



# TSA Activities Newsletter

Volume 10, Issue 2

February 2006

## News & Notes

### TSA Affairs:

#### 2006 Bustamante President's Day Project

The ever popular Bustamante President's Day Project is just over the horizon. This will be the ninth year that TSA has sponsored this project which has resulted in a dramatic improvement in the Grutas del Palmito and surrounding area. It has drawn cavers, friends, family and folks just interested in doing a good deed at one of North America's outstanding caves. Participants have come from several States in both the US and Mexico.

In the early years truckloads of trash were hauled out of the cave and picked up around the upper parking and entrance area, concrete steps were installed in the first room, conservation, directional and interpretive signs in both Spanish and English were installed and graffiti was removed in the first room. Since that time an improved trail was constructed from the upper parking area to the entrance, the trail leading to Cabeza de Leon has been improved above the cave, additional trash has been picked up, graffiti has been removed along the road, brush has been cleared along the road and trails and a new hand rail was installed at the entrance. Inside the cave, the lighting system has been improved, a bridge was constructed at a dangerous spot on the tour trail, mud was removed from the steps and formations and, vast amounts of graffiti have been meticulously removed in all areas of this huge cave. It is truly amazing what a hundred or so dedicated folks can accomplish over a weekend.

This year should be no exception. As in the past, Saturday will be the principle work day and Sunday will be devoted to field trips to area points of interest. There will be the much enjoyed banquet at the Ancira on Sunday night and the Monday morning tour of the Mescal factory on the way out of town.

Information on the project can be found at: <http://home.austin.rr.com/ojknox/bustainfo.htm>. There are still rooms available at the Ancira Hotel. For information and reservations, contact Jan Knox at: [knox\\_jan@hotmail.com](mailto:knox_jan@hotmail.com). Looking forward to seeing you there.

Rune Burnett and Orion Knox

### Local News

#### Austin's Edwards Aquifer Remains in Drought

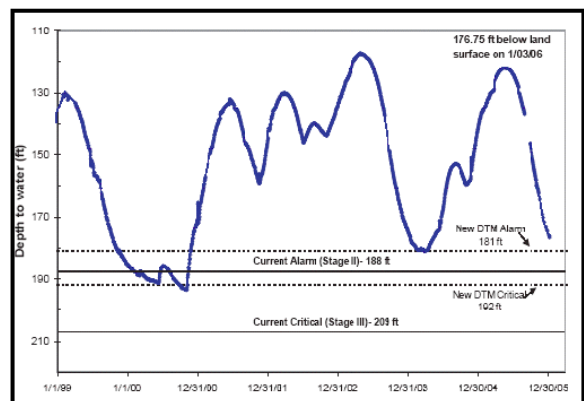
The [Barton Springs/Edwards Aquifer Conservation] District declared a Stage I Drought on October 27, 2005, on the basis of water levels in drought monitor wells falling to designated trigger levels. These drought conditions resulted from a lack of precipitation that began back in April of last year. Rainfall at Austin's Camp Mabry totaled 22.3 inches for the year (which was an 11.2 inch deficit from average),

and 2005 was the 20th driest year on record since 1856 when record keeping commenced. The lack in rainfall results in less recharge to the aquifer, lowered groundwater levels, and reduced spring flow (Figures 1 and 2).

Without additional rainfall the severity of the drought is likely to increase in 2006. Meteorological forecasts by the National Weather Service's Climate Prediction Center indicate that dry conditions may persist or intensify in 2006. At the time of writing this article, aquifer levels are approaching Alarm (Stage II) conditions, which will require permittee users to conserve 20% of their normal usage as outlined in their User Drought Contingency Plan (UDCP). Stage I is a warning of drought and the District asks users to voluntarily conserve 10% of their normal water use. Exempt users (generally small users who do not have permits) are also encouraged to conserve.

It is difficult to predict just how much rainfall is needed to bring the aquifer out of drought conditions because of the many variables involved (soil moisture conditions, duration, intensity, and location of rainfall). While an inch or two would greatly help alleviate the dry conditions on the surface, more than a couple of inches is needed to generate sustained creek flow, and therefore sustained recharge via these creeks. The District will continue to monitor water levels and Barton Springs. Please contact the District with any questions or concerns you may have.

(Excerpted from: Anonymous. 2006. *Aquifer Bulletin*, (1):1-3, January-April (2006).



**Figure 1.** Graph showing water levels at the Lovelady Monitor well between 1999 to January 2006. Solid horizontal lines are the District's current drought trigger levels. The Stage I trigger level is not shown for clarity, but corresponds to a level of 177 ft. Dashed lines indicate the proposed drought trigger methodology (DTM) levels that will be considered by the Board of Directors following a public hearing on rule revisions on January 26, 2006.

## Cave Biology

### 27 New Cave Species Unearthed From Sierra Nevada

Spelunking biologists have demonstrated that there are plenty of new things lurking where the sun doesn't shine -- in the caverns of the Sierra Nevada. The scientists have discovered 27 new species of arachnids and other invertebrates, including pill bugs, spiders and pseudoscorpions, in 30 caves at Sequoia and Kings Canyon National Parks. Their findings were released this week.

"It's remarkable, really," Jean Krejca, a consulting biologist with Austin, Texas-based Zara Environmental and the principal investigator in the expedition, said Wednesday. "I think perhaps the most compelling thing about it is that it gives us the opportunity to ask and answer many evolutionary questions."

