CENTRAL
OKLAHOMA
GROTTO
OF THE NATIONAL
SPELEOLOGICAL SOCIETY,INC

C.O.G.nizance

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Google Meet
Friday, April 8, 2020
At 7:00 central time
Becky will send you an invitation

ANNOUNCEMENTS

*No trips planned at the present time.

*Next meeting may be April 8, 2022 on Google Meet. Becky will send out invitations.

WHITE-NOSE SYNDROME DECONTAMINATION PROTOCOL, September 2018

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 37.

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.

MINUTES

CENTRAL OKLAHOMA GROTTO MEETING, MARCH 11, 2022

In attendance: Becky Hunsinger, meeting facilitator; Dale Amlee, Sue Bozeman, Duane Del Vecchio, Lil Town, Jon and Kelley Woltz, Steve Beleu
Presiding: His Imperial Highness Jon Woltz
Start time: 8:03

OLD BUSINESS –

1. Sue informed us that the map of Prospect Cave that she had mailed to Jon for him to ink hadn't arrived yet and that she had queried the Post Office about its late delivery. We hoped that it hadn't been lost in the mail. She planned to send Jon a JPEG of it during the weekend following our meeting.
2. Kelley is contributing her drawing of an axolotl for the cover of the proposed publication. She has several drawings to choose from.

NEW BUSINESS –

We discussed when we can return to caving again. Hopefully in May.

TREASURER'S REPORT –

Duane read John Talbot's report in his absence.

Meeting ended 9:00
Report by S. Beleu, Secretary and Sergeant at Underarms

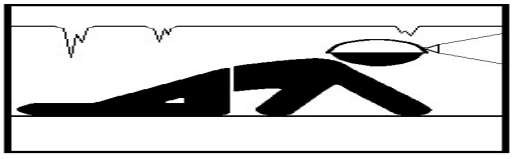
TREASURER'S REPORT

MARCH 2022 TREASURERS'S REPORT

	INCOME	EXPENSES
Dividends	$ .19	
TOTAL	**$ .19**	
CASH	$ 103.05	
CHECKING	$ 561.41	
SAVINGS	$ 1,417.81	
TOTAL	**$ 2,082.27**	

4/5/2022

PREPARED BY TREASURER
JOHN TALBOY NSS #30254



TRIP REPORTS

SORRY NO TRIP REPORTS BECAUSE THERE HAVEN'T BEEN ANY TRIPS!

POTPOURRI

A Cave With Ancient Drawings Has Been Sold, But Not To The Tribe That Hoped To Buy It

September 14, 20213:30 PM ET
THE ASSOCIATED PRESS
www.npr.org/2021/09/14/1037081978

A Missouri cave featuring artwork from the Osage Nation dating more than 1,000 years was sold at auction on Tuesday. The art inside "Picture Cave" shows humans, animals and mythical creatures. Alan Cressler/AP

O'FALLON, Mo. — A Missouri cave containing Native American artwork from more than 1,000 years ago was sold at auction Tuesday, disappointing leaders of the Osage Nation who hoped to buy the land to "protect and preserve our most sacred site."

A bidder agreed to pay $2.2 million from private owners for what's known as "Picture Cave," along with the 43 hilly acres that surround it near the town of Warrenton, about 60 miles (97 kilometers) west of St. Louis.

Bryan Laughlin, director of Selkirk Auctioneers & Appraisers, the St. Louis-based firm handling the auction, said the winning bidder declined to be named. A St. Louis family that's owned the land since 1953 has mainly used it for hunting.

The cave was the site of sacred rituals and burying of the dead. It also has more than 290 prehistoric glyphs, "making it the largest collection of indigenous people's polychrome paintings in Missouri," according to the auction website.

That's exactly why Carol Diaz-Granados opposed the sale. She and her husband, James Duncan, spent 20 years researching the cave and wrote a book about it. Duncan is a scholar in Osage oral history, and Diaz-Granados is a research associate in the anthropology department at Washington University in St. Louis.

"Auctioning off a sacred American Indian site truly sends the wrong message," Diaz-Granados said. "It's like auctioning off the Sistine Chapel."

The Osage Nation, in a statement, called the sale "truly heartbreaking."

A Missouri cave featuring artwork from the Osage Nation dating more than 1,000 years was sold at auction on Tuesday. Experts who have studied the cave were concerned about the auction, but the director of the auction company said protections are in place to prohibit the new buyer from exploiting the cave, including a Missouri law that makes doing so a crime.

