

President's Page

Hi everyone and I hope this letter finds you enjoying the fall weather in Tucson as much as I am. The cool nights and warm days are about as close to perfect as we get. Time to get out and explore our desert environment, enjoy the beauty we have been given and, of course, pick up a few rocks.

The last couple of months have had many high and a few low moments. First of all I would offer my condolences to the family and friends of Bill Lawrence who died in an unfortunate accident. He was a loyal member and his presence will surely be missed. Also, Ms. Carole Lee, a lifetime member, was injured in an accident that required back surgery. Thankfully she is doing well and looking forward to a full recovery.

In preparation for our first structured class at one of the Elementary Schools in Tucson, I put out a request to many of our members and friends for specific mineral specimens. The response was overwhelming!! I had a list of about 20 and someone came up with everyone of them in time for Shirley Wetmore's presentation. Would like to thank Paul Harter, Bruce Veek, Anthony (Tony) Jones, Wayne Klement, John Callahan, Carole Lee, Mark Candee and Andy Anderson. The first class will be held on Thursday the 24th and, thanks to these folks, we are prepared.

We are still in "fast forward mode" preparing for the Show. All the changes have generated a tremendous amount of work for our Show Chairman, Office Staff and Dealer Chairpersons. However, in spite of a few glitches, we are moving forward and will be looking for a lot of volunteers to make this 60th Anniversary event a success.

Last, but not least, plan to attend our upcoming seasonal events. The Annual Mineral, Fossil, Jewelry, Art & Craft Sale will be December 7th right here at the clubhouse. Also, join us for our Annual Christmas Party on December 18th with a traditional Holiday meal and great entertainment.

All for now, take care, be safe and see you in November!

Diane Braswell
President



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TGMS General Meeting - September 9, 2013

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Diane Braswell at 7:35 p.m. Visitors and new members were recognized and welcomed to the meeting.

PROGRAM: Dr. Madison Barkley is the Curator of Natural History and the Education and Outreach Division Head for the Arizona Historical Society. She received her Ph.D. in Geosciences from the University of Arizona where she studied the high-pressure behavior of crystal structures. Dr. Barkley's topic was "Metals That Changed the World" which was inspired by the book *Napoleon's Buttons: How 17 Molecules Changed History* by Penny Le Couteur and Jay Burreson. The talk explored metals that have greatly influenced the course of human history beginning with the Stone Age when native gold was discovered to be malleable and corrosion resistant. The Copper Age saw development of techniques for smelting ore, followed by the Bronze Age when copper was alloyed with other metals, notably tin. Next came the Iron Age and the rise of Alchemy which eventually led to modern chemistry and medicine. During the Industrial Era chemistry and metallurgy became recognizable disciplines and there were key innovations with steel. In the Modern Era, World War II, aviation and electronics drove research into metals and materials. Dr. Barkley listed the following as metals that changed history: lead, mercury, iron/steel, gold, copper and tin.

BREAK: Refreshments included a delicious assortment of cakes and muffins provided by members Pat McClain and Rose Marques. Many thanks!

APPROVAL OF MINUTES: MOTION: To approve the minutes of the May 6, 2013 General Meeting as published in Rock Talk. Seconded and approved.

OLD BUSINESS:

Shirley Wetmore was presented with Lifetime Membership in recognition of her many years of service to TGMS. She is currently helping with Community Outreach.

Jo Anne Sam announced that the 10th Annual Mineral, Fossil, Jewelry, Art and Craft Sale will be Saturday, December 7th from 9:00 a.m. to 4 p.m. All but two spaces are filled. Vendors are asked to set up Friday evening between 5 and 7 p.m. so the event may open on time Saturday morning. Janelle Cortright will be doing the advertising. Free coffee, lemonade and cookies will be available for the public during the sale. After move-out and cleanup, pizza and sodas will be available for the vendors.

Summer Pot Lucks: Everyone had an enjoyable time at the June pot luck which was at the home of John Callahan and Kathy Steiner. In July, Bob and Elaine Royer hosted the event at TGMS and presented a very interesting talk on Antarctica. The August event was held at the U of A Mineral Museum and hosted by Mark Candee. The attendees were treated to a viewing of the minerals by

headlamps and flashlights.