The creatures are unique not only because they are found only in caves. Some are found only in a single cave -- or even in a specific chamber of a particular cave. Krejca and the other scientists found the critters during a biological inventory of the parks that was conducted for the National Park Service between 2002 and 2005.

By surface standards, the creatures are exotic. One, a type of daddy longlegs, has oversize mandibles, perhaps enabling it to eat super-size prey. "We saw it eating dobsonflies, which are quite large," Krejca said. Many others were translucent. Pigmentation isn't necessarily an adjunct to survival beneath the ground, said Krejca, and most subterranean animals do without it.

"Sometimes there is a genetic link between giving up pigment and gaining enhanced sensory abilities, which would help in securing food," she said. "Or the energy used for producing pigment could instead be used to produce greater numbers of offspring." It is extremely rare to find new vertebrates -- mammals, birds, reptiles and amphibians -- on the Earth's surface, which has been thoroughly explored and largely surveyed. But the planet's vast subterranean complexes are still terra incognita for the most part, and scientists discover new species -- particularly invertebrates -- in them with some regularity.

Still, said Krejca, finding almost 30 new species in a single study is anomalous. Krejca said researchers typically find surface variants of new cave species and compare them.

One thing seems certain, said Krejca: The newly discovered species are new not only because they haven't previously been described in the scientific literature but because they haven't been around very long, in evolutionary terms. "Ten thousand years ago, the area where they live was covered by glaciers," she said, "and it's highly unlikely they could've survived extended glaciation." Cave species adapt to subterranean environments to different degrees, said Krejca. Many of the species recently discovered in the Sierra are troglobytes -- the most highly cave-adapted, Krejca said. "Troglobytes are so specifically geared to caves that they can't survive on the surface," she said, "so they can't leave one cave and walk to another. They have to use underground pathways."

And for many cavern-dwellers, such pathways may not exist -- meaning that a critter that evolves in a specific cave stays there. "So you can end up with lots of endemics in a

small area," Krejca said. "That's what appears to have happened in Sequoia and King's Canyon." An endemic species is an animal and plant that is found in a single locale and nowhere else.

So far, none of the new species has been named. Nor will that honor go to the researchers who discovered them, Krejca said. "We've submitted the information to taxonomists, who will write up the actual species descriptions," she said. "They're doing most of the hard work, so they get to name them."

Park officials plan to adopt measures to protect the caves, according to Despain, a cave specialist who helped explore 30 of the 238 known caves in Sequoia and Kings Canyon National Parks. Most of them are not accessible to the public, and can be visited only by researchers or experienced explorers with permits. The species have yet to be named, described scientifically and placed in the continuum of known living organisms.

"We don't know how long they live, what kind of habitat they prefer, how many offspring they have, or how sensitive they are to human disturbance," Krejca said. "There's still so much to learn."

(Excerpted from: Glen Martin. 2006. San Francisco Chronicle, January 19, 2006. <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/01/19/BAGTQGPQKPI.DTL> and <http://www.cnn.com/2006/TECH/science/01/18/new.species.ap/index.html>)



Pseudoscorpion (Zara Environmental)

### The Hazards of Eating Bats

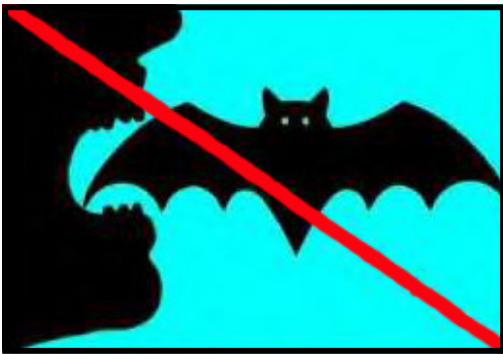
Bats, along with spiders and snakes, are one of the most frequently feared animals. Ask any bat lover, and they will tell you that these creatures are harmless and unfairly maligned. Sure they carry rabies, but so do many other animals, including "man's best friend" the dog. People's phobias, they maintain, comes from the medieval association of bats with the Devil, or from fear of the dark, or vampire legends, or some such thing. Bats are cute and good for the eco-

system. Leave them alone and they'll leave you alone.

That last sentence may be true, but apparently some bats aren't harmless. Certain bats are now suspected of causing some of the world's most feared diseases. And all the trouble started because some people, rather than leave them alone, eat them.

Australian researchers Lin-Fa Wang and Hugh Field have found that horseshoe bats are the likely natural reservoir of the deadly SARS virus that struck southern China in 2002, killing over 700 people and sickening thousands. Originally, a SARS-like virus was found in an animal called the palm civet. When this turned out to be a red herring, Wang and Field placed their bets on bats. Sure enough, SARS-like viruses and antibodies against them showed up in a whole lotta bats, and the finding has been repeated by others around the world.

The duo had good reasons to suspect our flying friends. Bats had already been found to harbor the nasty Hendra and Neepea viruses. And bats have so many disease-harboring and -spreading talents that researcher Kathryn Holmes calls them "magnificent vectors". They're more closely related to humans than you might think (some classify them as primates). They are relatively long lived, a potentially stable home. They huddle together during the day, sneezing and coughing on each other and spreading viruses around, even to other bat species. Then at night, they spread out for miles, potentially spreading disease far and wide. Some even think they can carry diseases without getting very sick themselves. Yikes.



