



Member: South Central Federation of Mineral Societies



Affiliated: American Federation of Mineralogical Societies



February 2021

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1<sup>st</sup> Place, 2019 SCFMS Mini-Bulletin

1<sup>st</sup> Place, 2020 SCFMS Mini-Bulletin

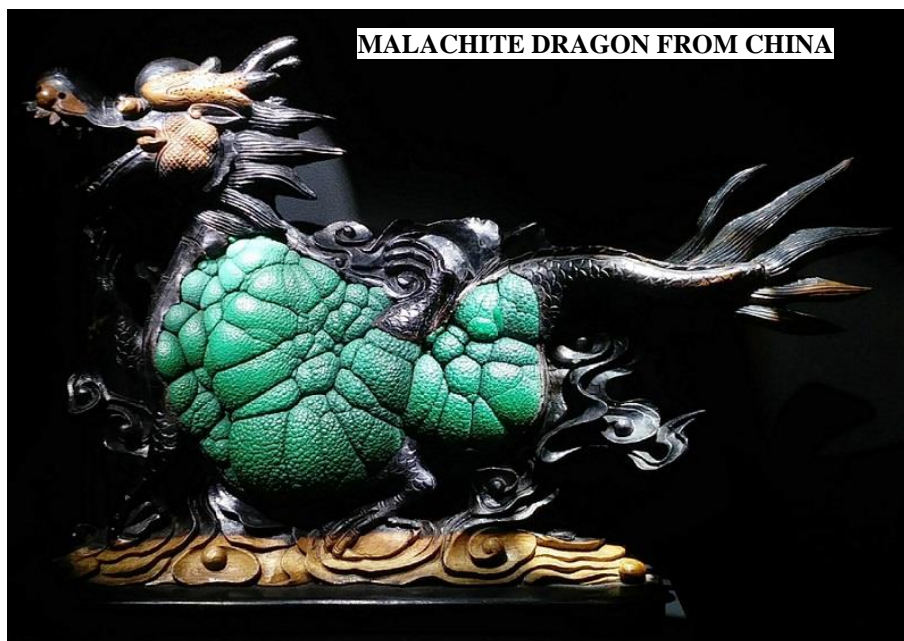
1<sup>st</sup> Place, 2017 AFMS Mini-Bulletin

## Malachite

Malachite, be it a cabochon, carved object, or mineral specimen, can be described in a single word – BEAUTIFUL. Malachite is a copper carbonate hydroxide with a chemical formula of  $\text{Cu}_2\text{CO}_3(\text{OH})_2$ . It is rather soft having a Mohs hardness of 3.5 to 4; it can be used in jewelry but would be better as a more protected necklace or tie clasp rather than a ring. Malachite can be found in botryoidal, massive, fibrous, and stalagmitic forms. It is often found as a pseudomorph of Azurite, another copper carbonate. The Azurite slowly weathers into Malachite. Azurite was used as a blue pigment by some of the early painting greats. If you look at some of the really old paintings, the blue sky is now a green sky – when the Azurite pigment was crushed to a very fine powder, it had a much larger surface area to speed along the conversion to Malachite.

Malachite was likely the first ore for copper. Archeological finds show that it was mined at the Great Orme Mines in Britain from 3800 to 2600 years ago and at mines in the Timna Valley of Israel from 3000 years ago. Mining of Malachite as a copper ore is now avoided if possible. Being a carbonate, Malachite must first be roasted to change the carbonate to an oxide before it can be smelted. The availability of copper oxides has made them the favorite material for producing copper – it only needs to be crushed and smelted.

The major uses of Malachite are as specimens for mineral collectors and as a carving and cutting material for lapidary works. The industrial uses of Malachite are rather limited. It can be used as a marker for copper ores, as green pigment for paints, and as a less desirable copper ore should oxide ores not be available. Malachite is found worldwide. The Ural Mountains of Russia have been prolific producers of Malachite. Malachite dates to antiquity in China, but it is only recently that significant mineral specimens have been exported. In Europe, Malachite is found in the United Kingdom, France, Germany, and Switzerland. In Africa, it is found in the Democratic Republic of the Congo and Namibia. In North America, it is found in Mexico, the US (Arizona, New Mexico, North Carolina, and New Hampshire, and in the Yukon Territory of Canada. In South America, it is found in Bolivia. Finally, in Australia, it is found in the Mt. Lofty Ranges in South Australia.



