



CENTRAL OKLAHOMA GROTTTO OF THE NATIONAL SPELEOLOGICAL SOCIETY, INC

C.O.G.nizance

Inside this Issue

Announcements	2
Minutes	2
Treasurer's Report for March and May.....	2
Trip Reports	
Cherybad Cave, May 21, 2016 by Sue Bozeman	3
Potpourri	
Neanderthals Built Mysterious Stone Circles	3-4
Surprise at Robbers Cave: Federally protected bats found at brewery site	5
Bat Maze.....	5

NOTICE THE DATE CHANGE FOR THE MEETING...STEVE WAS OUT OF TOWN SO THE MEETING WAS RESCHEDULED FOR JUNE 24TH!



Copyright 2008 John Crowley



"What does this mean, Trog wants to go on living at home until he decides what to do with his life?"



Sorry, We ordered pepperoni!

Cartoons were found at

aq=june+cave+cartoons&biw=726&bih=473&tbn=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj7qdfYzaPNAhUPM1IKHQWrAe8QsAQIGw



"IT JUST DOESN'T GET ANY BETTER THAN THIS..."

ANNOUNCEMENTS

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

*The June meeting will be Friday, June 24, 2016 at The home of Steve.Beleu

WHITE-NOSE SYNDROME DECONTAMINATION PROTOCOL, APRIL 2016

This is the latest formal revision of the national decontamination protocol to prevent spread of the fungus that causes white-nose syndrome. This document is the product of a collaborative effort with multiple federal and state agencies and several non-governmental organizations.

Go to this website to view the detailed suggestions listed to help stop the spreading of WNS.

<https://www.whitenosesyndrome.org/news/national-white-nose-syndrome-decontamination-protocol-april-2016>

For the latest information about WNS visit this site:

<https://www.whitenosesyndrome.org/>

MINUTES

CENTRAL OKLAHOMA GROTTO

Minutes of the meeting of May 13, 2016

Host: the home of Dale Amlee

Attendees: Dale Amlee, Anne Ault, John and Sue Bozeman, John Talbot, John Van Dyke, S. Beleu

The Honorable Dale Amlee began the meeting at 8:09

OLD BUSINESS

· We discussed the status of the BCI-COG data sharing agreement. We decided for the sake of information security to limit the level of geography we send them to section level and cave number (no sub-section or cave name identifiers). Dale will sign the agreement with them as our current lead officer. BCI will return a copy of the agreement as signed by both parties for our archives.

· We discussed the fires in northwest Oklahoma and their proximity to our landowner's houses.

· We discussed our shared current and eventual and loss of visual acuity and how it will affect our caving skills. Ack!

NOTE: the June meeting at S. Beleu's shed and lean-to will in the gangsta hangs of far east Norman will be held on Friday June 24, the gavel descending at 8:00:01. To lower security concerns that attendees may have about leaving their cars parked in my fortified neighborhood, and safely walking to and from my house, I will hire Nine Fingers Machado and his singing machete to provide security for us. The most recent charges against Nine Fingers were dropped due to lack of identifiable evidence.

TREASURER'S REPORT

John Talbot gave his report.

We concluded the meeting at 8:40



NEW BUSINESS

TREASURER'S REPORTS

MAY, 2016 TREASURERS'S REPORT

INCOME		EXPENSES
Dues	\$ 12.00	
Dividends	\$ 00.01	
TOTAL	\$ 12.00	
CASH ON HAND	\$ 172.62	
CHECKING	\$ 312.85	
SAVINGS	\$ 2,138.04	
TOTAL	\$ 2,623.51	
5/01/2116		

TOTAL FUNDS AS OF 5/5/2016
PREPARED BY TREASURER JOHN TALBOT NSS # 30254RE

TRIP REPORT

May 21, 2016 Trip Report -- Cherylbad Cave

Personnel: Dale Amlee, Steve Beleu and
Sue Bozeman

Report by: Sue Bozeman

We were set for wetwork. Nothing grizzly, mind you -- it's just that when we left the upstream portion of the cave as of our last trip, we knew that ahead lay wall to wall water -- over sucking mud.

However, what we all were interested in was the effect of the massive fires that April had visited on our cave and surroundings. Had it affected our particular cave canyon? Had it hurt the bats inside? What would things look like.