How is it that humans managed to get these diseases? It looks like the sale of bats for food is to blame for bringing folks and flying furballs together. Most Westerners cringe at the thought of eating the critters, but they are prized as food in other parts of the world. The outbreak of SARS is likely due to humans mingling with bats in the crowded markets of southern China.

Now the poor creatures are suspected of spreading the hideous Marburg and Ebola viruses. Could it get any worse? Yes. The eating of giant fruit bats or "flying foxes" on the island of Guam is now blamed for causing one of the most baffling and disturbing epidemics ever— a sudden appearance of a Parkinson's disease-like syndrome in the 1970's.

The Chamorro people of Guam loved the taste of flying foxes. An American military presence in Guam suddenly made guns more available, and therefore made the delicious giant fruit bats more available too. After downing a flying

fox, an aboriginal resident of Guam would drop the whole thing unskinned into a pot of boiling milk. In an hour or so, soup was on. But every scrumptious spoonful was causing cumulative poisoning.

Primitive, fern-like trees called cycads grow on Guam and neighboring islands. These plants produce brightly-colored fruits that often contain neurotoxins. The native peoples ate the seeds, but were wise to the danger, and they therefore washed the seeds thoroughly.

The bats, however, were not so discriminating. They ate the fruits with relish, accumulating toxins in their flesh. And then the Guamians ate them. After downing enough bats, these people started showing tragic symptoms of a new disease christened ALS-PDC. The syndrome was a ghastly amalgam of Alzheimer's-like dementia, ALS-like slow paralysis, and Parkinson's-like shaking. Eventually the disease became the leading cause of death among the adult Chamorro people.

Then just as suddenly, new cases of the disease stopped happening. Turns out that the native bats had been hunted to near-extinction, and different species were being imported from Samoa and other places where no cycads grew. The origin of the disease wasn't worked out until years later, so it remained a deep mystery for decades. The answer was over their heads the whole time— they merely needed to look up to that leathery flapping sound.

After all of this, bats need a friend. But don't give them a hug. And don't eat them.

(Bryan Lowder. 2006.

<<http://www.damninteresting.com/?p=281>>)

## **Tales of the Sinkhole:**

### **Sinkholes Strike Trinity**

**Trinity, Alabama** — An alert Trinity resident possibly prevented a tragedy Tuesday morning by notifying authorities of a sinkhole that caved in the westbound lane of Old Alabama 24. Jason Bowling, acting supervisor of Trinity's Water/Street Department, said Troy Terry called police about 7:45 a.m. after watching a portion of the road dip under the weight of a passing school bus. Terry lives on Old Alabama 24, about 200 feet from the sinkhole. Residents of Heritage Estates Mobile Home Park and officials at Jones Fence Co. on Old Alabama 24 also re-ported two sinkholes each. The businesses are about a quarter mile east of the highway problem. Trinity Mayor Vaughn Goodwin estimated the sinkhole to be 20 feet deep with a 10-foot radius. "It slanted under the highway," Goodwin said. "We could have buried a school bus in there." Another sinkhole formed on the south side of the highway and ran from the ditch to the edge of the road.

Trinity and District 1 road employees spent three hours dumping limestone, or rip rap, from nearby Hoover Quarry into the holes, topped by crusher run limestone. Goodwin said the sinkholes "rattled a few nerves, and I understand why. We had a sinkhole about 50 feet east of this spot several years ago that stretched across the highway. We haven't had any more problems there."

Theresa Jones Poludniak of Jones Fence said one of the sinkholes was in front of where an employee parked a truck.



She pointed to the tire treads. Her brother, Keith Jones, said the company was fortunate the truck didn't go down. The hole appeared from the surface like a cave, slanting sharply into the ground.

"We had to dig out a load of pipe from a sinkhole about five years ago," he said. The other sinkhole on the property occurred in the back yard of their sister, Janice Boyd, taking roots from a tree. It formed an almost perfect circle with about a 15-foot radius.



Sinkhole in Trinity, Alabama (Gary Lloyd)

Wright said that although sinkholes can occur in the area anywhere at anytime, they are more prevalent after a long dry spell followed by heavy rain. "That's what we've just had, and this is what we got," he said. He categorized the sinkholes "colloquial or slope." He explained the region is composed of karst topography that stretches from Birmingham to the Ohio River, on the north side of Kentucky. Karst features porous limestone containing deep fissures or pinnacles. "The underlying bedrock is all broken up." Wright said. "Anywhere there is a pinnacle, the water that penetrates down through the soil hits it and goes down the slope, like water running down a hill. It erodes the soil over the rock, forming a cavity. The cavity eventually reaches the surface, forming a sinkhole."

