CENTRAL
OKLAHOMA
GROTTO
OF THE NATIONAL
SPELEOLOGICAL SOCIETY,INC

C.O.G.nizance

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Google Meet
Friday, October 14, 2022
At 8:00 p.m. CDT
Becky will send you an invitation

Remember to wear your favorite bat-bat outfit. (October was traditionally our bat-themed meeting at the Wallaces.)

ANNOUNCEMENTS

*No trips planned at the present time.
*Next meeting may be October 14, 2022 on Google Meet. Becky will send out invitations.

***If you are writing or drawing something to be included in the 2022 Oklahoma Underground please get it finished and sent to Sue. Thanks**

MINUTES

CENTRAL OKLAHOMA GROTTO MEETING
SEPTEMBER 9, 2022

In attendance: Dale Amlee, Sue Bozeman, Becky Hunsinger—virtual meeting facilitator, John Talbot, Lil Town, Dale and Carol Town, Jon and Kelley Woltz, and Steve Beleu. Guest and prospective member: Levi Carter.

Presiding: His Majesty Jon Woltz
Start time: 8:05

OLD BUSINESS

1. Sue reviewed the upcoming COG *Underground* monograph, noting that she has received nothing from any of us since spring. She asked us to consider whether we want this publication in print, virtual only, or both. Among his forthcoming contributions Dale Amlee is writing an article about the similarities between how his blind dog Sam navigated the inside of the Amlee house with how bats navigate.
2. Becky noted that Duane had promised us during our last meeting to do research into the smart audio technology that registers bat calls and calculates which bats made them. She admonishes him to do this for our next meeting.

NEW BUSINESS

1. Sue wants to begin caving again in October; October 29 was decided upon by those able to cave.
2. Levi Carter, our guest and prospective new member, told us about a caving trip that he organized for his family and friends to the wild caves of Alabaster Caverns State Park.
3. Becky and Steve put forth their idea of contacting those groups, usually originating at Oklahoma's colleges and universities, that conduct bat counts with a brochure about COG, inviting them to consider joining us. Becky will revise a brochure COG published sometime in the past for our consideration.
4. We had a general discussion about the possibility of once again volunteering to do gratis work in the caves of Carlsbad Caverns National Park.

TREASURER'S REPORT

John Talbot delivered his report unto us.

Meeting ended 9:01
Report by S. Beleu, Secretary and Sergeant at Underarms

WHITE-NOSE SYNDROME DECONTAMINATION PROTOCOL, October 2020

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/static-page/decontamination-information

Wildlife Health Bulletin 2022-01
National Wildlife Health Center
Jonathan Sleeman, Center Director
January 31, 2022

Winter 2021/2022 Bat Submission Guidelines and Highlights of the 202/2021 White-Nose Syndrome Surveillance Season

Summary
The USGS National Wildlife Health Center has released updated guidance for bat diagnostic submissions for the 2021/2022 white-nose syndrome (WNS) surveillance season. During the 2020/2021 surveillance season, WNS was detected for the first time in Wyoming and Montana, increasing the number of states where WNS has been confirmed to 38.

Field testing of several vaccine candidates to prevent WNS in susceptible bat species is ongoing, and field vaccination has proven to be safe in WNS susceptible animals. Updated guidance from the USGS National Wildlife Health Center (NWHC) is now available for bat diagnostic submissions for the 2021/2022 white-nose syndrome (WNS) surveillance season. These guidelines are posted on the NWHC WNS web page and replace all previous NWHC bat submission criteria.

TREASURER'S REPORT

SEPTEMBER 2022 TREASURERS'S REPORT

INCOME		**EXPENSES**
Dividends	$ 0.20	
TOTAL	**$ 0.20**	
CASH	$ 106.05	
CHECKING	$ 455.43	
SAVINGS	$ 1,433.17	
TOTAL	**$ 1,994.65**	

PREPARED BY
TREASURER
JOHN TALBOT
NSS #30254

10/8/2022

TRIP REPORTS

Trip: Alabaster Caverns, OK
Wild Cave Exploration by Carter & Oakes Families
Date: September 4, 2022
Personnel: Michael Carter, Clayton Carter, Levi Carter, Ryan Carter, Jaime Oakes, Samuel Oakes, Paul Oakes, Harrison Oakes, Benjamen Oakes
Written by: Levi Carter

As we neared the entrance to the first cave, we felt the cool air from the mouth of the cave on our faces. A few months earlier my brother and I were in Roman Nose State Park and had stumbled on a little hole in the wall of a cave and had gone with some friends to "explore" it. We enjoyed our trip immensely, and a week or so afterwards I began researching where I could find more caves. To my immense dissatisfaction, I found nothing.

The only caves I could find were big, tour-guided caves which didn't suit our thirst for adventure. However, after some amount of persistence, I was rewarded with the information that other caves existed but were hidden from the public by secret societies who guarded this information zealously from the incompetent and unworthy. With this information I was also awarded with the address and email of the closest of these clubs, the Central Oklahoma Grotto (COG). There, I was directed to the wild caves in Freedom, Oklahoma.