MALACHITE DRAGON FROM CHINA

### References

Mindat, <https://www.mindat.org/>

Wikipedia, <https://en.wikipedia.org/wiki>

Picture by Don Shurtz, Malachite Dragon from China, as displayed at the Perot Museum of Nature and Science

# In Memory of Delbert (Del) Grady

July 18, 1945 – January 4, 2021



Del at an IGEM Show

## Remembering Del

A Friend

A Man of Integrity

Honest

Kind

Willing to Help

Dedicated

An Ardent POGMC Member and Officer

Fond of his Irish Heritage

## Shows and Activities – Upcoming Show and Activity Dates

Please note that many shows are being canceled in response to health concerns associated with COVID-19  
Check with the show contact to verify the show status

### February 2021

- FEB 1-15, Tucson, AZ, numerous shows and dates, see <https://jogsshow.com/tucson-gem-show-schedule/>. Note, Tucson G&MS show scheduled for Feb 11 – 14 has been canceled

### March 2021

- MAR 26-27, Ada, OK, Ada GM&FC, Ponotoc Agri-Plex, [melody.ulanowski@gmail.com](mailto:melody.ulanowski@gmail.com)

Ref:

- September - October 2020 SCFMS Newsletter
- Rock & Gem Show Dates, <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

## INTRODUCING JERROLD SIMPSON, SCFMS PRESIDENT 2021

Hello everyone, I am Jerrold Simpson, newly elected president of the South Central Federation of Mineral Societies.

I have been a rockhound at heart all my life. I was born in Picher, OK, and grew up in the area. My grandfather, father, and most of my uncles were lead & zinc miners. All that was done by the time I was old enough to do it.

My wife Linda and I have been serious about rockhounding since the mid-'70s, which by the way, is our current age. We collect & sell rocks, minerals, and fossils and attend as many shows as we can each year.

My home club is the Gulf Coast Gem & Mineral Society, Corpus Christi, TX., where I served on the board, in all positions, for 12 years and was Show Chair for the entire time. I have been active in the SCFMS and the American Federation for the past two years. I served as the Executive Vice-President of the SCFMS and the 3rd Vice-President of the AFMS.

We have all heard enough about COVID for this year. It has had a major effect on the Gem & Mineral world. Most, if not all Societies have canceled their shows and many have canceled their meetings. Many clubs are having ZOOM meetings. The AFMS & SCFMS had ZOOM meetings this year.

The hurricanes have also had a major impact on some of our clubs and members. Some lost homes, meeting places, and equipment.

We hope you all have a Merry Christmas and a Happy New Year. We are looking forward to 2021 and hope we can get back to our shows and meetings in the coming year. If I or the Federation can help you or your Society, please call on us to do so. We are looking forward to a rock-solid 2021.

Jerrold Simpson  
SCFMS President 2021



### VISIT AN AREA CLUB

- [Arlington Gem & Mineral Club](#), meets the 1st Tuesday of each month at 7:30 pm, 1408 Gibbins, Arlington, TX
- [Cowtown Gem, Mineral, & Glass Club](#), meets the 2nd Tuesday at 7:00 pm, CERA 3300 Bryant Irvin Rd. Fort Worth
- [Dallas Bead Society](#), meets 1st Saturday of each month at 10:00 am at The Point at CC Young, 4847 W. Lawther Dr., Dallas, TX
- [Dallas Gem & Mineral Society](#), meets the 3rd Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)
- [Dallas Paleontological Society](#), meets 2nd Wed. of each month at 7:00 pm, Brookhaven College, Building H, 3939 Valley View Lane, 75244
- [Fort Worth Gem & Mineral Club](#), meets 4th Tuesday of each month at 7:30 pm, 3545 Bryan Avenue, Ft. Worth
- [Oak Cliff Gem & Min Soc.](#), meets the 4th Tuesday of each month at 7:30 pm, Unitarian Universalist Church, 3839 W. Keist Blvd, Dallas,
- [Pleasant Oaks Gem & Mineral Club](#), meets the 1st Thur. of each month at 7:30 pm, Garland Women's Activities Bldg., 713 Austin, Garland
- [Wild West Bead Society](#), meets 3rd Tuesday of each month at 6:30, Wild Beads, 2833 Galleria Dr., Arlington, TX