(Excerpted from: Ronnie Thomas. 2005. <<http://www.decaturdaily.com/decaturdaily/news/050928/holes.shtml>>)

## **International News**

### **World's Longest Salt Cave Discovered in Iran**

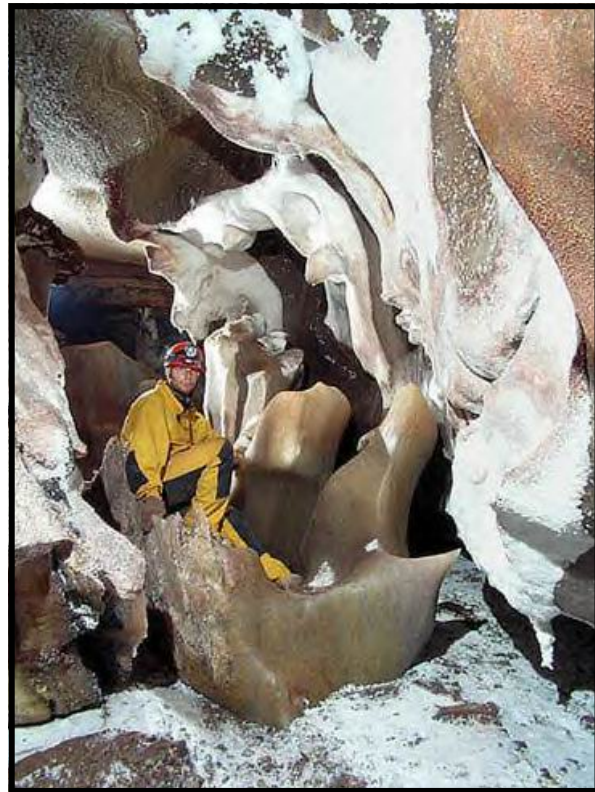
Experts from Charles University of Prague in the Czech Republic and Iran's Shiraz University announced on January 17 that they had recently discovered the world's longest salt cave on Qeshm Island, Iran. The newly revealed Tri Nahacu Cave (Cave of Three Nudes) is over 6000 meters long. The Czech-Iranian expedition found a connection between two caves, one of which is 5190 meters long that the Czechs had previously explored in 1999. A commission of the International Union of Speleology (UIS) will officially decide on the cave's length. The cave was named "Cave of Three Nudes" because the first explorers removed their clothes to cross the large and deep salty lake in the entrance. Before the discovery, Malham Cave in Israel was the longest known salt cave in the world at 5685 meters.

The director of the Qeshm Department of the Environment, Bijan Farhang Darreh-Shuri, said that facilities such as

hotels, restaurants, and parking lots will soon be provided for tourists interested in visiting the cave. "The cave is open to those interested, but they are not allowed to walk to the end of the cave, and only researchers can see the whole cave," he added. Springs flowing from the caves, with 99 percent salinity, are utilized for medical and industrial purposes.

Experts from the Geology Department of Shiraz University, Charles University, and a British university began the project to explore the caves of the region about two years ago.

(Excerpted from: Mehrnews.com <<http://www.mehrnews.ir/en/NewsDetail.aspx?NewsID=279979>>, and Prague Daily Monitor <<http://www.praguemonitor.com/ctk/?id=20060117E0551;story=Czech-speleologists-reveal-large-salt-cave-in-Iran>>)



Tri Nahacu Cave, Iran (Expedition NAMAK 2005)

## **Announcements**

### **Annual Bracken Bat Cave Guano Gathering** **February 5, 2006**

This is it, the event we all have been waiting for! The chance to get ankle deep (or knee deep, or thigh deep...) in bat guano! The chance to get as much free seed-free fertilizer as you can carry! The chance to see the back of Bracken Bat Cave and NOT die of ammonia poisoning! Yes, that's right, it's the annual GUANO GATHERING!

We will be meeting at Bracken Bat Cave in Comal County (Texas, for those of you reading this from elsewhere) at 10:30 on Sunday, February 5. Entrance is off 3009 (Natural Bridge Caverns Road), about 8 miles from I-35 (exit 175). There will be orange traffic cones on the side of 3009 at the

gate. The cave is privately owned, and must be accessed through 2 locked gates. There will be a brass combination lock on each gate with a bat sticker. I'll email the combination to anyone who writes back to tell me they will be there.

What we normally have is about 50-70 cavers, friends, and family. (No dogs, please. We mean it.) Everybody lines up from the surface down to the cave mouth, forming a bucket brigade. We'll have 2-3 people inside the cave filling 5-gallon buckets as fast as people can pass them up the line. Empties are passed back down. There will be another 2-4 people on the surface filling whatever containers people bring: trash cans, trailers, truck beds, etc. When all the containers are filled and no more empty buckets go back in the cave, the remaining buckets are filled and also passed up to the surface to be taken away. This whole process is usually hot and dirty, but takes no more than 2-3 hours. Afterwards, everybody is welcome to tour the cave, so bring a light and a helmet if interested.

There are some important things to keep in mind. Everyone, no exceptions, will have to sign a release form upon entering the property. Everyone, no exceptions, that shows up should be prepared to be a part of the bucket brigade and WORK. We have no space for sightseers. Now the disclaimer. We will be handling dry, powdery GUANO, and there is a slight chance of contracting histoplasmosis if you inhale the fungal spores when breathing guano dust. Bandanas and painter's dust masks can not keep you from breathing in the spores. Only a properly-fitted respirator with a P-100 particulate filter can do so. If you are worried, either wear the right equipment or don't come. I won't be wearing a mask, and in the 8 or 9 times we have held this event, no one has contracted histoplasmosis from not wearing a mask. But don't say you weren't warned. End of disclaimer. Also, I only want to see FIVE-GALLON plastic buckets. No square kitty-litter buckets, no 3-gallon detergent buckets, just 5-gallon buckets. It makes it so-o-o-o much easier to pass buckets back down the line when we can stack them.



