# Tucson Gem and Mineral Society, Inc. ROCK TALK Volume

Volume 9 - Issue 1 September - October 2014

# President's Page

"Welcome back" to everyone that was lucky enough to go on adventures this summer. Actually it has not been so bad on us "stay at homes" this year, a pretty good monsoon and temperatures were relatively tolerable. Now it is time for clearing out all the grass and weeds that get the Homeowners Associations so stressed out.

We are looking forward to a good year with lots going on. We have our annual sale the first Saturday in December, our Christmas Party, and of course, preparations for another great Show. Keep in mind that we cannot do this without your help as volunteers; it is only with your participation that we can make this happen in such a memorable and spectacular way. The theme for our Show for 2015 will be "Minerals of Western Europe." We have not gotten a report from Peter yet, but I'm sure the exhibits will be as special as always.

At our Christmas Party this year we are welcoming back Melody Louise. She was quite a hit last year with her versatility and talent. So get your requests ready and come enjoy the party on Wednesday, December 17th.

We had the pleasure of having Mardy Zimmerman down from Phoenix at our June potluck to discuss the program they are doing to bring information to the school children on mineral collection and identification. She left us with a lot of material to start the program here so now we just need volunteers to help us get the message out. Contact the office if you are interested.

I'm sure Kerry will have a number of field trips planned to start when the weather is not so hot. He will have a list at the first meeting so members can sign up. Remember you have to be a member to go on these trips so if you have not sent in your yearly dues, you need to do that as soon as possible.



Have a wonderful and safe Labor Day holiday and I will see you at the September meeting on the 8th.

Diane Braswell President

Deuter Teas

SPECIAL NOTE: The Tucson Gem and Mineral Society has received our "Certificate of Registration" from the U.S. Dept. of Patent and Trademark Office for the "Tucson Gem and Mineral Show ®" and for our TGMS logo. When using either, the "®" must be used!

We have accomplished a milestone in our Society's history ... congratulations!

Tucson Gem and Mineral Society, Inc. 2013 - 2014 Officers & Directors

President: Diane Braswell ph. 520.574.1942 Vice President: Mark Marikos, ph. 520.360.4264 Recording Secty.: Marilyn Reynolds, ph. 520.296.0688

Treasurer: Ellen Alexander, ph. 520.743.9383 Membership Secty.: Alrene Hibben, ph. 520.529.6502

Director: Madison Barkley, ph. 804.761.8324 Director: Dick Gottfried, ph. 520-584-0211 Director: Jo Anne Sam, ph. 520-403-0117 Past President: Mark Ascher, ph. 520.886.0397

Librarians: Robert & Elaine Royer

ROCK TALK Editor: P. R. McClain
ROCK TALK Assistant Editor: R. Marques

ROCK TALK Reporters/Contributors: Mark Ascher, Anna Domitrovic, Peter Megaw, Diane Braswell, Kerry Towe, Bill Hodgson, Donn Cuson, Helen Serras-Herman, Paul Harter,

Jim Bleess, Ellen Alexander, Karen Weinrich

Page 2 ROCK TALK

# TGMS General Meeting - May 5, 2014

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.

Helen Serras-Herman was welcomed back after her long illness.

#### **APPROVAL OF MINUTES:**

**MOTION:** To approve the General Meeting minutes for February 10, 2014, March 3, 2014, and April 7, 2014 as published in the May-June Rock Talk. Seconded and approved.

**OLD BUSINESS:** Recognition plaques were presented to the 2013-2014 officers and directors: John Callahan, Vice President; Ellen Alexander, Treasurer; Marilyn Reynolds, Recording Secretary; Alrene Hibben, Membership Secretary; Mark Marikos, Bob O'Donnell and Madison Barkley, Directors. President Diane Braswell was presented with a plaque and a 1981 framed TGMS Show poster.

#### **NEW BUSINESS:**

**Budget:** The proposed budget for 2014-2015 was distributed to all members present and reviewed. **MOTION:** To approve the proposed budget. Seconded and approved.

**By-Laws Change:** The Board recommended the title Administrative Manager be changed in the By-Laws to Executive Manager. **MOTION:** To approve the change to the By-Laws. Seconded and approved.

**TGMS Scholarship:** The scholarship was presented to U of A graduate student Barbara Lafuente.

#### **Announcements:**

Dr. Peter Megaw has been invited back to China for the 2014 Changsha Mineral and Gem Show as the TGMS Ambassador.

**Educational Class:** Bill Shelton's class will be Tuesday, May 7, 2014 at 7:00 p.m. at TGMS. The topic will be "Raman!"

