CENTRAL OKLAHOMA GROTTO
OF THE NATIONAL SPELEOLOGICAL SOCIETY,INC

C.O.G.nizance

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The June meeting of the Central Oklahoma Grotto will be held Friday, June 8, 2012, at the home of Duane Del Vecchio at 7:00 p.m.

What cave could this be is Southwest Oklahoma?

ANNOUNCEMENTS

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

*The June meeting will be at the Duane's house, Friday, June 8, 2012. Remember he likes to cook on the grill!

MINUTES

CENTRAL OKLAHOMA GROTTO

Minutes of the May 11, 2012

Host: the home of Dale Amlee

Attendees: Dale, Sue Bozeman, Jason Talbot, John Talbot, J.T. and John Van Dyke, Jon and Kelley Woltz, and S. Beleu.

The Honorable Dale Amlee began the meeting late at 8:20 because it was more important for us to eat and drink than to talk.

OLD BUSINESS

none

NEW BUSINESS

- We discussed the upcoming trip to Greene's Cathedral. We began a survey there many years ago and must return to finish it while we live.
- Sue talked about Dr. Kyle Murray, an OSU hydrogeologist, who wants information from us about caves in the Arbuckle Mountains. He is interested in conducting ground water investigations there. John Bozeman told him that we can share our cave data for that area with him if the membership so voted at this meeting. We so voted. We also will refer him to the Dallas/Fort Worth Grotto, the Arbuckle Karst Conservancy, and Andy Harris.
- Dale talked about a possible new member, who is a university student already conducting research about caves.

TREASURER'S REPORT

Treasurer John Talbot gave his report.

We concluded the meeting at 9:54.

Prepared by Steve Beleu

TREASURER'S REPORTS

May, 2012

	INCOME	EXPENSES
Dividend	$ 0.02	
		none
TOTALS	**$ .02**	
CASH ON HAND	$ 107.10	
CHECKING	$ 376.75	
SAVINGS	$ 2,133.04	
TOTAL FUNDS AS OF 5/6/2012	**$ 2,616.89**	

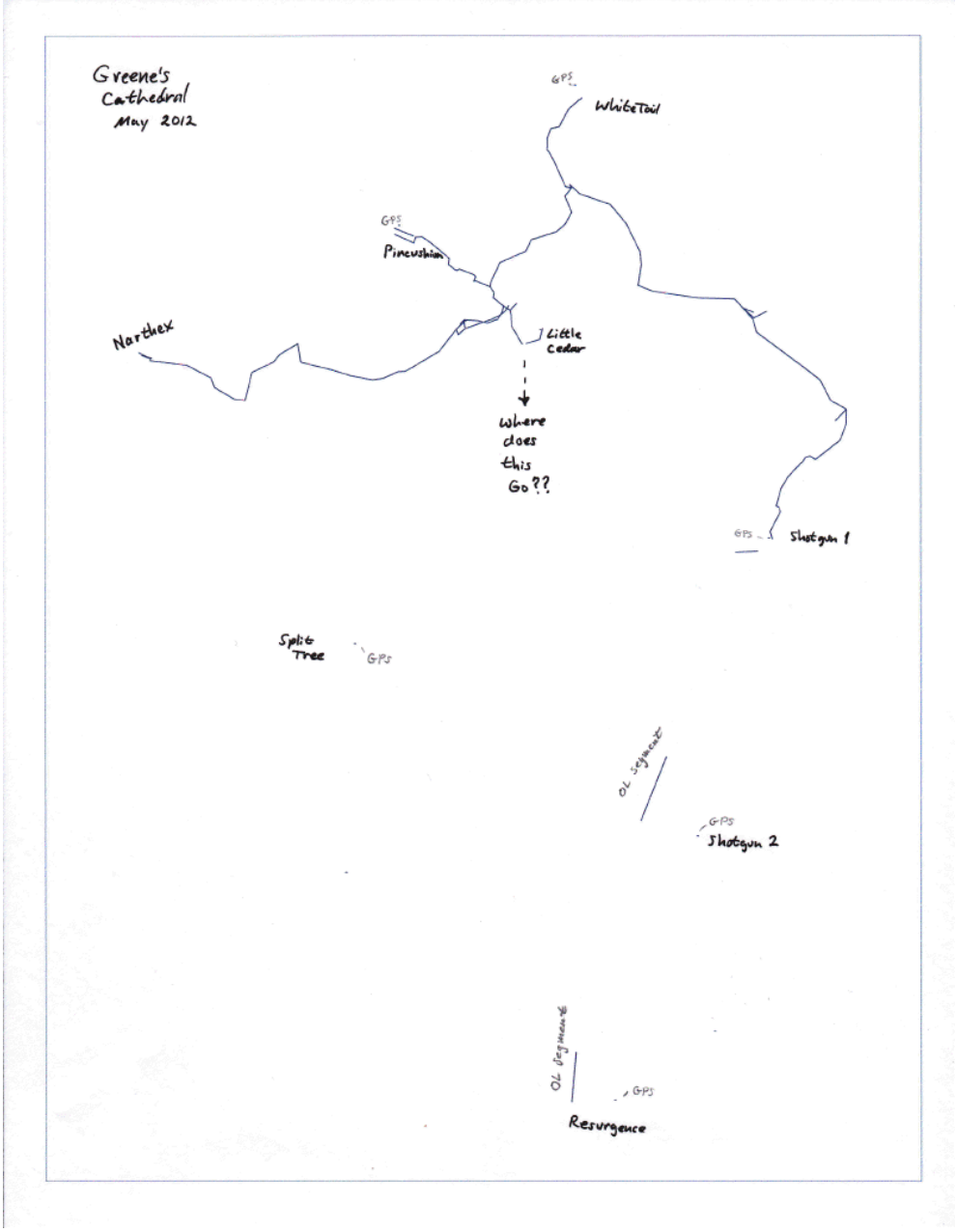
PREPARED BY TREASURER JOHN TALBOT
NSS#30254RE