Worker removing guano from Bracken Bat Cave, Texas

I'll have several shovels in the cave, mostly for scraping up the loose guano into deep piles so we can just scoop it up with the bucket. So don't bring any tools like that. Also, if you are planning to transport the guano back home in a truck bed or trailer or the trunk of your car, let me remind you again that the guano is dry and powdery and is easily air-

borne. Trailers and truck beds need to be lined with a tarp or something so the guano doesn't sift out, and also covered so it doesn't blow away. And if it is in your car and leaks out anywhere, your car is going to stink for a long time. Buckets and trashcans with lids are the best way to go, but heavy-duty (contractor grade, not yard grade) trash bags will work in a pinch if not filled very far. FINALLY, be sure to bring some water and wet wipes to clean yourself up, a change of clothes and shoes, and a trash bag for your dirty clothes. Some of us will likely stop for the traditional late lunch at Capparelli's on the way home.

So let's hope the weather holds, and we see LOTS of people with buckets. Bring non-caver friends if they are interested. More people on the line makes the work easier and faster. It's a good time and a lot of fun. Really! Last year we brought out somewhat over two tons of guano that is now fertilizing flowerbeds, fruit trees, lawns, vegetable gardens, and other crops across Texas.

Guano Ho! -- Crash

### **Government Canyon Karst Project**

**February 25-26, 2006**

The February karst project at Government Canyon will be held on the last weekend of the month - the 25th and 26th. Thousands of unexplored acres to ridgework and virgin cave to survey. Directions to the park are below. Contact me if you want to camp.

Directions to the gate of GCSNA. Find the intersection of U.S. 16 and Loop 1604 in northwest Bexar County (clearly shown on any state highway map). Drive 2 miles north on U.S. 16 to the third traffic light and turn left onto FM 1560 (there is a Shell station on the corner). Follow 1560 for 3 miles to Galm Road. (Old San Antonio city maps may show another Galm Road less than half a mile past the Shell. This road is now named something else. Ignore and keep on to the real Galm Road.) Turn right on Galm Road and drive 2 miles to the sharp left turn in the road. The gate to GCSNA is straight ahead. Enter at the gate and then take the first right. There is an unlocked gate that will need to be opened and then closed behind you. Continue to the ranch house, where we will meet. Start time is 9:00 AM. You won't find us after 9:30!

Marvin Miller (830)-885-5631 <mlmiller@gvtc.com>

### **Grotto Events**

**Bexar Grotto:** There will be a Deep and Punkin Caving and Trip-Leader Training trip led by Joe Ranzau and Allan Cobb on February 3-5, 2006. A work trip to Bracken Bat Cave is scheduled for the first weekend in March. New grotto officers for 2006: Chairman: Joe Ranzau, Program Chair: Kurt Menking, Trips Chair: Rob Bisset, Secretary: Sara DuBose, Treasurer: Cindy Perez, Editor: JoAnn DeLuna.

**Cowtown Grotto:** The grotto is scheduling several restoration projects at Carlsbad Caverns NP during early 2006.



**Lubbock Area Grotto:** The grotto intends to finish the survey of Endless Cave in New Mexico by the end of January 2006. New grotto officers for 2006: Chairman: William Tucker, Vice-Chair: Robin Reynolds, Secretary: Lee Ann Dean, Treasurer: Jimmy Thurlo, Historian: Tammy Tucker, Safety Officer: Don Mittan, Conservation: Dan Dennison, Logistics: Brian Alger.

**NTSS:** New officers for 2006: President: Sheree Mahan, President-elect: Dan Fraser, Vice-president: Cory Pardue, Secretary: Pam Stephens, Treasurer: Sheree Mahan, Trip Coordinator: Bill Stephens.

**PBSS:** The next PBSS meeting will be at ESS Cave on Saturday, February 11, 2006.

**UTG:** New grotto officers for 2006: President: Colin Peden, Vice-president: Marlena Cobb, Secretary-Treasurer: David Ochel, Webmaster: Fran Hutchins.

## Caving Calendar

**February 1, 2006 : From the Mouths of Caves: Maya Creation Mythology in the 1st Century BC (San Antonio).** Bill Saturno, anthropologist from the University of New Hampshire, will lecture on the recently discovered polychrome murals found at San Bartolo, Guatemala. **Location:** Trinity University, Northrup Hall, Rm. 040, 7:30 PM.

**February 5, 2006 : Bracken Bat Cave Guano Gathering (New Braunfels).** Annual event to gather and distribute as much free bat guano to participants as they can haul out of the cave. For details, see announcement elsewhere in newsletter. **Contact:** Jim Kennedy <jkennedy@batcon.org>

**February 5-12, 2006 : CDS Fund Raiser - Cruisin for Caves (Miami, Cozumel, Belize, Roatan and Cayman).** For every ticket purchased the CDS will receive \$35.00 and Carnival will match the donation. The CDS will be cruising to Cozumel, Belize, Roatan and Cayman on Feb 5th 2006. Details on price, itinerary and registration can be found on the NSS Section website at <www.nsscds.org>.

**February 8, 2006 : Texas Speleological Survey Work Session (Austin).** Held at the TSS office in Austin from 5:00 to 8:00 p.m. Come help with the organization of Texas cave information. **Contacts:** Jim Kennedy (512)-663-2287 <jkennedy@batcon.org> or Ron Ralph <ronralph@austin.rr.com>.

**February 11-12, 2006 : Kickapoo Cavern State Park Project.** Final project work weekend. The focus will be on completing the surveys of two small caves, re-securing the shaft above Stuart Bat Cave, light brush-trimming on the trail to Kickapoo, work around the campsites, and as always, ridgewalking for anyone interested. **Contacts:** Travis Scott <travis@oztotl.com>, or Allan Cobb <ac@oztotl.com>.