**Summer Potlucks:** The first potluck will be June 21, 2014 at TGMS. Mardy Zimmerman will bring kits and, hopefully, a small exhibit that she calls a "mini museum." She will talk about her educational

program for schools and members will be encouraged to help with TGMS's Community Outreach program in schools. Her program also meets all requirements for the Boy Scouts Geology Badge. The August potluck will tentatively be at the U of A Mineral Museum.

Election of Officers and Directors for 2014-2015: The TGMS Nominating Committee submitted the following list of candidates: President: Diane Braswell; Vice President: Mark Marikos; Treasurer: Ellen Alexander; Recording Secretary: Marilyn Reynolds; Membership Secretary: Alrene Hibben; and Directors: Madison Barkley, Richard Gottfried and Jo Anne Sam. A call for nominations from the floor was made for each position. Mark Candee was nominated for Director. Voting was done by paper ballot by all members present. After the break it was announced that all candidates submitted by the Nominating Committee were elected.

**Field Trips:** Kerry Towe announced that mimetite and vanadinite were found at the Rowley Mine. The Ocean View trip was attended by 15 members. The Himalaya Mine recently opened again and collecting is \$60.00 a day. Memorial Day weekend will be a trip to the Royston Mine near Tonopah, Nevada. The Field Trip Committee will meet Sunday afternoon, June 1, 2014 at Kerry's home and more trip information will follow.

**BREAK:** Refreshments were provided by Kerry Towe and included sandwiches, ham salad, chicken salad, snack mix, cookies, cheese and crackers. Thanks to Terry for a very nice assortment.

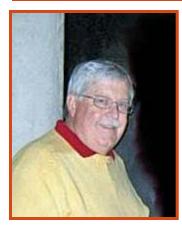
**PROGRAM:** Specimens which were to be auctioned off with the proceeds going to the TGMS Case Endowment Fund were on display before and during the meeting and break. John Callahan presented a slide show of each specimen and gave the history of the piece. Most of the specimens were old and had been in museums or private collections. There were also case-type specimens. The silent auction proceeded after the presentation and was very successful. This novel program was enjoyed by all.

**DRAWING FOR DOOR PRIZES**: Kerry Towe, as meeting host, made the first choice. Drawing winners were Vera Schlichter, Andy Herman, Marilyn Reynolds and Bob Royer.

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

Respectfully submitted, Marilyn Reynolds, Recording Secretary

## **Tucson Gem and Mineral Show ®**



There are no "dog days of summer" for the Show Committee. While five months have passed since the 60<sup>th</sup> Anniversary Show lots has been occurring. Perhaps the most significant will be the privatization of operation and management of the Tucson Convention Center. We have had

several meetings to address the needs of TGMS and to offer suggestions for improvements. While we may not see any significant differences for 2015, I expect that over time we will see significant changes and improvements.

Members of the Show Committee have responsibilities that surface at various times of the year. For example, Gloria Quigg is working on promotion and publicity for both the 2015 Show and the 2016 Show. One of the most important aspects of her job is to create pieces that catch people's attention and give them a reason to visit our Show. Peter Megaw has a daunting task this year with "Minerals of Western Europe" as the Show theme. While there are several "regular" exhibitors who we can expect will bring great exhibits to the 2015 Show, he has been diligently working to persuade collectors and museums in Europe to bring minerals from classic European locations, recent discoveries and historical exhibits to the 2015 Show. I cannot wait to see what arrives in Tucson in February.

On a personal note, while I was in Paris in June, I tried to visit two great museums to assist in this endeavor, but sadly both were *ferme*. But, thanks to email and other forms of communications, Peter presses on in the quest for exhibits that would take folks years to see. Dealer Chairs have been working on a list of dealers to invite and a floor plan. The list looks great, with many longtime favorites as well as first-time dealers. Let's welcome every dealer when the Show opens and thank them for supporting the Tucson Gem and Mineral Show®. While I have not specifically mentioned every Show Committee member, please rest assured each has been attending to their particular area of responsibility.

Pat McClain and Rose Marques continue to attend to various matters, the most important at this time of year being contracts for dealers. Contracts will be out in a few days and the coffers will start to grow. Linda Oliver has focused on several items for the staging and decoration of the 2015 Show, some may materialize and some may not. With so many items now coming from China, the lead time is much greater than you may imagine. Think about prototypes, color selection, manufacturing, shipping to a port, arranging ship transit, arrival in Los Angeles and shipping to Tucson. This is not an overnight, UPS or FedEx, proposition. But, rest assured, the Show will be an eye popper.