Field Trips: Kerry Towe announced the tentative schedule. If anyone has ideas and wants to work on setting up a trip, it would be greatly appreciated.

Monday, October 14th back to Granite Gap which members enjoyed last year.

November – Nuevo Corral near Ruby for geodes.

December – geodes at a site near Douglas.

Hopefully a trip to the Tiger Mine again.

January – Silverbell Mine.

Magma Mine – three people are going to look at the site and see if a trip will be worthwhile.

March 7th – Mission Mine.

April – possible trip to Big Indian Copper Mine in Utah. Janelle Cortright will be investigating this option. The charge is \$110 per person for four hours at the mine.

Community Outreach: TGMS ads are being put in Bear Essential News, a monthly publication of elementary and middle school children, with the objective of informing students about the Society and what it has to offer. Hopefully this will interest more young people in earth sciences and ultimately result in more members for the Society. TGMS is also participating in Earth Day twice a year at Pima Community College West. Volunteers may be needed to deliver materials to schools and talk to students about earth sciences. If anyone has ideas for other outreach activities, please contact Diane Braswell.

NEW BUSINESS:

Bill Shelton's next class will be October 8th, 7:00-8:30 p.m. at TGMS. The topic will be "Tourmaline". There is a sign-up sheet in the back room.

Hospitality: Volunteers are needed to provide the refreshments for the meetings. Expenses are reimbursed up to \$100 and the host gets first choice of the specimens for the drawing. Please sign up on the sheet in the back room.

Christmas Party: Bill Hodgson, Carol Johnston and Don and Sue Feyrer have retired after years of arranging a wonderful dinner and entertainment for TGMS members and guests. Many thanks to them for all their hard work. Volunteers are needed to set up the Christmas tree and decorations in early December and to help with arrangements and set up for the party the middle of December. The dinner will be catered again this year.

DRAWING FOR DOOR PRIZES: Winners were Ortrud Schuh, Alrene Hibben, Ron Gibbs, Lisa Walsh and Sara Day.

The meeting was adjourned at 9:10 p.m.

Respectfully submitted,
Marilyn Reynolds, Recording Secretary

TGMS General Meeting - October 7, 2013

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Diane Braswell at 7:30 p.m. Visitors were recognized and welcomed to the meeting.

PROGRAM: Bob Jones has been a science teacher, who was twice selected as "Teacher of the Year", a photographer, lecturer and mineral collector (personally collected "bobjonesite"). He is an editor and author for Rock and Gem, has written over 1200 articles and is a Carnegie Mineralogical Award recipient. His topic was "Color in Minerals". Two things important to understand are that chemical molecules have geometric configurations and valence which refers to the number of electrons an atom can give up or take on. In an earlier study, chromium was added to aluminum oxide resulting in ruby. This was the first indication that impurities in minerals were responsible for color. He discussed and gave examples of the mechanisms resulting in mineral color: transition metal elements, band gap metals, color centered minerals, charge transfer and microscopic parallel twin crystals.

BREAK: Refreshments included fruits, vegetables and cinnamon rolls provided by Diane Braswell and empanadas provided by John Callahan. Many thanks!

OLD BUSINESS:

Field Trips: Kerry Towe announced that participants going on the Granite Gap trip on Monday, October 14th will leave TGMS at 7:00 a.m. There are waivers in the back room to be filled out and put in a box. There will be a stop at Texas Canyon to regroup and use the facilities. Other tentative trips include:

November or December: Ash Canyon for smoky quartz, possibly November 17th.

January: Silverbell to an old mine in the area

February: Purple Passion near Wickenburg

March: Mission Mine

Community Outreach: TGMS has become more involved in Bear Essentials, the newsletter sent to elementary schools. Shirley Wetmore is putting together a program to show raw minerals compared to what they are developed into and used for in everyday life. She needs samples of the following: kaolinite, talc, hematite, cassiterite, tremolite, beryl, actinolite, epidote and galena. Any members who can donate these materials, please contact the office.