That was quickly answered. As Dale observed, "Fire burns up, not down." The fire burned with fierce abandon as it consumed the many years of deadfall in the valley leading to our normal entry, Neighbor Entrance, at the head of the canyon. You could tell that all sides of the valley and the plateau burned -- sometimes even into the ground! Red cedars are known to be especially incendiary and left only the root systems charred in the earth like black fingers. Not a whisper of the rest of the tree remained. Awesome. A few trees that grew in the center of the valley remained untouched.

Interestingly, the first greenery on the pathway down the sides of valley to the cave entrance was poison ivy!

It took us awhile to get down (or up) to the entrance, depending on the route one tried. The rains that

followed the fire's devastation sluiced the ash and unfettered valley sides into slicky mudbanks. The trees that remained were all charred. Everything we touched left us full of soot.

Once inside, we looked around for signs of devastation or disruption. Nothing. Besides some ash covering the rocks about six feet in, there was no indication of the fire impinging on cave internal. No sign of ANY bats, but happily no dead bats. They were probably very aware of the encroaching fire's heat and ash-filled currents and skedaddled to other environs in advance of the full force of the devastation.

We headed for our last survey point and didn't notice any particular increase in water or debris since our last survey. Steve set point, preceding Dale and me judiciously. It is no fun plumbing sucky muds under several feet of water. We shot from one bank to another -- or wall projection -- as the passage allowed. The headroom got lower and lower until further advance was declined. Yes, the passage continued. No, we did not.

We set a point on the NE bank that could be tied into should our efforts from the upstream pathway ever prove fruitful. (Doubtful)

We have the upstream water course to survey plus a bit of upper room survey -- and we will have completed the cave! Probably one more trip -- any takers?

✎

POTPOURRI

Neanderthals Built Mysterious Stone Circles

<http://news.nationalgeographic.com/2016/05/neanderthal:-caves-rings-building-france-archaeology/>
PUBLISHED May 25, 2016

Rings of stalagmites found in a cave in France suggest that our ancient relatives were surprisingly skilled builders.

Once illuminated by the flickering fires of prehistoric builders, an array of mysterious stone circles hid in darkness for millennia, tucked into the recesses of a cave in France. Now, these ancient structures are again emerging from the shadows.

The strange rings are crafted from stalagmites and are roughly 176,000 years old, scientists report today in [Nature](#). And if the rings were built by a bipedal species, as archaeologists suspect, then they could only be the work of Neanderthals, ancient human relatives that are proving to be much more "human" than anticipated.

"This discovery provides clear evidence that Neanderthals had fully human capabilities in the planning and the construction of 'stone' structures, and that some of them penetrated deep into caves, where artificial light-

ing would have been essential," says paleoanthropologist Chris Stringer of the Natural History Museum in London.

However, why Neanderthals ventured deep into the darkness and constructed such elaborate structures is an enigma, at least for now.

Time Capsule

Sealed since the Pleistocene, Bruniquel Cave is located in southwest France, in a region littered with decorated caves and other Paleolithic sites. In 1990, spelunkers excavated its entrance and squeezed through, finding signs of long-vanished cave bears and other extinct megafauna just inside.

But the cave's real treasure lay in a damp chamber more than 1,000 feet (330 meters) from the entrance. There, several large, layered ring-like structures protruded from the cave floor, the seemingly unmistakable craftwork of builders with a purpose.

"All visitors have noticed the presence of these structures, from the first speleologists," says Jacques Jaubert of the University of Bordeaux, a coauthor of the study describing the finding.

(continued on page 4)

It would take decades for scientists to begin deciphering the enigmatic circles, an endeavor slowed by re-

stricted access to the cave and the untimely death of the archaeologist who began work on the site in the 1990s.

In 2013, Jaubert and his team were finally able to bring Bruniquel's secrets into the light.

"The cave was very well preserved, with very few visits, almost none," he says, noting that the site is on private property and is regulated by the French government. "The structures are spectacular and have virtually no equivalent for that period, and even for more recent periods."

Stony Mysteries

The mysterious structures are built from nearly 400 stalagmites—the cone-shaped rock formations that rise from cave floors as dripping, mineral-rich water accumulates over time.

Hewn to roughly the same length, some of the stalagmites were crafted into a large circular structure measuring nearly 22 feet (6.7 meters) across. Others were aligned in a smaller semicircle, and the rest were stacked in heaps.

Cracked areas of red and black discoloration indicate that fires had been lit atop the stalagmites, and charred bits of bone, including the burnt bone of a bear or large herbivore, were found near the smaller circle.

Even to a trained eye, the scene looked like it could be the work of early modern humans, who first appeared in Europe about 40,000 years ago. But uranium dating of the stalagmites, as well as dates for a mineral cloak that had grown over them and the bone bits, revealed an age the team didn't expect.