I have made several trips to Tucson for various Show related matters. My next big push will be to speak with all of our show dealers who will be in Denver at their great fall show. Then, although I will not be going this year, TGMS will be represented at the Munich show in late October.

So you see, for the Show Committee and its members, there are no "dog days of summer." For now, remember this is a great hobby which can be enjoyed by everyone, so please do your part and encourage your friends to mark February 12-15, 2015 on their calendars.



Page 4 ROCK TALK

# Walkin' The (Pipe)Line - By Anna Domitrovic



I suppose one could walk the 800 mile long pipeline from Prudhoe Bay on the north slope of Alaska to the southern terminus at the port city of Valdez. Or one could drive it along the Dalton and Richardson highways. I chose the northern section along the Dalton. We've all heard about



the Trans-Alaska Pipeline, but to really appreciate it, one must see it close up and personal. What an incredible feat of engineering!

It would have been cheaper to bury the pipeline, but out of respect for the environment and the natural permafrost, it was raised: High enough so wildlife could go under it; on refrigerated stilts to keep the permafrost intact; in a zigzag pattern to allow for expansion and contraction with temperature fluctuations and to absorb any earthquake waves. Absolutely amazing!

But let's go back. In 1968, oil was discovered at Prudhoe Bay. The source of the oil is the Kingah Shale, deposited during the Jurassic, about 65



million years ago. Subsequent sedimentary deposits covered the shale. Oil tends to rise through porous sedimentary rock layers until it reaches an impermeable layer; in this case, the Sadlerockit Shale, which serves as the reservoir for what is estimated to be 10 billion barrels of crude. Once we knew the oil was there, the next step was making it available for refining and commercial use ... thus the Trans-Alaska Pipeline.

If you decide to see the pipeline for yourself, plan on a day trip from Fairbanks with an overnight in Coldfoot. The next day will take you as far as Deadhorse, as far as you can go along the Dalton Highway. My day trip took me to the Arctic Circle (so I could get my certificate and bumper sticker saying that I crossed the Arctic Circle on the Dalton Highway). It's three hours alone from Fairbanks to the Yukon River. Then another two hours to the Circle, and that's without stops for those many Kodak moments along the way.

## Walkin' The (Pipe)Line - By Anna Domitrovic - CONTINUED



The first part of the trip is on the Elliot Highway to Livingood and crosses Pre-Cambrian and Paleozoic metamorphic rocks. Some outcrops are so highly weathered, they crumble easily in your hand. These rocks are part of various *terranes*, disrupted fragments of other land masses.

Rocks are poorly exposed once you reach the Dalton Highway, also called the Haul Road. Vast expanses of low lying arctic tundra stretch out from either side of the highway to the distant mountains to the east and west. Several feet below the surface are thick layers of permafrost, permanently frozen ground. When portions of the permafrost thaw during the brief summer months, collapse at the surface creates "therma karst," analogous to the collapse one sees associated with limestone caves resulting in karst topography. In the summer, these surface depressions become isolated lakes visible from the highway.

Now if it's minerals you're interested in, you'll have to go beyond the Arctic Circle to the Brooks and smaller associated ranges. The Brooks Range stretches across northern Alaska and into Yukon Territory, Canada, for about 700 miles and rises to elevations in

excess of 9,000'. It's a relatively young mountain range, only about 126 million years old. The Brooks Range is mostly uninhabited, and thus unexplored, terrain. There are a few Native Alaskan villages scattered throughout and several small communities along the Dalton Highway. Mineral localities are mostly in the western and northwestern reaches of the mountains. The Red Dog Mine in the west is considered to be the largest zinc mine in the world, but also includes lead and silver minerals along with the zinc. Mindat lists the usual mineral assemblages associated with this type of deposit - barite, boulangerite, galena, polybasite, pyrrhotite.

tetrahedrite and sphalerite; also pyrite, marcasite and chalcopyrite. And of course, the ubiquitous quartz and calcite. But native gold is the predominant mineral and the one of choice if looking for minerals in the Brooks Range.

Most of my trip to Alaska was to sightsee, but now that I've "been there, done that, got the tee-shirt," maybe the next trip will be to search for those elusive minerals. And if one of them happens to be gold, well, all the more worthwhile!



Photos by: Anna Domirtrovic

Page 6 ROCK TALK

## 2014 TGMS Scholarship Winner!!



The TGMS Scholarship winner for the 2014 -2015 year was Barbara Lafuente.

