anymore, they are Tri-Color Bats... but it's hard to teach the ol'Dog new tricks!

Once we were back on dry land and in the Pip Hall, we started taking samples. This year we were told we can mix and match the samples getting different species of bat rather than 25 samples of the same species. So, we took 8 tricolor swabs in the hallway. Since these guys have been diagnosed with WNS in the east, particular emphasis was made to get samples from them here in Jester this year. The procedure is to open a sterile swab, dip it into a sterile DNA tube which has distilled water in it. The swab sucks up the water and then you roll the swab across the nose and arms of a 'hopefully' sleeping bat. Some never wake up from the process but some start yelling at you right off the bat. Some even bite the swab... no problem... thank you for the saliva sample!

Dale is the recorder for our science stuff. We split into two teams: Carol and John and Cole and Duane. One holds the container while the other gets the swab wet and swabs the bat and then returns it to the container, breaks it off and then the container is closed and sealed airtight to keep the sample pure as possible. Then the data is called out to the recorder: Vial #, Sex of the Bat, Species of Bat, Solitaire or Cluster, Wall or Ceiling. The vial is then placed in a 'clean bag'.

We saw a lot more pips (tricolor) this year than in past years. We did a measurement in Pip Hall and the humidity was 85% and yet the temperature was the same as the other section of the cave. Usually the hall is warmer by about 5 to 8 degrees. We finished this section, headed back out the pool and near the exit where we finished the rest of the swabs on the myotis mats all over the place. These were easier as they were right in reach. We finished and headed out. Total time: just about 2 hours.

The group didn't have to do Train Tunnel as Duane got there an hour early (stupid GPS) and did it before the rest of the group got there at 11. Lots of flooding happened in train tunnel. There was a 3-foot log dam across the entrance... a giant gully down the middle of the cave, debris everywhere and then all kinds of logs and debris at the 90 degree turn near the back. Found 2 long ears, a couple of myotis and lots of pips.

We went up to the north part of the cave, parked on the shoulder and headed for Glade and Homestead entrances. Carole, Dale, and John went in Glade to start the count and Cole and Duane went down to Glade to check on long ears as they usually roost there. A big surprise in Homestead... it used to be a bunch of little side chutes to little fist size holes in the back... too small to exit but you could see sunlight. This time you can walk right through... the entire back side has collapsed and there is now a way to enter from either side.

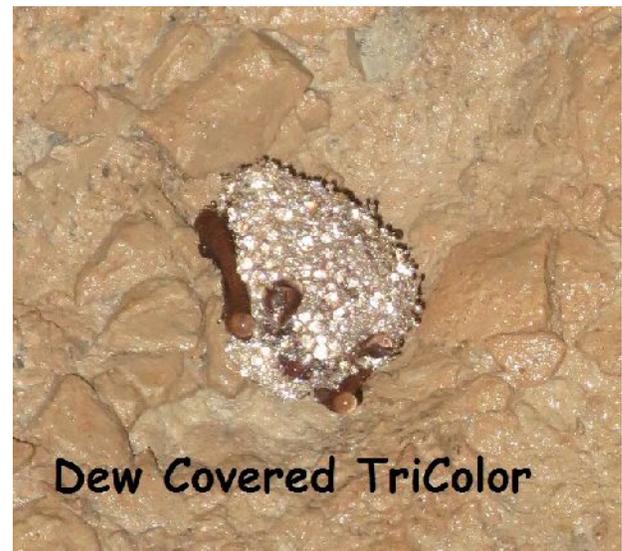
Lots of light in the back sections now. We only found 3 Long ears. We then took the side tunnel that connects Homestead to Glade and met the rest of the group. Lots of water here too!! Funny how we break our neck to stay dry at the start of any trip only to be soaked at the end! <grin> We slogged and the boots made great sucking sounds in the mud and got through the count when we hit the waterfall room. Nice moving water this year on the fall. We exited Stovepipe and trudged back to the cars.

We all met about an hour later for our traditional after bat feast at Luigi's in Blair. We also got to see the whole Talbot clan as they were visiting Jason Talbot family for their late Christmas! Many thanks to y'all... had a great trip! ...ddv17

Final Counts: Myotis: 14,720; Tricolor (Pips): 84; LE Brown: 5 - Total: 14,809

Go to the following website to see the full report along with pictures.

<http://www.okcavers.com/bat%20counts/2017/jester17/jester17.htm>



POTPOURRI

Europeans have three times more Neanderthal genes for lipid catabolism than Asians or Africans

April 2, 2014

Source: Max-Planck-Gesellschaft

<https://www.sciencedaily.com/releases/2014/04/140402100056.htm>

Contemporary Europeans have as many as three times more Neanderthal variants in genes involved in lipid catabolism than Asians and Africans.