NEW BUSINESS:

Bill Shelton's class "Tourmaline" will be Tuesday, October 8th from 7:00-8:30 p.m. There is a sign-up sheet in the back room.

Show Cases: Blueprints are being drawn up for the new cases. Donations toward the cost of the cases are welcome. With a donation of \$500, a plaque bearing the donor's name, or the name of someone to be honored, will be permanently displayed on the front of a case. A member suggested donations could be made for a case honoring Harrison

Yocum. A donation letter and form are available in the back room.

Hospitality: Please sign up to bring refreshments for one of the meetings. Meeting host gets first choice of the minerals for the drawing. Sign-up sheet is in the back room.

Christmas Party: Wednesday, December 18th, is \$5.00 for members and \$10.00 for guests. There is a sign-up sheet in the back room.

Old Pueblo Lapidary Club will be holding their 12th Annual Silent Auction on Saturday, November 2nd from 9:00 a.m. to 2:00 p.m. The address is 3118 N. Dale, Tucson. This is a great chance to get all your mineral and lapidary needs.

DRAWING FOR DOOR PRIZES: Winners were Wolfgang Mueller, Mark Marikos, Ginny Peterson and Bob Powell.

The meeting was adjourned at 9:20 p.m.

Respectfully submitted,

Marilyn Reynolds, Recording Secretary

**10th Annual
Mineral, Fossil, Jewelry, Art & Craft Sale**

Presented by the
TUCSON GEM AND MINERAL SOCIETY MEMBERS

THE PUBLIC IS INVITED!

SATURDAY, DECEMBER 7, 2013

9:00 a.m. - 4:00 p.m.

3727 E. BLACKLIDGE
2 blocks south of Ft. Lowell,
1/2 block east of Dodge

FREE COFFEE, LEMONADE, AND HOMEMADE COOKIES!
FREE GIVEAWAYS FOR THE CHILDREN!

FABULOUS HOLIDAY GIFT SHOPPING, FROM STOCKING
STUFFERS TO WORLD CLASS MINERAL SPECIMENS,
FOSSILS, JEWELRY, PAINTINGS
AND MUCH, MUCH MORE.







"The TGMS Christmas Party"

WHEN: Wednesday, December 18, 2013

WHERE: TGMS facility - 3727 E. Blacklidge Drive

WHAT TIME: Starting at 5:30 p.m., dinner at 6:30 p.m.
and the concert will begin around 7:15 p.m.

It will include a catered dinner and entertainment by Melody Louise. Her exceptional vocal stylings and versatility includes a repertoire ranging from Jazz Standards, Pop Rock to Country Classics.

TGMS members pay \$5.00 and guests \$10.00 to help cover the expenses incurred in having a "GREAT" party. We will have sign-up sheets starting at the October 7th General Meeting. You can also contact the TGMS office and make reservations by calling 520.322.5773 or emailing tgms@tgms.org.

The deadline for signing up is December 13, 2013.

"Mark your calendars and come join the fun!"



TGMS Board Meeting - April 22, 2013

Present: Ellen Alexander, Mark Ascher, Diane Braswell, John Callahan, Alrene Hibben, Bob O'Donnell and Marilyn Reynolds.

Absent: Anna Domitrovic, Mark Marikos

Staff: Pat McClain

The Board Meeting was called to order by President Mark Ascher at 6:30 p.m. in the TGMS General Meeting Room.

Minutes Approval: Minutes of the February 25, 2013 Board Meeting were presented. **MOTION:** To approve the minutes as written. Seconded and approved.

Treasurer's Report: Income YTD is \$177,167.77, expenses YTD are \$144,827.37, funds in the bank \$611,726.24.

Review and approval of new 2013-2014 TGMS budget: The Treasurer presented the proposed 2013-2014 TGMS budget. Issues and ideas related to income and expenses were discussed and changes were explained. **The Board went into Executive Session.** After leaving Executive Session, a **MOTION** was made: To recommend the amended 2013-2014 budget to the Society for approval at the May General Meeting. Seconded and approved.