One of her goals while working on her PhD is to become a mineralogist with a strong understanding of crystallography and analytical techniques applied to mineralogy.

Sounds like the TGMS Board found the perfect recipient!!

Now the process will start all over for the next "perfect" individual to receive the tap on shoulder and to become the TGMS Scholarship recipient.

Congratulations Barbara!!!

# June TGMS Potluck - Community Outreach Program



Mardy Zimmerman, Earth Science Museum Education Outreach Coordinator, took time out of her very busy schedule to drive to Tucson and present to a very interested group of TGMS members the "hands on" educational kits that she had put together.



are intended to be given to interested schools or teachers to help supplement their information (often times the only information) in the field of earth sciences.

Once everyone is back from their summer vacations and travels, we will schedule a "community outreach" meeting. We will get all of the interested TGMS members together, go over what we need to do, when we need to do it, and we will get the word out to everyone what TGMS has available.







# **TGMS School Visits Program**

# "SCHOOL VISITS" TO THE 2015 TUCSON GEM AND MINERAL SHOW®

The Tucson Gem and Mineral Show® will be held February 12-15, 2015. The theme of the Show will be "Minerals of Western Europe." We will be exhibiting exceptional mineral specimens from some of the world's greatest collections. We will have docents who will explain what the specimens are, their significance and the special features that they display. This will be an exceptional learning experience for all visitors to the Show.

#### How we are doing this:

As we do every year, we are inviting all Pima County elementary schools (3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> grades) to attend the Show at no charge on Friday morning, February 13<sup>th</sup> from 9:00. AM to page This is an educational



from 9:00 AM to noon. This is an educational experience for the children that we hope will spark their interest in rock and mineral collecting.

#### Why we are doing this:

The focus of the Tucson Gem and Mineral Society is education and encouraging children to collect and learn about rocks and minerals. Arizona has a wealth of mineral collecting sites and many guidebooks are available describing where these sites are and what can be found there. Getting into rock and mineral collecting is one of the greatest ways to get children interested in science and is a terrific family activity. If you talk to scientists in almost any field, they got excited about science starting this way. I am a microbiologist and I got my

beginnings in science by collecting rocks and fossils in California.

The Exhibitors and Dealers all enjoy and look forward to having the school children visit, as their enthusiasm is infectious. We want to encourage interest in our hobby and, of course, invite them to become members of our



Society. Every month we have fascinating programs, field trips, and special classes related to gems and minerals, and we welcome anyone with an interest to join us. There is no age limit.

# What we are doing about transportation costs:

The number of schools participating has been dwindling in the past years. We have found that the biggest reason for this is the high cost of providing transportation to the Show and lack of funds made available for field trips. We are trying to alleviate this situation in the most direct way we can. We are encouraging all members and friends of the Tucson Gem and Mineral Society to donate their educational tax credits to the school districts specifically for transportation to the Show. We have asked the district offices to allocate this money to the schools that have the greatest need.

We have also suggested that if the members know of a specific school that needs transportation funds, they can donate directly to that school.

We heard about one of the schools at the Show this year that did not allow children in their classes to buy

Page 8 ROCK TALK

# **TGMS School Visits Program**

anything because not all of the kids had money to spend on grab bags or mineral specimens. Many of the Dealers at the Show have special school pricing on small specimens so that the kids would not spend more than a dollar or two to have a nice memento to bring home. We want to do something about this. Please let us know if you hear about any child in that situation and we will do our best to make sure that no one is left out.

#### What you can do:

If you know of any school or class that cannot afford bussing, please let us know so that we can try and find funding for them.





We want to make this opportunity available to as many children as possible.

#### If a school cannot participate:

If a school is unable to join us Friday morning, we encourage parents to bring their children to the Show over the weekend. Children under 14 are admitted into the Show for free along with an adult paid admission.

In addition to the exhibits, during the weekend the Society of Earth Science Students who man the Junior Education area will be giving demonstrations and teaching the kids all about rocks and minerals. They will also be giving away free samples of minerals to start them off in this hobby. Junior Education will not be open

during the school visits Friday morning because it is run by the geology students of the University of Arizona and they will be in classes at that time.

Teachers can register their classes for the School Visits Program beginning November 1<sup>st</sup>. Deadline for registration will be December 31<sup>st</sup> of this year. This is a great educational opportunity that is too good to miss.

Dick Gottfried School Visits Chairman

#### **SOMETHING EXTRA!!!**

William Ascarza's upcoming book on the history of mining in Arizona will be out shortly!