I immediately began packing for the trip and calling around to see if I could find two others to come with me. Two people expressed their interest, and we set a date that would work for all three of us. I mentioned it to my dad over the phone that night and invited him to come as well. He agreed and three became four, which quickly became five, until we had a total of nine people making the trip. (*Continued on page 3)*

al scrambled to *make* accommodations, and after dozens of emails, phone calls, and five separate trips to Lowe's for hard hats, we were packed and ready to go.

A three-hour drive across Oklahoma, a mile-long walk to the entrance, and we were ready to go. We had two parents intent on safety and survival, and seven boys set on exploring every nook and cranny of every cavern Alabaster had to offer. We toured 3 caves in total starting with the smallest and finishing with the largest. Deep in the largest cavern, my father came out of a particularly long crawlspace only to find he had lost his glasses somewhere back in the tunnel. Several of us volunteered to go back and look for them, but we realized it would take close to an hour just to crawl to the entrance and back, so we opted to give up and move on.

We all agreed to take the quickest way out but disagreed about where exactly that was. Luckily, I had devoted many an hour of my childhood in the maze-like caverns of Minecraft, and I sat them down and showed them a certain rock I had pointed out to them earlier, and they realized where we were on the map. Once we were back on track, we headed straight for the closest exit, aptly dubbed the "Greased Pig Exit." As we came upon the exit, we each crawled out into the bright sunlight, dirty and triumphant. As we walked back up towards our vehicles, people stared in awe at the group of men who dared crawl through wild caves, swim through the Water Cave, and squeeze through the Greased Pig. That day, we were not a bunch of College Students, High Schoolers, a Pastor and an Accountant, we were Spelunkers.

POTPOURI

Mexico's Earthquake Last Week Created a 'Desert Tsunami' in a Distant Cave

NATURE

Mexico's Earthquake Last Week Created a 'Desert Tsunami' in a Distant Cave : ScienceAlert

27 September 2022

By CARLY CASSELLA

The Devils Hole desert tsunami. (Screenshot of NPS video by A. Chaudoin)

Last Monday, September 19, a 7.6 magnitude earthquake shook the Pacific coast of Mexico at 11.05 am local time.

Five minutes later and 2,400 kilometers (1,500 miles) away, a researcher at Death Valley National Park in California noticed something strange.

Five minutes later and 2,400 kilometers (1,500 miles) away, a researcher at Death Valley National Park in California noticed something strange.

Biological science technician Ambre Chaudoin was peering down into the famous limestone cavern known as Devils Hole when the usually calm entrance to the desert aquifer began to churn and swirl.

"This is a big earthquake, wherever it is," Chaudoin can be heard saying in the background of her footage.

"I don't think I've ever been here when there was such a large quake."

Soon enough, Chaudoin's voice and the voices of others around her were drowned out by the crashing and sucking of waves, which the US National Park Service (NPS) later announced reached over a meter (4 feet) high at 11.35 am.

Technically, when an earthquake churns up a lake or partially enclosed body of water, it's known as a seiche. But when this occurs in an arid environment like Death Valley National Park, it's colloquially known as a 'desert tsunami'.

While not nearly as giant as an ocean tsunami, these waves are much larger than what is usually seen in this partially filled cavern.

"Devils Hole is a window into this vast aquifer and an unusual indicator of seismic activity around the world," reads an explanation on the NPS website.

"Large earthquakes as far away as Japan, Indonesia and Chile have caused the water to 'slosh' in Devils Hole like water in a bathtub."

These earthquake-triggered waves have previously reached as high as 2 meters, and in these extreme events, the water can drag algae and diatoms off the hole's sunlit shelf.

That can be a serious problem for the hole's isolated population of pupfish, which have been foraging and spawning on the cave's shelf for over 10,000 years.

Today, Devils Hole pupfish (Cyprinodon diabolis) are critically endangered, although their numbers have recently shown signs of recovery.

Nine years ago, there were only 75 pupfish left in the Devils Hole. This year, a formal tally in March reached 175.

It's not yet clear why pupfish in the Devils Hole are suffering. Not every desert tsunami is a deadly event for these creatures, but they are certainly a risk factor given the limited nutrients available in the 152-meter-deep (500 feet) habitat.

Waves in the Devils Hole can actually help the ecosystem, clearing the shelf of organic matter that can deplete the aquifer of oxygen over time.

"This kind of resets the system," Kevin Wilson, an NPS aquatic ecologist, told the LA Times.

But if these waves are powerful enough, they can also wash away too much.

Luckily, no dead pupfish were found after the Mexico earthquake, but it's unclear how much algae the waves washed away or how many fish eggs the splashes may have crushed.

The recent phenomenon is a good reminder that a disaster in one part of the world can very well impact an overlooked ecosystem or species thousands of kilometers away.

Central Oklahoma Grotto is a non-profit organization and a chapter of the NSS (National Speleological Society), 6001 Pulaski Pike, Huntsville, AL, 35810-1122 USA. Phone (256)852-1300. Dedicated to cave conservation and safety, C.O.G. publishes 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 an SASE with submission. All materials in this newsletter are 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

Friday—October 14, 2022

There will be a virtual meeting. See you online! Wear your favorite bat outfit.

Central Oklahoma Grotto
Halloween Zombie Cavers
2125 Holly Oaks Lane #105
Weatherford, TX 76087