Update on internal "audit/review:" A three member committee will meet in June to conduct the audit.

Old Business:

Document Retention & Destruction Policy Update: Still in progress.

Whistle Blower Policy Update: Still in progress.

Trade Name Update: Still in progress.

Other Old Business: Regarding excess/duplicate library books, the individual who is interested in buying the lot of them is currently out of town.

New Business:

Show Committee items:

A prototype case based on recent recommendations is to be available for the Show Committee Tuesday evening. A suggestion was made to ask the Show Committee to look at extruded aluminum and glass cases as an alternative to wood cases.

The Show Committee recommended Paul Harter for 2014 Show Chair. **MOTION:** To approve the Show Committee's recommendation. Seconded and approved.

Scholarship Review: The Board discussed the two applications for the TGMS scholarship. **MOTION:** To approve giving the 2012-2013 scholarship to Ben Schumer. Seconded and approved. It was recommended that the new Board, elected at the May General Meeting, consider giving the 2013-2014 scholarship to the other applicant, possibly next October or November.

Neighbor Issue: John Penczar, Administrator of Academy Adventures which is the charter school behind TGMS, has requested permission to bring in two mobile class units using TGMS property for access. This would involve taking down the fence and putting it back up. The Board specified that everything to be done and assumption of liability be put in writing by the school. A meeting will be set up to determine details in the near future.

Officer Slate: The Nominating Committee has proposed the following slate to be presented for vote at the May General Meeting: President – Diane Braswell, Vice President – John Callahan, Treasurer – Ellen Alexander, Recording Secretary – Marilyn Reynolds, Membership Secretary – Alrene Hibben, Directors – Mark Marikos, Bob O'Donnell and Madison Barkley. Nominations for each position will also be accepted from the floor.

Nominations for Lifetime Membership: Shirley Wetmore and Linda Oliver were selected to be recommended to the membership for approval at the May meeting.

Other New Business:

The question of changing the General Meeting time to an earlier time will be presented to the membership at the May meeting.

A plaque was received from Arizona Families for Children in appreciation for TGMS support of their 2012 annual Celebrity Bowl.

A communication was received from Dick Gottfried, School Visits Chairman, encouraging members to give a Tax Credit donation to schools in need to be used for buses to transport students to the 2014 TGMS Show.

Call to the Audience: None present.

Meeting was adjourned at 9:20 p.m.

Respectfully submitted by
Marilyn V. Reynolds, Recording Secretary

TGMS Board Meeting - June 4, 2013

Present: Diane Braswell, Mark Ascher, Madison Barkley, Ellen Alexander, Bob O'Donnell, Alrene Hibben, Mark Marikos, John Callahan.

Absent: Marilyn Reynolds

Guests: Linda Oliver, Paul Harter. Les Presmyk, Peter Megaw, Pat McClain

President Diane Braswell opened the meeting at 6:30 PM. The Board was convened to listen to a presentation on the status and progress of the current design/prototype of a proposed exhibit case for the Society. The Society needs to replace the current cases used at the February Show.

Les Presmyk, assisted by Peter Megaw, gave the presentation. It began with the background on previous prototype cases ("Cincinnati," "Denver," and "Colorado") and why they were deemed inappropriate for the Society's needs. He then explained the design, the fronts, the interiors (stating the concerns of the Case Linings Committee), the sides, the bottoms, the lighting, the storage of the cases, the number of cases needed and, finally, the costs. He concluded the presentation with a demonstration showing everyone the ease of dismantling / assembling the model as well as how it looked when dismantled and ready for storage.

Questions were asked of Les and the other guests during and after the conclusion of the presentation. Responses were given by the appropriate person. Peter Megaw had

his cabinet maker come and evaluate the prototype. Suggestions were given, including the use of nice wood for the fronts rather than laminate. Some concerns rest with the need to build separate storage cases for the cases since they do not lay perfectly flat. All the information given was considered by the Board. It was the consensus that the Board needed to see a more finished model that incorporated the suggestions made before approval could be considered or given.