For further information please contact M.T. Publishing at (812) 468-8022 or visit the website at

http://mtpublishing.com/index.php/soon/arizona-mining-history-group.html

### Other Show Dates!!!

#### August - September 2014

30-1—SILVER CITY, NEW MEXICO: 31st Annual Gem and Mineral Show; Grant County Rolling Stones Gem & Mineral Society; Grant County Business and Conference Center; 3031 US Hwy. 180 at 32nd St.; Sat. 9-5, Sun. 10-5, Mon. 10-4; free admission; more than 35 dealers, displays, collecting and geology field trips; contact Lee Stockman, 16 McKinley St., Silver City, NM 88061; e-mail: Leet@stockmanfamily.net

#### September 2014

6-14—DENVER, COLORADO: Wholesale and retail show; Eons Expos, LLP; Denver Coliseum; 4600 Humboldt St.; Daily 9-6; free admission; two floors, almost 100 tents; contact Heather Grana, 235 First St., Keyport, NJ 07735; e-mail: Heather@EonsExpos.com; Web site: <a href="www.ColiseumShow.com">www.ColiseumShow.com</a>

7-14—DENVER, COLORADO: Wholesale and retail show; Martin Zinn Expositions; Ramada Plaza Denver Central; 4849 Bannock St.; Daily 10-6; free admission; 200 wholesale and retail dealers; contact Regina Aumente, PO Box 665, Bernalillo, NM 87004, (505) 867-0425; e-mail: mzexpos@gmail.com; Web site: www.mzexpos.com

12-14—DENVER, COLORADO: Denver Gem & Mineral Show; Greater Denver Area Gem & Mineral Council; The Denver Mart - Expo Hall (formally the Denver Merchandise Mart); 451 E. 58th Ave., I-25 Exit 215; Fri. 9-6, Sat. 10-6, Sun. 10-5; adults \$6, seniors and students \$4, children accompanied by an adult free; "Agate": nearly 200 dealers, speakers, demonstrations, shuttle to satellite shows, free gem and mineral identification, door prizes, "Mr. Bones", kids' activities and gold panning; contact Robert Berry, Greater Denver Area Gem & Mineral Council, c/o Denver Museum of Nature & Science, Box 4, 2001 Colorado Blvd., Denver, CO 80205-5798, (303) 638-5000; e-mail: www.info@denvermineralshow.com; Web site: www.denvermineralshow.com

#### October 2014

10-12—BUCKEYE, ARIZONA: Annual show; West Valley Rock & Mineral Club; Helzapoppin Rodeo grounds; 802 N. 1st St., Miller Rd. entrance; Fri. 9-4, Sat. 9-4, Sun. 9-4; adults \$3, children (under 12) free; contact Larry Tracey, PO Box 1425, Buckeye, AZ 85326, (623) 208-3230; e-mail: larry@youth4youth.org; Web site: www.westvalleyrockandmineralclub.com

11-12—SIERRA VISTA, ARIZONA: 40th Annual Show; Huachuca Mineral & Gem Club; Cochise College; 901 N. Colombo Ave.; Sat. 9-5, Sun. 10-4; free admission; jewelry, mineral specimens, beads, lapidary supplies, raffle, fluorescent display, geode sales and cutting; contact Maudie Bailey, 5035 S. San Carlos Ave., Sierra Vista, AZ 85650, (520) 378-6291 or (520) 249-1541; e-mail: gmbailey@msn.com; Web site: huachucamineralandgemclub.info

#### **TGMS EVENT CALENDAR**

TGMS Calendar			September 2014			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Labor Day!!!	2	3	4	5	6
,	8 TGMS General Meeting 7:30 p.m.	9 TGMS Educational Class 7:00 p.m.	10	11	12	13
14	15 TGMS Micromount Meeting 7:30 p.m.	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Unless otherwise stated ... all meetings are held at the Tucson Gem and Mineral Society facility.

Located at: 3727 E. Blacklidge, Tucson, Arizona 85716

# ROCK TALK

FROM:

T.G.M.S. P.O. BOX 42588 TUCSON, ARIZONA 85733





Tucson Gem and Mineral Society, Inc.

P.O. Box 42588 Tucson, Arizona 85733

Phone: 520.322.5773 Fax: 520.322.6031 E-mail:tgms@tgms.org

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), Visit Tucson, Tucson Metropolitan Chamber of Commerce (TMCC).

**ROCK TALK** is the official publication and is © 2014 by the **Tucson Gem and Mineral Society, Inc.** To reproduce material contained herein, commercial and other use requires written permission from the Tucson Gem and Mineral Society, Inc.