"Our ancestors lived in this area for 1300 years," the statement read. "This was our land. We have hundreds of thousands of our ancestors buried throughout Missouri and Illinois, including Picture Cave."

The cave features drawings of people, animals, birds and mythical creatures. Diaz-Granados said various means were used to create the art. Charred botanical material was used to draw. For one depiction of a mythical being, the artist created a white figure by scraping off the brown sandstone.

Diaz-Granados said the intricate details set the Missouri cave apart from other sites with ancient drawings.

"You get stick figures in other rock art sites, or maybe one little feather on the top of the head, or a figure holding a weapon," she said. "But in Picture Cave you get actual clothing details, headdress details, feathers, weapons. It's truly amazing."

Years ago, analytical chemists from Texas A&M used pigment samples to determine the drawings were at least 1,000 years old.

The cave has other history, too, Laughlin said. European explorers visited in the 1700s and

(Continued on page 4)

wrote the ship captain's name and names of some crew members on the walls. It's also the year-round home to endangered Indiana gray bats.

Laughlin said there are plenty of reasons to believe the cave will remain both protected and respected. For one, he said, Selkirk vetted potential buyers.

Then there's the law.

Missouri Revised Statute 194.410 states that any person or entity that "knowingly disturbs, destroys, vandalizes, or damages a marked or unmarked human burial site commits a class D felony." The statute also makes it a felony to profit from cultural items obtained from the site.

Finally, there's the location.

"You can't take a vehicle and just drive up to the cave. You have to actually trek through the woods to higher ground and go through a 3-foot-by-3-foot opening that's secured by the Missouri Historical Society with steel bars," Laughlin said.

Diaz-Granados is holding out hope that the new owner will donate it to the Osage Nation.

"That's their cave," she said. "That's their sacred shrine, and it should go back to them."

Stalagmites trace climate history and impact from volcanic eruptions

March 9, 2022

Source University of Göttingen

http://www.sciencedaily.com/releases/2022/03/220309131853.hml

The soils and vegetation of Patagonia's fjord regions form a unique and highly sensitive ecosystem that is closely linked to marine ecosystems, sediment deposition and carbon storage in the ocean. A research team, including the University of Göttingen, has been working on reconstructing the climate history of this region in this extremely wet, rainy and inaccessible fjord and island zone of the Patagonian Andes in southern Chile. Due to its location, the area is a key region for understanding the history of the southern westerly wind belt within the global climate system. The results were published in the journal *Nature Communications Earth & Environment*.

The research, in collaboration with the University of Trier, is based on extensive soil analyses and, above all, the detailed geochemical analyses of a stalagmite that is around 4,500 years old, which was recovered from an almost inaccessible cave. "This stalagmite is the southernmost limestone deposit of its kind ever found," says Professor Gerhard Wörner of the Geoscience Center at Göttingen University.

"Its fine and detailed stratification enables us to document the chemical composition of the stalagmite at high temporal resolution." Since the stalagmite formed over a long time from surface waters that seeped into the cave, this geological "archive" makes it possible to reconstruct the climate-driven chemical processes in the peaty soils at the Earth's surface above the cave.

It turns out that the transport of chemical compounds from the peatlands to the fjords in southern

Patagonian fjords are particularly closely coupled with natural processes in the delicate soil ecosystems, which react highly sensitively to climate fluctuations and the input of volcanic ash from nearby active volcanoes. "It was a surprise to discover actual remnants of volcanic dust from eruptions of nearby volcanoes in the soil. In fact, tiny volcanic

"It was a surprise to discover actual remnants of volcanic dust from eruptions of nearby volcanoes in the soil.

particles were detected embedded in the stalagmite from the cave," Wörner explains. The effect of volcanic depositions can also be documented from geochemical anomalies in the stalagmite -- such as the high presence of sulphur -- and can even be attributed to individual volcanic eruptions by dating the stalagmite layers. These volcanic deposits are of fundamental importance for the chemical processes in the peatlands of Patagonia and have a particularly strong effect under the influence of the extreme precipitation in the region. "These effects range from substantial destruction of vegetation after large eruptions to a possible fertilizing effect on the ocean as a result of nutrients released after smaller eruptions,"

Wörner adds.

After 40 years, the Hill's Horseshoe bat (Rhinolophus hilli) has been rediscovered by a team of conservationists.