The Board did not entertain a formal motion to accept the current prototype. The Board asked if a committee could be formed to expedite and oversee the development of a more complete model and to explore the bidding and design template portions of the project. Mark Marikos, Peter Megaw, and Les Presmyk volunteered to form the committee. The Board asked for a reasonable but expedited date for completion of the committee report and to completely build a finished model.

Ellen Alexander offered to find a draftsman or architect to hire for creating the template once the design is approved. The Board set the next meeting date on Monday July 8, 2013 at 6:30 PM at the Society facility. The committee agreed that the report and finished model could be presented at the meeting.

Before adjourning the meeting, all present were asked to complete a new annual 'Conflict of Interest' form. The meeting was adjourned at 9:15 PM.

Respectfully submitted by Alrene Hibben
Recording Secretary pro tem

TGMS Board Meeting - July 8, 2013

Present: Mark Ascher, Madison Barkley, Diane Braswell, John Callahan, Alrene Hibben, Mark Marikos, Bob O'Donnell and Marilyn Reynolds.

Absent: Ellen Alexander

Staff: Pat McClain

Guests: Peter Megaw, Lee Oliver, Linda Oliver, Les Presmyk and Jeff Martin.

The Board Meeting was called to order by President Diane Braswell at 6:30 p.m. in the TGMS Meeting Room.

Business: The purpose of this meeting was to examine and critique two case designs based on suggestions from the June 4, 2013 Board Meeting. Jeff Martin from Swiss & Martin Custom Interior Products and Greg Hughes from Wood Intrigue Custom Woodworking were chosen to build the prototypes for this meeting.

Jeff Martin showed his case and discussed the features: Cherry front with maple veneer sides, back and bottom; sides and back are attached to the base by hinges; top is attached to the back by hinges and folds backward; sides are held to top by latches; the front hangs from a French cleat with the bottom fitting into a trough in the steel trim around the base of the cabinet. The glass would be tempered glass held in the frame by silicone. Jeff suggested Watco Danish Oil for the finish. Set up and take down were

very quick. Batwing hinges were suggested in place of the ones used on the case which did not fold completely flat because of the French cleat and the hinges. Jeff also stated he had room in his factory to store the cases in pallets he would build for them. Jeff was excused after his presentation.

Peter Megaw demonstrated and discussed the Greg Hughes case as Greg could not be present. The case had a cherry front and cherry veneer sides. Sides and back were hinged to the base with piano hinges. The top was hinged to the back but folded forward which allowed the case to fold flat and provided room for LED lights to remain attached to the top. The sides were secured to the top using an interior locking mechanism requiring a one quarter turn with a screwdriver. The front hung from brackets with the bottom fitting into a trough in the aluminum trim around the bottom of the case. Set up and take down were very quick also.

The cases were closely examined and tweaks to both designs suggested. **MOTION:** To go with Greg Hughes design, after making the suggested tweaks to his case, and proceed with bids from both manufacturers. Seconded and approved.

The next Board Meeting: To be announced.

Meeting was adjourned at 8:30 p.m.

Respectfully submitted by
Marilyn V. Reynolds, Recording Secretary

Greetings from München Stadt.



Greetings from München Stadt. Many of our dealer friends and others affiliated with the Tucson Gem and Mineral Show™ have enjoyed the hospitality of the show, the dealer's specimens and the magnificent displays. All of us who visited Munich extended out congratulations for fifty years of successful shows. I

do hope that all of you will be fortunate enough to one day visit this great city and show. Bavaria in the fall is beautiful.

Sixty consecutive years of shows: An elementary school with folding tables, to the TCC and all of the staging associated with our great show. Hospitality toward all is one hallmark of our Show. I was impressed by the friendliness of everyone I met in Munich. One goal which I hope each of us will not only meet, but exceed, is friendliness to everyone we encounter. When you are at the Show, whether as a volunteer or just enjoying the dealer booths and the exhibits, stop and take time to introduce yourself as a Society member. Inquire if there are any questions and wish everyone, not only a pleasant day, but invite them to return in 2015. Each of us needs to be an ambassador for TGMS and its Show.