TRIP REPORTS

The May 19th a group went to Greene's and conducted a surveying trip. This stick map is showing surveyed passages of Greene's with GPS points also shown. I hid the various over-land surveys just to clean up the diagram. I'm impressed with the accuracy of the GPS points as related to the known cave entrances (Whitetail, Pincushion, Little-Cedar). The GPS point that we named ShotgunShell-1 lays dead on top of the last surveyed point on that south-eastern arm of the cave. ShotgunShell-2 seems to lie on a straight line between that last survey point and the resurgences.

I haven't been inside the cave, but it sure seems that there ought to be another south-heading arm coming from the area near Little-Cedar. If there is, perhaps the spilt-tree entrance is not too far off of that line.

By Dale Amlee



POTPOURRI

Gypsum Caving Bagatelles 9

Accidentals affect only the measures they're in
Metronome: quarter note = 85

Steve Beleu

©Revised March 24, 2012

Unstoppable disease strikes endangered gray bats
By Renee Schoof / McClatchy Newspapers
Tuesday, May 29, 2012 http://news.bostonherald.com/news/national/general/view.bg?&articleid=1061135092&format=&page=2&listingType=nat

WASHINGTON — White-nose syndrome, the disease that's killed millions of insect-eating bats, keeps getting worse. It's made a thumb-sized bat rare in parts of New England and has spread through most of the Eastern U.S., as far west as Missouri. Now another species has it, the endangered gray bat of caves in the Southeast.

The loss of bats is serious because they provide natural pest control. They live throughout the country, and the disease could end up almost everywhere as well. In places where bat populations have been lost, it could be decades before they recover, scientists say.

The fungus that causes white-nose syndrome spreads in cold weather, when bats hibernate. Gray bats might be especially vulnerable because they hibernate in huge numbers in only a few caves. The mortality rate differs among species of bats that have the disease, but in some cases it's nearly 100 percent.

The gray bat was listed as being in danger of extinction in 1976, but its population had been growing. Although it's too early tell how hard white-nose syndrome will hit the gray bat, Paul McKenzie, the Fish and Wildlife Service's endangered species coordinator for Missouri, said the discovery was "devastating news."

"Because gray bats hibernate together in colonies that number in the hundreds of thousands, (white-nose syndrome) could expand exponentially across the range of the species," McKenzie said Tuesday in a news release. A loss of gray bats also could destroy other cave-dwelling species that live off the bats' guano.

Biologists recently saw the tell-tale white fungus on the muzzles, tails and wings of several gray bats in Hawkins and Montgomery counties in Tennessee. The bat's main range, besides Tennessee, is Alabama, northern Arkansas, Kentucky and Missouri.

First detected in Albany, N.Y., in 2006, white-nose syndrome spread through the Northeast and down the Appalachians. In the winter of 2010-11, it hit the Midwest. This March it was reported for the first time in Alabama and Missouri, and in Acadia and Great Smoky Mountains national parks. The disease is now found in four Canadian provinces and 19 states.

"Eventually the disease is going to spread across the country," said Ann Froschauer, a spokeswoman for the Fish and Wildlife Service.