## Bench Tips from Brad Smith

Reprinted by permission of the author, Brad Smith. Received as an email from Brad Smith

### CUTTING MOLDS

Cutting molds is easier and more precise with a sharp blade. A new Xacto blade is sufficient for cutting RTV molds but is usually not sharp enough for vulcanized rubber. For that, it's best to use scalpel blades available from most jewelry supply companies. The #11 blade is triangle shaped, and the #12 is hawksbill shaped. I find the hawksbill is particularly nice for cutting the registration keys of the mold



### USING YOUR THUMB

When using multiple bits in a Foredom, we often have to deal with different shaft sizes - the usual 3/32-inch burs, the larger 1/8-inch shaft sizes, and of course the many different sizes of twist drills. For some reason, I really dislike having to turn the key multiple times to open or close the jaws of the handpiece chuck.



So I have two ways to speed up that task. For opening up the jaws, I just remember "four", the number of turns I have to make to open the chuck just enough from the 3/32 bur shaft size to the larger 1/8 bur shaft size.

For closing the jaws around a smaller shaft, there's a neat trick. Hold the new bit in the center of the open jaws of the chuck, put your thumb lightly onto the outer toothed collar of the chuck, and gently start up the Foredom. As the chuck turns, it will naturally tighten the jaws around the bur shaft or the drill bit. Then all you have to do is a final tightening with the key.

### ADJUSTABLE CHUCK FOR DREMEL

Many of us have a Dremel motor tool to use at home or when out to a class or workshop. The one thing that makes this tool much more productive is the addition of one inexpensive option, an adjustable chuck.

The basic motor tool as sold typically comes with a collet chuck. This means you have to use a wrench to change every tool bit, you have to switch collets to use different shaft sizes (3/32- or 1/8-inch bits), and you can't use ordinary drills at all - only the special ones that have a 3/32 shaft.



A simple and inexpensive (\$12) adjustable chuck solves all of this. It's available in most large local hardware stores or modelmaking outlets. Tightening the chuck is done easily by hand to any size shaft. No key is required.

### IDENTIFYING UNMARKED SOLDERS

There are plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder.



What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I would have a sample of easy, medium, and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.

### Work Smarter & Be More Productive With Brad's "How-To" Jewelry Books



[Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)

## PRESIDENT'S MESSAGE

Ling Shurtz, POGMC President

Chinese New Year will be February 12, 2021.

Happy New Year!

IGEM will be March 26 – 28, 2021. Plan for setup on Wednesday, March 24, 2021, starting early afternoon.

## CLUB OFFICERS FOR 2021

President: Ling Shurtz  
1st VP, Programs: Carolyn Grady  
2nd VP, Field Trips: Open  
Secretary: Cheryl Ogletree  
Treasurer: Open  
Editor: Don Shurtz  
E-mail: don.shurtz@gmail.com,  
L.SHURTZ@gmail.com

## MEETING MINUTES

January 7, 2020

POGMC President Ling Shurtz called the January 7, 2021 club meeting to order at 7:45 pm.

We recited the Pledge of Allegiance to the Flag

Quorum: We have a quorum

Sunshine Report: Del Grady passed away on January 4, 2021. Please remember Carolyn in her time of grief.