Now, on to the Show. 2014 promises to be a fantastic Show. The dealer lineup is full. The mix of dealers is better than ever. Whatever our guests may want will be on the Show floor. Don't forget Valentines Day and the opportunity to buy that special gift. Most of you are aware of the new exhibit case project. Although we have been temporarily slowed, the Show Committee and the Society Board are fully committed to seeing this project through for the 2014 Show. Lighting for the cases will also be state of the art. A small group of members have designed an LED light strip and, with the approval of the TGMS Board, has ordered LED lights for all new cases. The lights are being manufactured as you read this column. There is still more to report! The Show Committee has stretched its budget to also upgrade the look of the Show. The first thing each guest will notice is a significantly revamped floor plan. Second there will staging at the ceiling level and we are beginning to carpet in the center of the Exhibition Hall. Improved landscaping and, as many people would like to see, more casual seating throughout the entire Show. Exhibits, both competitive and special, will be stunning. Although diamonds are small, we will be able to see several

great exhibits of diamond crystals and pieces of jewelry. Gemstones - look for exhibits which feature the big three: ruby, emerald and sapphire. Gold and silver, a reprise but only better than what we saw both 20 and 10 years ago. Lastly, please do not overlook the Galleria. Not only are there public information booths but also educational programs throughout the four days of the Show. Enjoy the dealers, add a specimen or piece of jewelry to your collection, view the finest collection of special exhibits you will ever see under one roof and spend time upstairs to learn more about your hobby.

Lastly, it is time for a double pinch. We can always use your help. As Grandpa used to say "I have never been to a town where all the work was done." If you are so inclined just pick up the telephone and call Pat or Rose at 520-322-5773 and volunteer. Second, please consider financial support for the new case and light project or use your state tax credit to sponsor a school bus to the Show. Again Pat and Rose can provide information on both of these.

Enjoy the fall collecting season and get ready for a great 60th Anniversary Show.

2014 Show Chairman
Paul S. Harter

The Tucson Gem and Mineral Society
proudly presents

The TUCSON
GEM and MINERAL
SHOW™

60 YEARS of Diamonds, Gems,
Silver and Gold

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LISTENING TO THE SILENCE By Anna Domitrovic

The last thing the ranger told me before I started my descent was “Don’t talk above a whisper if you talk at all.” That little bit of advice makes a trip into Carlsbad Caverns more rewarding than you can imagine. A series of tight switchbacks take you from the cave entrance to a part of the cave called the “twilight zone.” Just at the edge of light and dark, this part of a cave is the last chance, if you will, where you’ll find plant growth and most animal life. Beyond the twilight zone, you’d have to be a *troglobite*, a true cave dweller. *Troglophyles*, like you and I, linger at cave entrances for shelter or protection, and need artificial light if we want to venture further into the dark.



water would break the silence. It made the experience all the more compelling.

The descent to the Big Room is about a mile, then another mile and a half around the Big Room. For those less inclined (or declined) to walk in, there is an elevator that drops 750' to the underground rest area and access to the Big Room. But I recommend what I did, walk in and take the elevator up and out. In fact, I did it twice. The first time was a leisurely morning entry to take pictures and learn. The second time was just before 2 PM, the last time for walk-in entry. It was this second descent that allowed me to listen to the silence.



I visited Carlsbad during the off-season when visitors were limited in number. That left me feeling like the cave was mine and mine alone.

Oh, I read the interpretive signs and imagined why certain formations were given anthropomorphic names. But my speleologic studies from learning to interpret the Desert Museums’ caves came back to me in full force. Stalactites form from water dripping from above. Stalagmites grow from splashing water on the cave floor. And if one meets the other, it’s called a column. There are rafts and rimstone dams and cave pearls that form in cave pools.