Bats are the main nighttime predators of beetles and moths. Those insects and their larvae damage forests and crops, including cotton, tomatoes, corn, apples and cucumbers. A study last year estimated the loss to farmers at $3 billion a year or more.

"They're essentially the only nighttime predator of many of our agricultural and forest pests. They save us a lot of money," said Dave Waldien, a wildlife ecologist and the interim director of Texas-based Bat Conservation International.

Bats also eat mosquitoes, though not as their main source of protein, Froschauer said. "Mosquitoes are potato chips to bats."

No cure or way to stop white-nose syndrome has been found. Earlier this year, biologists estimated that 5.5 million to 6.7 million bats have died.

Waldien said the disease had been spreading to new states and filling in more areas of states it had reached in recent years.

In Maryland, for example, white-nose syndrome was found on some state property last year, and this year it was detected for the first time nearby in an abandoned mine in the C&O Canal National Historical Park, about 90 miles from Washington.

"We do suspect that it will slowly move to the West," Waldien said. "Right now it's hit the most obvious migration paths, and so further westward expansion should be a little slower unless humans inadvertently carry it."

The fungus was brought to the United States from Europe, where for some unknown reason it doesn't kill great numbers of bats. A cave visitor probably introduced it inadvertently.

It's named for the way the fungus grows around bats' noses, but it also grows and causes lesions on other parts of their bodies, including the wings. Dead bats appear to have starved. Bats with the fungus wake up from hibernation in winter — when there are no insects — and quickly use up the fat stores in their small bodies.

The United States has 46 bat species. Most already have been declining in numbers because of habitat loss, wind turbine collisions, pesticides and pollution. The disease previously had been found in six species, including the endangered Indiana bat.

The Fish and Wildlife Service is leading efforts to study the disease and try to stop it. It announced $1.4 million in research grants last month. The agency also has recommended closing caves so that people don't track in the fungus.

White-nose syndrome has been particularly devastating for the little brown bat, a species that makes up a huge chunk of the overall bat population and has a range throughout Canada and the United States except for the desert Southwest. Where its population has been measured, the death rate from white-nose syndrome is more than 90 percent.

Two years ago, a team of researchers made news when they reported in Science magazine that the little brown bat could become regionally extinct in 16 years.

Winifred Frick, the report's lead author, said she's now studying how the disease is transmitted. New findings could change the extinction estimate, she said. "We desperately hope we're wrong."

So far, however, extinction in a short time remains possible.

"The mortality rates have been catastrophic," she said.

Most North American bats hibernate. They swarm and mate in the fall, hibernate in caves or abandoned mines all winter, emerge in April and disperse for the summer. Females bunch up in maternity colonies, where they nurse their young and care for them until they're ready to fly.

Bats use the same hibernation and maternity colonies year after year. Scientists still have many questions about how far they travel, Frick said. Radio transmitters that are small enough for bats don't last long enough or work very well.

"In the Rockies and the West, we don't know where our bats go to hibernate," Frick said. "A lot of our species we never see in winter."

In the West, bats haven't been known to hibernate in clumps of hundreds of thousands, as in the East, she said. It may be that there are big gatherings and scientists just don't know where they are. But if bats are more dispersed in the West, the disease might pan out differently there, Frick said.

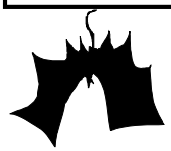
Bats are unusually long-lived for such small mammals. The little brown bat, for example, can live for more than 30 years years. Unlike mice and rabbits, they're not speedy reproducers. Females generally have only one pup per year.

Froschauer and Waldien say they hear people talk about how they don't see bats anymore in places where white-nose syndrome has killed so many of them.

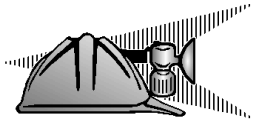
"People who used to sit on their porches with their children, watching the bats in the evening after a long day of work, say there are no bats here," Waldien said. "And it is very hard to recognize that they will never see them in their lifetime again."

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 Town, 25692 Mosier Circle, Conifer, Colorado 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

Decontamination protocols specific to WNS have been developed and will continue to be revised to incorporate the best available information. Source: DRAFT WNS Plan - v. 10.21.2010 from **A National Plan for Assisting States, Federal Agencies, and Tribes in Managing White-Nose Syndrome in Bats**
Duane has put the decontamination protocols in the COG website http://www.okcavers.com/wns



The June meeting will be held at The Duane's Friday night, June 8th, 2012.



Central Oklahoma Grotto
1117 NW 74th St.
Lawton, OK 73505-4234