**February 11-12, 2006 : Colorado Bend State Park Project.** Survey, ridgewalking, and digging activities. Beginners and experienced cavers welcome. **Contacts:** Terry Holsinger (512)-443-4241 <trhli@sprynet.com> or Dale Barnard <Barnarddale@yahoo.com>.

**February 18-20, 2006 : Bustamante President's Day Project (Bustamante, Mexico).** Annual conservation and development project at the magnificent Gruta del Palmito. **Contacts:** Bob (Rune) Burnett <bburnett1@austin.rr.com>, (512)-459-0505; or Orion Knox <Orion-Knox@alumni.utexas.net>, (512)-453-4070. Details and pre-registration forms at <http://home.austin.rr.com/ojknox/bustainfo.htm>.

**February 18-20, 2006 : Manhole Cave Dig (Carlsbad, NM).** Ongoing cave dig in the Guadalupe near Lechuguilla Cave. **Contact:** Steve Fleming <swcaver@warpedriveonline.com>.

**February 25-26, 2006 : Government Canyon Karst Project (San Antonio).** Ongoing project to discover, explore, and survey the many caves within the park. **Contact:** Marvin Miller (830)-885-5631, <mlmiller@gvtc.com>.

**February 25-26, 2006 : High Guads Restoration Project (Carlsbad, NM).** On-going work amidst spectacular scenery in the beautiful caves of the Lincoln National Forest. Last weekend of the month, permits often include Three Fingers, Virgin, Pink Dragon, Pink Panther, Hidden, Wonderland, and Black Cave. Activities vary from month to month. **Contacts:** Susan Herpin or Jennifer Foote <highguads@yahoo.com>.

**March 17-19, 2006 : Deep Cave Survey Trip.** Continuing exploration and survey of TCMA-owned Deep Cave in Edwards County. Activities at Punkin Cave will be included if there is adequate interest. **Contact:** Jerry Atkinson, (281)-360-2244 or <jerryatkin@aol.com>.

**March 23, 2006 : Deep Down Underground Caving Event (Austin).** The Sheffield Education Center will be introducing students to Austin's underground at the Sheffield Education Center's Deep Down Underground Caving Event from 9:30 AM to 1:30 PM. Activities will include a cave obstacle course, knot tying, live bats, and a map activity in a constructed cave crawl. If you are interested in bringing your young elementary students to this free program, contact Margaret Russell at (512)-478-1466 to register.

**March 24-26, 2006 : NSS Board of Governor's Meeting (Irving, TX).** The Metroplex grottos will host the spring meeting of the NSS BOG. Evening parties on Friday and Saturday will be at Bill Steele and Diana Tomchick's house, Saturday meeting and catered lunch at the Irving Garden and Arts Center, and Saturday dinner at the Irving Spring Creek Barbeque. Come on out and meet your elected NSS official-sand have a good time, too. **Contact:** Bill Steele <speleosteel@comcast.net>.

**April 8-9, 2006 : Colorado Bend State Park Project.** Survey, ridgewalking, and digging activities. Beginners and experienced cavers welcome. **Contacts:** Terry Holsinger (512)-443-4241 <trhli@sprynet.com> or Dale Barnard <Barnarddale@yahoo.com>.

**April 8-12, 2006 : 1st Central American Speleology Congress (Catacamas, Honduras).** Invitation is still open for cavers from all around the world that want to participate in this first Congress. Technical presentations on the caves and karst of Central America with planned field trips to area caves. **Contact:** Gustavo Quesada <www.anthros.org> or check website at <http://www.talgua2006.blogspot.com>.

**May 20, 2006 : Texas Speleological Survey Board Meeting (Austin).** Held at the TSS office in Austin at 10:30 a.m. Open to anyone interested in Texas cave information, its organization, and publication. Work session held after the meeting. **Contacts:** George Veni (210)-558-4403 <gveni@satx.rr.com> or Jim Kennedy (512)-663-2287 <jkennedy@batcon.org>.

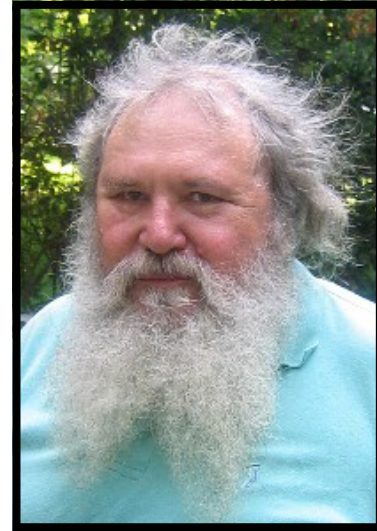


**July 3-8, 2006 : XII International Symposium on Volcanospeleology (Tepoztlán, Mexico).** Sponsored by the UIS Commission on Volcanic Caves, SMES (Sociedad Mexicana de Exploraciones Subterráneas), and Grupo Espeleológico ZOTZ. Two days of formal presentations and three days of field trips including a trip to the longest lava tube in America (Iglesia Cave at ~6 km). For details, see : <www.saudicaves.com>.