Although Neanderthals are extinct, fragments of their genomes persist in modern humans. These shared regions are unevenly distributed across the genome and some regions are particularly enriched with Neanderthal variants. An international team of researchers led by Philipp Khaitovich of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, and the CAS-MPG Partner Institute for Computational Biology in Shanghai, China, show that DNA sequences shared (CONTINUED ON PAGE 5)

Between modern humans and Neanderthals are specifically enriched in genes involved in the metabolic breakdown of lipids. This sharing of genes is seen mainly in contemporary humans of European descent and may have given a selective advantage to the individuals with the Neanderthal variants.

The researchers analyzed the distribution of Neanderthal variants in the genomes of eleven contemporary human populations of African, Asian and European descent. They found that genes involved in the lipid synthesis contained a particularly high number of Neanderthal variants in contemporary humans of European origin, but not in Asians and Africans.

"These sequences show signs of recent positive selection," says Philipp Khaitovich of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, and

the CAS-MPG Partner Institute for Computational Biology in Shanghai, China. "This may indicate that they give modern humans carrying the Neanderthal genotype a selective advantage."

Analyzing the influence of Neanderthal variants on lipid processing in modern humans, the researchers further found recent evolutionary changes in lipid concentration and expression of metabolic enzymes in brains of humans of European origin.

"We don't know what these lipid concentration changes do to the brain, but the fact that Neanderthal variants might have changed our brain composition has interesting implications," says Philipp Khaitovich. Further work is needed, however, in order to fully assess the potential functional effects of these changes.



1 © 2017 Steve Beleu

Change out its o-ring
For a tight new seal.
But still enough flames
Roar out to cook a meal.

After this utter defeat
Of my mechanical indignity
I turn on my electric
And join the caving majority.

A cave light should be warm
When you crawl through mud
Only to sink into deep pools
That ice your blood.

My electric light is cold
As the Antarctic pole
Or glaciers of the Arctic
As they break apart and drift

Through the northern seas
I surely must be crawling in.
So I'll fire up my carbide
Even if it burns my skin.
I'll be caver well done
For bats to feed on.

2
When you're not lead caver
You already know what you'll see--
No different than two dogs
Ambling down the street

Except we crawl slowly,
Grateful for thick coveralls
And weak carbide lamps that light
Only a few feet of our crawls.

But soon we will stand tall
Where the cave opens up spacious!
And on our way back can be tired,
At least ten feet between us.

3
She loves caving but not darkness
So on her helmet is an LED lamp,
Taped onto each side a flashlight,
Strapped on each shoulder a headlamp,
And on her prominent nose a seachlight
Sways around corners to light passages
We'll reach 10 minutes from now or 15.

There's no inch of the cave unseen
But we never see salamander, crayfish, or bat--
By the time we're there, they're hidden from sight.
But in mid-cave what's good is that
Her nose detects the weather outside.

4
Past mid-cave we're tired and cold
So we reach deep into our packs with greed
And haul out snacks: energy bars, jerky,
Sandwiches, candy, cookies, canned hams--
We go too far! Next trip we'll need
Full backpacks--or better yet and trendy--
Luggage with wheels. But after we eat, oh no,
We can't fit back through the cave exit!
At least we have provisions for the week
Until we can shove our rolls of fat to fit
On each side of us, then past us and behind
As we struggle to get out and find a buffet line.
The cave will widen as we exit.

5
Though we wear spaceage caving suits,
Materials manufactured for astronauts,
Cold rises up our sleeves, up our pants' legs,
Descends down our necks and through our spines.
So of course we crawl next through deep mud
Into pools of water, and winds from outside
Accelerating gust past us like a wind tunnel.
Our energy falls flat as we are and numb.
So it's no wonder if you could observe us
From someplace safe you'd see we've become
Rectangular blocks of ice wearing helmets
Pushing grimly forward like glaciers until we reach
Wall-to-wall water that we fall into, float, and shiver.
*O friends, we're not finished with these
Sorrowful complaints, we have no joy to sing of!*
Let the chorus sing about these agonies of caving
Since they are the only way we finish surveying.
Conductor, lift up your baton and conduct
And your chorus will sing from its heart!



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 Lil Town, 25692 Mosier Circle, Conifer, CO 80433: All submissions to the newsletter should be sent to the editor: Lil Town, 25692 Mosier Circle, Conifer, CO 80433: Telephone: (580)471-1238: E-mail: cavemoose@gmail.com. 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!* Website: <http://www.okcavers.com>

The February meeting will be
At the home of John Van Dyke
Friday, February 10, 2017



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