Flowstone, drapery and bacon line the cave walls. Yes, I remembered most of it, but my most memorable moments were those when I just stopped and listened. With eyes closed, the silence was eerie but not uncomfortable. An occasional distant drip of



The Guadalupe Mountains in southeast New Mexico are home to Carlsbad Caverns. But the range is part of a larger feature in the Southwest US, the Delaware Basin, which is part of the much larger Permian Basin. Both basins are noted for extensive oil fields. The source of the oil is a dark shale interbedded in Permian age limestone. It reaches thicknesses up to 2200' over about 10,000 square miles.

About 200 million years ago, during the latter part of the Permian Period of geologic time, the Delaware Basin began to retreat and reefs started to rapidly grow. Capitan Reef was the largest in the Delaware Basin. El Capitan, a prominent feature at the southern end of the Guadalupe, is a remnant of that ancient reef. The fossiliferous limestones that make up the

LISTENING TO THE SILENCE By Anna Domitrovic ... Continued

Guadalupe Mountains are the host rocks for Carlsbad Caverns.

Because of the nature of the rock, Carlsbad Caverns hosted the usual mineralogy.

The formations, or speleothems, are CaCO₃, calcium carbonate, or plain old aragonite and calcite. While some crystallization was evident when it came to the aragonite, calcite deposits were massive and non-crystalline. I did see a few small pockets of dogtooth spar along the main path. Gypsum is another



mineral found in Carlsbad. Iron stains speleothems shades of red and brown. And some of the fossils preserved in the limestones of the Guadalupe are exposed in the walls along the descent from the Caverns' natural entry.

Carlsbad Caverns was named a national monument in 1923 and designated a national park in 1930. In 2006 alone, more than 400,000 people visited this natural wonder. And the visitor numbers go up every year.

Be one of the counted! Visit this underground world and marvel at what the geologic processes have provided for us. It's worth the trip.

Photos by:
Anna Domitrovic

In Fond Remembrance of William "Bill" Lawrence



On October 9, 2013, TGMS member Bill Lawrence, 56, was tragically killed while collecting in the St. David area. Bill's passion was field collecting since he and his wife, Jaye Smith, moved to Tucson after Bill took early retirement from Chevron in September 2012. Bill participated in many of the TGMS field trips since coming to Tucson and both he and Jaye were show volunteers during the 2013 Show.

Bill collected minerals since childhood, joining the youth section of the Houston Gem & Mineral Society and going on many field trips with his father to famous Arkansas mineral localities. After going to work for Superior Oil Company right out of college, he was able to use the "silver pick" to amass a collection of over 7500 specimens. He specialized in Calcite from worldwide localities, Barite, Galena, Hematite and Scheelite; also mineral suites from Brazil, the former USSR republics, China and an extensive Fluorescent mineral collection. Bill was awarded the South Central Federation trophy for Miniature Minerals in 1983 as well as

numerous other awards from regional shows.

The Arizona State Museum at The University of Arizona will be hosting a Celebration of Life for Bill on Friday, January 31, 2014 at the Arizona State Museum on the University campus. Further information on this event can be obtained from Darlene Lizarraga, dfl@email.arizona.edu, (520) 626-8381. A memorial fund in Bill's honor has been set up to benefit the ongoing conservation and preservation projects of The Arizona State Museum. Please contact Sandra Um, Director of Development, and Arizona State Museum for donations and further information, sum@email.arizona.edu, 520.626.3466



Photos by:
Barb Muntyan

ROCK TALK

FROM:

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We're on the web
www.tgms.org

PURPOSE: To encourage interest and study in geology, mineralogy, lapidary, and allied earth sciences.

Meetings: Usually the first Monday of the month, starting at 7:30 p.m., except February (on Monday, week of the Show), June-August (potlucks), and September (second Monday because of the Labor Day holiday). The TGMS facility address is: 3727 East Blacklidge Drive, Tucson, Arizona 85716

The Tucson Gem and Mineral Show™:

The second full weekend in February, starting with Thursday.

Affiliations: American Federation of Mineralogical Societies, Inc. (AFMS), Rocky Mountain Federation of Mineralogical Societies (RMFMS), International Federation of Micromount Societies (IFMS), Metropolitan Tucson Convention & Visitors Bureau (MTCVB), Tucson Metropolitan Chamber of Commerce (TMCC).