**August 7-11, 2006 : NSS Convention (Bellingham, Washington).** The 2006 NSS Convention will be hosted at beautiful Western Washington University. The university is located between the Puget Sound and the Cascade Mountains, just outside of downtown Bellingham. Situated between Seattle, Washington and Vancouver, British Columbia, the spectacular surroundings of this region will make a stunning backdrop for the convention. For more information, visit the website at <www.nss2006.org>. **Contact:** Michael McCormack (Chairman) <michmcco@exchange.microsoft.com>.

**August 18-20, 2006 : EspeleoCoahuila 2006 (Saltillo, Mexico).** Details to be announced.

## -- Obituaries --



**Clark A. Santos**  
(1942—2006)

CLARK ANTONIO SANTOS, beloved son, father, grandfather, brother and friend, passed away on January 14, 2006, in Houston at the age of 63. His strength and spirit will eternally be a part of all who were privileged to know him. Clark was an adventurous and free-spirited soul who lived life to the fullest, doing it his way every day. Individuality was the essence of Clark's life, from his trademark beard to his razor-sharp wit. Beneath his strong exterior was a kind and loving heart that, throughout the course of his life, saw him reach out to countless individuals in need of assistance whether they were lifelong friends or total strangers.

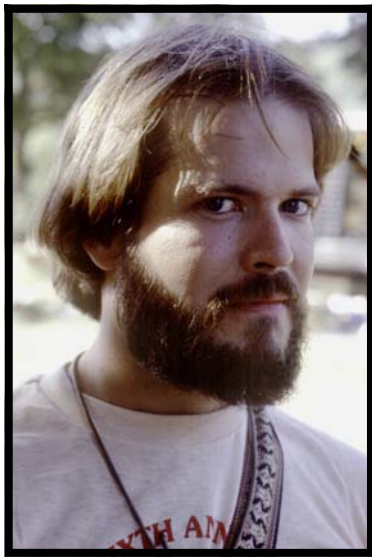
Clark was born in Austin, Texas, on December 13, 1942 and was a graduate of Austin High School. He earned the rank of Eagle Scout and went on to graduate from the University of Texas at Austin with a degree in Business Administration. A Certified Public Accountant, Clark was involved in many entrepreneurial endeavors, including his ownership of University Motorcycle Rentals and Home Car Tune. He possessed a passion for motorcycles, as evidenced by his honeymoon cycling trip through Europe on his BMW with former wife Cynthia, as well as the numerous trophies earned from his days as a competitive racer. A proud participant of the Austin Ghetto in the 1960s and still today, Clark maintained friendships that were perpetuated by his involvement in groups such as the Texas Cavers. He looked forward to the annual Oldtimers reunion, where he was a celebrated cook. Clark always loved to travel to Mexico and shared many memorable moments there with his daughter, Bevin, and close friends. Recently, he rekindled his love of sailing as captain of the Sea Gypsy. His most cherished times, however, were those spent with his grandsons, Asher and Ramsey, of whom he was so very proud. Asher and Ramsey loved their "Pops" very much and know that he will watch over and guide them every day of their lives.

Preceded in passing by his parents, Jose Antonio and Lena Clark Santos, he is survived by his daughter Bevin Santos of

Dallas, her husband Shawn Heilbron, and grandchildren Asher Santos Heilbron and Ramsey Santos Heilbron; his brother David Santos of Austin and his wife Helen; dear friend Cathy Bradshaw of Houston; and dog Wangus. A memorial service to celebrate Clark's life will be held on Saturday, January 21 at 2 p.m. at Weed-Corley-Fish Funeral Home at 3125 North Lamar in Austin.

(Published in the Houston Chronicle on 1/19/2006. Photo by Charlie Jennings )

## Randy M. Waters (1957—2006)



(James Jasek, 1983)

Randy Waters, longtime caver from the San Antonio area, passed away on January 24, 2006 after a long illness. A more caver-related obituary for Randy will be forthcoming in the *Texas Caver*. In the meantime, I have republished the following obituary that was posted on the internet and, in what is probably a more fitting tribute to Randy, the Caver of the Month article that appeared in the February 1982 issue of the *Texas Caver*. Randy will be missed.

Jerry Atkinson

Randy Mack Waters, age 48, of Mico, TX, passed away Jan. 24, 2006. Randy was born July 26, 1957 in San Antonio, TX to the late Elza and Marjorie Burge Waters. In addition to his parents he is also preceded in death by his sister, Donna Burgess. Survivors include his wife, Glenda Sexton Waters; daughter, Jessica Waters both of Mico; step-sons, Shayne Reynolds and his wife Britnye of Spring Branch, Christopher Reynolds and his wife Brooke of San Antonio; grandson, Gatlin Reynolds; brother, Bobby Reeves and his wife Mary of San Antonio; sisters, Sandy Oberg and her husband Steve of New Braunfels, Sue Burgess of AZ and numerous nieces and nephews. A memorial service will be held Saturday, Feb. 4, 2006 at 2:00 P.M. at Honey Creek Cave on the Gass Ranch, 2350 Park Road 31 near Bergheim,

TX. The family suggests memorials may be given to the Bexar Grotto Association c/o Kurt Menking, 8255 Bindseil, San Antonio, TX 78266.

(From: <www.tondre-guinn.com>)

## Randy Waters — Caver of the Month

(Texas Caver, 27(1):3, February 1982)

If one discounts his childhood visits to Carlsbad Caverns and Dinosaur Caverns, Randy Waters began his caving in 1974 as a member of the Alamo Area Chapter. Initially his caving was an occasional pastime, but in early 1976 his interest and fervor began to grow. Perhaps it was the Dec. 1975 trip into Cascade Sink, which made the breakthrough doubling the cave's length and finding possibly the largest room in Kendall County, that whetted his appetite for more.