At around 176,000 years old, the structures vastly predate the arrival of *Homo sapiens*, not just by a smidge, but by more than 100,000 years.

"These must have been made by early Neanderthals, the only known human inhabitants of Europe at this time." Stringer says.

Neanderthal Behavior

Neanderthals thrived for 300,000 years, coexisting with and occasionally breeding with modern humans. Like us, they were big-brained and clever, with a mastery of fire. But scientists argue about how similar the two species really were, and debate whether Neanderthals were capable of symbolic thought and ritual behaviors.

Unlike us, Neanderthals didn't survive, and the reasons why they vanished from the landscape some 30,000 to 40,000 years ago are still a source of contention.

Until now, anthropologists had thought it unlikely that Neanderthals had mastered the art of subterranean living, which is a bit trickier than traipsing around above ground. The Bruniquel cave could prove otherwise.

"The find is solid, and it is an important documentation of the advanced behaviors of the Neanderthals," says paleoanthropologist Erik Trinkaus of Washington University in St. Louis.

To craft those enormous stone rings, Jaubert and his colleagues argue, the cave's occupants needed a reliable source of illumination, some kind of social organization, and the ability to conceive of and construct the patterns, which are made from more than two tons of stalagmites.

"This requires the mobilization of people who choose, who lead, who advise, manufacture—and with continuous light," he says. "All this indicates a structured society."

Clan or Cave Bears?

That's one interpretation, but some scientists say it's too soon to draw these kinds of conclusions about the site. To begin with, it's not yet clear how widespread such complex behavior may have been among Neanderthals, or if the structures were built by one person or many.

"We don't know how many people were involved, if the structures were done in one event or during several events, by one person or by several," says anthropologist Marie Soressi of Leiden University. "I don't know what to expect, because such a discovery is very unusual."

Other scientists question the presumed human origin for the structures and instead suggest they could be the work of hibernating cave bears.

"Who in their right minds builds structures 300 meters underground inside of a cave? Seeking refuge in a cave is a way of avoiding having to make an artificial structure," says paleoanthropologist John Shea of Stony Brook University. "When bears settle in for the winter hibernation, they push all kinds of litter to the side. This looks like a place where cave bears settled in for a nice nap over and over through time."

But bear dens are generally smaller than the largest ring, Soressi says, and the animals don't stack stalagmites so much as excavate hollows and brush things aside. Plus, Jaubert notes, "bears do not make fire."

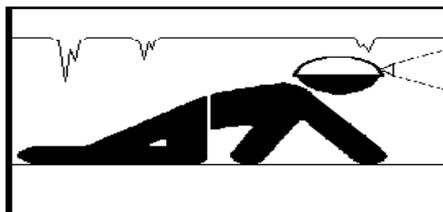
Subterranean Secrets

If the structures are indeed the work of Neanderthals and not cave bears, their purpose is still a mystery. No one knows what the Neanderthals might have been doing in that cave, or how long they used it. Jaubert and his colleagues refuse to speculate about the structures' purpose until further work at the site tells more of the story.

In the meantime, it's hard to resist wondering what our ancient relatives were doing deep inside that cavern, with their fire-lit rings of stone.

"The complex Bruniquel structures are well-dated to within a long cold glacial stage, and at that time the cave might have provided a temporary, more temperate refuge," Stringer says.

"If there is still-buried debris from occupation, it would help us to determine whether this was a functional refuge or shelter, perhaps roofed using wood and skins, or something which had more symbolic or ritual significance."



Surprise at Robbers Cave: Federally protected bats found at brewery site

by Peter Salter/*Lincoln Journal Star*
February 17, 2016

http://journalstar.com/news/local/surprise-at-robbers-cave-federally-protected-bats-found-at-brewery/article_e1efe8dd-3451-5aa1-90ce-643126fceabb.html

The new owner of Robbers Cave invited the retired biologist to look at its bat population last month, so Blue Blood Brewing would know what to expect when it started giving tours of the tunnels.

"We wanted to know, what bats do we have and what do we do with them?" owner Brian Podwinski said. "We wanted to know exactly what we are dealing with."

They found tri-colored bats. They found big brown bats. And then they found two northern long-eared bats.

But just one would have been enough for what happened after that.

"We had to take immediate actions to protect the bats in that cave," said Bob Harms, a biologist with the U.S. Fish and Wildlife Service.