Visitors: There were no visitors

Minutes: We reviewed the minutes of the November 2020 meetings as printed in the December 2020 Chips and Chatter. Don made a motion to accept the minutes. Cheryl seconded the motion. *The motion passed.*

Treasurer's Report: The Treasurer's report was deferred

Old Business: No old business

New Business:

There will not be an IGEM show in *January*. The next IGEM will be March 26 – 28, 2021. Plan for set up on Wednesday, March 24.

Area shows (note that dates are subject to change or show cancellation

- JAN – All Month, Quartzite, AZ, numerous shows. It seems to be the best date for rocks, minerals, and fossils

*Chips and Chatter*

Pleasant Oaks Gem and Mineral Club of Dallas, TX

- JAN 16, Fredericksburg, TX, Fredericksburg Rockhounds, Pioneer Pavilion, Lady Bird Johnson Park.
- JAN 22-24, Tyler, TX, East Texas G&MS, Tyler Rose Garden Center, [www.etgms.org](http://www.etgms.org)
- FEB 1-15, Tucson, AZ, numerous shows and dates, see <https://jogsshow.com/tucson-gem-show-schedule/>. Note, Tucson G&MS show scheduled for Feb 11 – 14 has been canceled

Presentation

Raffle: Instead of a raffle, names were drawn for door prizes.

Ling adjourned the meeting at 855 pm.

## Presentation Review: Devils Tower, Igneous Enigma

Cheryl Ogletree, POGMC member

Devils Tower, a strange striking rock formation, rises out of the Wyoming Plains, almost vertically, to more than 1200 feet above the area around it. Tall columns, some as much as 8 feet in diameter, taper from the bottom to the top.

This strange shape was formed underground when the area around it was at a much higher elevation. Devils Tower is made of a type of igneous rock called phonolite that is between granite and basalt in composition. It has more quartz content than the typical basalt. Basalt erodes easily, but the granite and quartz in phonolite make it more weather-resistant. Very hot rock that liquified or magma from a volcano rose from the mantle to bulge out or erupt at the surface. The columns composed of phonolite were more rugged than the surrounding rocks and were able to better withstand the erosional forces of wind and water, leaving the tower to stand as a sentry above the plains.

## MEETING

The next meeting will be on February 7, 2021, starting at 7:30 PM at the Garland Activities Building.

## VISITORS ARE ALWAYS WELCOME

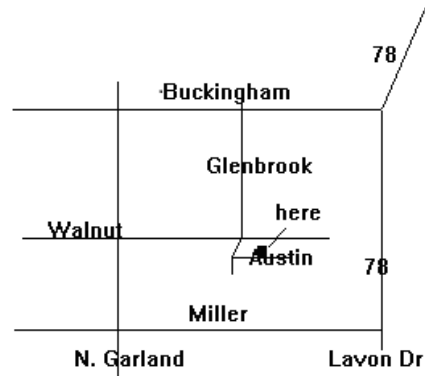
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**PLEASANT OAKS GEM and MINERAL CLUB of Dallas**



**Meetings**  
 First Thursday of each month, 7:30 PM  
 Garland Women’s Activities Building  
 713 Austin St., Garland, TX  
 (Northeast corner of Austin & Glenbrook)

**Membership**  
 Single Adult: \$16.50,  
 Junior: \$5.00, Family: \$27.50  
 (Plus badge fee for new members)



**PURPOSE:** The Pleasant Oaks Gem and Mineral Club of Dallas is organized for charitable and educational purposes to promote interest in the various earth sciences, particularly those hobbies dealing with the art of cutting and polishing gemstones, the science of gems, minerals and metal crafts, as well as their related fields. Pleasant Oaks Gem and Mineral Club of Dallas is a Section 501(c)(3) not-for-profit organization

**CHIPS AND CHATTER**  
 Pleasant Oaks Gem & Mineral Club  
 PO Box 831934  
 Richardson, TX 75083-1934

To

**VISITORS ARE ALWAYS WELCOME**

**The December meeting will be our annual Christmas Party and Potluck Dinner. We will start with a social gathering at 7:00, dinner at 7:30, and the gift exchange to finish the meeting.**

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