At that time San Antonio was lacking actively caving members, so Randy began to associate with some new cavers who shared his growing enthusiasm. He helped train them and took them caving. Many of the trips were to caves he discovered himself. Soon he had constant caving companions like John Cross, Dottie and Teeni Kern, Gary Poole, and George Veni. They formed the core of the newly formed San Antonio Grotto which was led by Chuck Stuehm.

Within a short time the SAG had stepped into the forefront of active caving in Texas. It began with a few small, no-go caves. The only leads involved digging, which was Randy's greatest love, and thus many caves were found. After learning to survey, the SAG's first project was the complex Robber Baron Cave. Randy made a very fine map of the cave and headed the continuing Project whose activities involved clean-up, gating, and of course - digging.

Much of Randy Waters is closely tied to the SAG. He was its first member to draft maps and has contributed greatly to the Bexar County Survey. He has opened lots of land and lots of caves to exploration. He has been the most important human resource drawn upon in the push into Sorcerer's Cave. Presently he is leading an integrated survey of the caves in and around Cascade Caverns and the nearby Pfeiffer Ranch. A major undertaking vital to understanding the hydrology and speleogenesis of that area.

With the TSA he prefers to observe and quietly assist. The volume of material he sends to the *Texas Caver*, his name in the *NSS News* under many regional reports as its Texas correspondent, his non-gregarious manner of aid at TSA functions; this all goes easily unnoticed by most cavers. So next time you read the *Texas Caver* or *NSS News*, listen to any reports coming from the San Antonio area, people watch at the TSA function; - pay close attention and you will see that Texas caving is very fortunate in having an asset such as Randy Waters.

George Veni



### **From the Editor of the TSA Activities Newsletter**

The *TSA Activities Newsletter* is an adjunct publication to the *Texas Caver*, the official publication of the Texas Speleological Association. The ANL's purpose is to provide a timely forum for Texas caving news, events, and announcements that cannot be shared with the general caving community through the *Texas Caver*. The *Texas Caver* is a bi-monthly publication at best, and has a history of dependable tardiness. The intent of the ANL is to fill these communication gaps, but not to replace the *Texas Caver*. The TSA encourages cavers to continue to support the *Texas Caver* by sending in trip reports, articles, and photographs to the *Texas Caver* editor(s) that are not suitable for publication in the ANL.

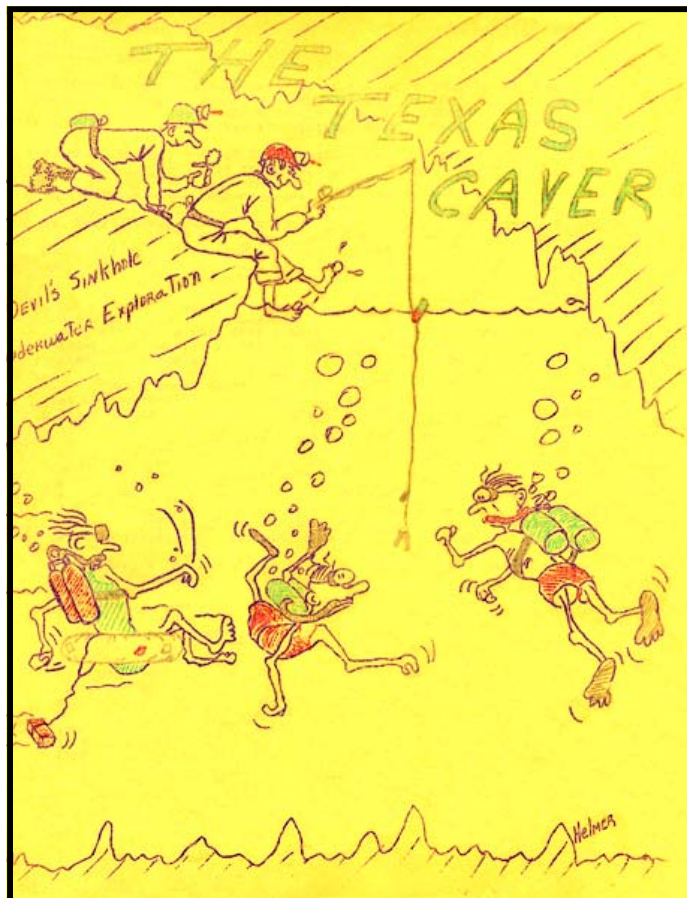
It is the intent of the editor to post the ANL monthly to the TSA website. Due to the prohibitive cost of printing and mailing a monthly hardcopy publication, the ANL will be distributed to all cavers in a digital pdf format which can be downloaded free-of-charge from the TSA website at <http://www.cavetexas.org/>.

As in all endeavors of this sort, a large part of its future success will be based on whether people contribute material. Please send all grotto announcements, calendar events, general caving news and information items that you would like to have included in the ANL to: Jerry Atkinson <[jerryatkin@aol.com](mailto:jerryatkin@aol.com)>.

Editor : Jerry Atkinson  
Editorial Staff : Carl Kunath

**TSA website : <<http://www.cavetexas.org/>>**

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Cover from the February 1956 issue of the *Texas Caver*.