The northern long-eared bat was named a federally threatened species last year, which means the quarter-ounce mammal now has a sizable say in what happens in the manmade caves near 10th and High streets.

And it will alter some of the plans Podwinski had for Robbers Cave, around which he is building Blue Blood's 12,000-square-foot brewery, restaurant and taproom. But not too much, he said: The business still intends to offer tours and hold special events deep inside the Lincoln landmark, although a section will now be off-limits.

With the brewery approaching its April opening, Podwinski sought an expert to visit the 500 feet of sandstone tunnels, originally excavated for storage but used for decades as a tourist attraction.

The cave had been closed for years, although apparently not tight enough to keep out bats seeking places to hibernate, said Cliff Lemen, the retired bat biologist who visited the cave in January.

"Bats are pretty good at getting in small places," he said. "And in general, the northern long-eared bat is fairly secretive. They like to get in cracks and crevasses."

Still, Lemen identified at least two of the bats, whose long ears help them stand out. The species is common, with a range covering 38 states. But it's also under attack by a fungal disease known as white-nose syndrome.

The bat's numbers have dropped dramatically since 2006, when the disease's symptoms were first noticed in New York. White-nose syndrome has since spread to 26 states, and the fungus that causes it was documented in Nebraska last year.

By some estimates, the syndrome has killed more than 5.5 million northern long-eared bats, prompting its listing as a threatened species in April 2015.

After finding the long-eared bats in Robbers Cave, Lemen told Podwinski they needed to contact the Fish and Wildlife Service.

Harms, the federal biologist, knew he would eventually take a call about long-eared bats and federal protection, but he expected to be summoned to eastern Nebraska, where limestone mines near Weeping Water and Louisville have traditionally housed hibernating bats.

"I never dreamed it would be a mine that was associated with a microbrewery in Lincoln," he said. "It's hard to say how many bats are in that cave, but for us, one is enough to have concerns."

Harms visited Robbers Cave late last month and came up with a plan for Podwinski.

First, Blue Blood had created another cave entrance, and that was lowering the temperature too much for the bats.

"You don't want the bats to get cold because they wake up. They only have a certain amount of energy, and if they use that energy, they can't make it through the wintertime and they die," Harms said.

He asked that the new entrance be sealed, and when that didn't raise the temperature, he asked Podwinski to try warming it with space heaters. That didn't work either, so they plan to use fans to blow this week's higher temps through the cave.

He also told Podwinski to stay out of the cave until March 11, the general end of hibernation. Human interaction doesn't threaten the bats as much once they're awake and roosting and coming and going.

That's fine with Podwinski. He had planned some work in the cave before then, but it can wait, he said.

And Harms will work with Blue Blood on its plans to designate a corner of the cave as bat habitat, closed to the public. Podwinski identified a dead-end tunnel that has a manhole-covered opening at the surface, allowing the bats to get in and out.

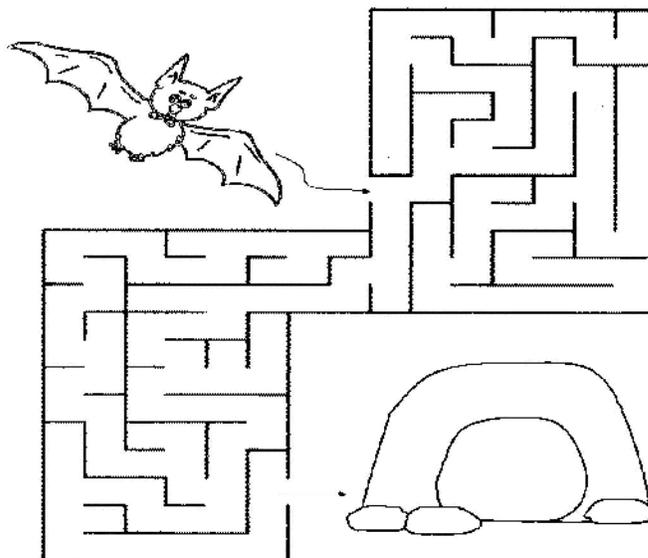
He hopes to incorporate that into the tours, maybe by adding a screen or piece of Plexiglas so visitors can see the bats.

"It just so happened it's going to work out well," he said. "It adds to the whole experience."



Bat Maze

Help the bat get to the cave.



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 June meeting will be
At the house of Steve Belevu,
Friday, June 24, 2016.



Central Oklahoma Grotto
Guano ink printing press
2119 Holly Oaks Lane
Weatherford, TX 76087