Jon Flanders / Bat Conservation International
March 10, 2022, 2:52 PM MST
Thought to be extinct, Hill's horseshoe bat found for first time in 40 years (nbcnews.com)
By Denise Chow

A bat with big ears, a horseshoe-shaped nose and a seemingly smushed face hidden behind flaps of skin that was recently discovered in Rwanda is a member of a "lost species" not seen in 40 years, scientists say.

The Hill's horseshoe bat (*Rhinolophus hilli*) is listed as critically endangered by the International Union for Conservation of Nature.

It was not known whether the creatures still existed in the wild, but researchers announced Tuesday that the species has been rediscovered.

"Going into this project we feared the species may have already gone extinct," Jon Flanders, the director of endangered species interventions at Bat Conservation International, said in a statement.

The bat was caught in January 2019 during a 10-day expedition in Rwanda's Nyungwe National Park.

Flanders called it an "incredible" discovery, adding that "it's astonishing to think that we're the first people to see this bat in so long."

Winifred Frick, Bat Conservation International's chief scientist, said a horseshoe bat is easily identifiable by its nose leaf, or the distinctive folds of skin around its nostrils. The lower part of a horseshoe bat's nose leaf is typically U-shaped, like a horseshoe, which is how the creatures got their name. Even still, Frick said, it was clear that they had stumbled on something special.

"We knew immediately that the bat we had captured was unusual and remarkable," she said in a statement. "The facial features were exaggerated to the point of comical."

Bat Conservation International and collaborators collect data on several bat species in Rwanda's Nyungwe National Park.Jon Flanders / Bat Conservation International

The scientists took extensive measurements of the bat before it was released again into the wild. The researchers were able to compare the newfound specimen with records in various museum archives in Europe to confirm the species.

Frick and her colleagues also recorded the echolocation calls of the Hill's horseshoe bat, which are the high-frequency pulses of sound bats emit to navigate and hunt for prey.

A Darker Domain
By Val McDermid

Caves turn up regularly in crime fiction, and this time it's Scotland's turn to see some speleological literary action.

Karen Pirie, the main character in several books by Val McDermid, is a Detective Inspector in charge of investigating cold cases in Fife, eastern Scotland. In A Darker Domain, she is presented with a tempting scenario when an estranged daughter appeals to her to find her father Mick Prentice, reported missing during the miners' strike in 1984, whom she badly needs to supply a compatible bone marrow transplant for her ailing son.

The bulk of the book is set in 2007, with frequent illustrative flashbacks to various events and embraces localities as far away as Tuscany. Running simultaneously with the disappearance of the coal miner father, presumed to have fled to Nottingham in 1984 as a 'scab', is scrutiny into the notorious kidnapping of a wealthy local industry magnate's daughter, which gradually entangles the cold case police in both issues.

Much of the strike narrative concerns the Michael Colliery, now completely excised from the landscape. But of more interest for cavers is the involvement of the sandstone caves on a raised beach at East Wemyss (Wemyss is a corrupted form of Uamh, Gaelic for cave). These caverns have long been celebrated for their Pictish and Iron Age engravings, but were also well-known by the mining community for illicit 'pitch and toss' gambling sites that, being on the sea shore, avoided the law in an ingenious manner.

As investigations proceed, Pirie comes into conflict with her senior commander regarding her pursuit of the powerful magnate, and is frustrated by community refusal to confide in the police even 20 years after the prolonged – and fatal – miners' strike, but she gradually picks away at every tiny piece of evidence, arriving at a resolution that ties everything together.

In the process, she finds it necessary to conduct a forensic investigation of Thane's Cave, an invented name that possibly equates to Well Cave 1. These caves, lying immediately below the ruins of Macduff's Castle, were prone to collapse while the Michael Colliery was operating – probably due to vibration from blasting since the workings were not that deep – providing the author with an excellent, well-described locale.

Val McDiarmid is right up there as one of our best crime writers, and the complex wanderings of these two seemingly unrelated issues provides a very satisfying, hard to put down thriller.

Reviewed by Alan Jeffreys
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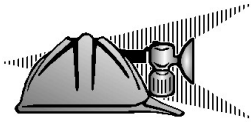
Central Oklahoma Grotto is a non-profit organization and a chapter of the NSS (National Speleological Society), Cave Avenue, Huntsville, AL., 35810. Dedicated to cave conservation and safety, C.O.G. published general information in a monthly newsletter ($6.00/year) and detailed cave surveys and related 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**

April 8, 2022
There will be a virtual meeting.
See you online!



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