



Member: South Central Federation of Mineral Societies



Affiliated: American Federation of Mineralogical Societies



July 2022
Vol. 56, Issue 7

1st Place, 2019 SCFMS Mini-Bulletin
1st Place, 2017 AFMS Mini-Bulletin

Geodes

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

Geodes are sphere-like in shape and are hollow and often have crystals growing inside. The name geode comes from Ancient Greece *γεώδης* (*geōdēs*) meaning earthlike (the earth is roughly a sphere). If the spherical rock is completely filled with crystals or rock (such as agate), it is properly called a nodule.

Many geodes are found in igneous rock formations. The lava flow can have gas entrained in the flow. The gas generally forms into bubbles. If the bubbles do not rise to the top of the flow before the flow cools enough to trap the gas, then you have the potential start of a geode. The gas can be replaced by a hot solution containing minerals, most commonly silicon oxide or calcium carbonate. As the saturated solution cools, it can grow into crystalline minerals, mostly quartz and calcite. The reaction is exothermic which will cause the crystallization to accelerate until the solution is no longer saturated. Geodes can also form in sedimentary formations. A log or lump of organic matter can be trapped in the forming rocks. Over time the organic material will deteriorate leaving a hollow inside the sedimentary rocks. If the hollow fills with a hot, saturated mineral solution, the same process that occurs in igneous rocks can occur resulting in a geode or nodule.

Once you have the geode, the fun begins. Geodes are sometimes cut into two pieces on a diamond-bladed saw. However, at most gem and mineral shows, someone will have a chain geode cracking device. It creates tremendous stress in the shell of the geode causing it to break into two or more pieces. There is also the option of striking a geode with a hammer (with a lot of force, several times). Make sure you have safety glasses and good gloves – when the geode finally breaks it will likely shed small, sharp pieces of rock in many directions.



POGMC recently received two 35-gallon barrels of geodes from prior club members, the Powells – Thank You! Trust me, two 35-gallon barrels are a lot of geodes. I broke one and took it to our last meeting – it had very nice quartz crystals but was mostly solid. There was a very small void near the middle, so it does count as a geode. I also took some of the geodes to the IGEM show to sell for the club and AFMS Scholarship Foundation. One of the geodes felt like it would be hollow – the results are shown in the picture in this article. It was a very nice Geode! I think, however, that most are going to be like the first one broken – mostly solid.

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

Picture: Geode purchased from POGMC at the IGEM Show. Picture by “The Eubanks Family,” used with permission.

Mineral and Gemstone Families Word Find

Minerals and gemstones are often members of a family. The family has the same chemical formula (or at least the same generalized chemical formula), a similar hardness, and the same streak. The colors are often different due to trace elements that get caught up in the crystalline matrix. As an example, Citrine, Rose Quartz, and Amethyst are all varieties of Quartz (SiO_2) but have different colors due to trace elements. They may also have different colors due to different combinations of elements in the matrix. An example of this could be Tourmaline with a generalized formula of $(\text{Ca}, \text{K}, \text{Na}, \square)(\text{Al}, \text{Fe}, \text{Li}, \text{Mg}, \text{Mn})_3(\text{Al}, \text{Cr}, \text{Fe}, \text{V})_6(\text{BO}_3)_3(\text{Si}, \text{Al}, \text{B})_6\text{O}_{18}(\text{OH}, \text{F})_4$ where the items inside the parenthesis can be one or more of the elements. The color will be dependent on these combinations. As an example, Elbaite is $\text{Na}(\text{Li}_{1.5}, \text{Al}_{1.5})\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{OH}$ and is green to red in color while schorl is $\text{NaFe}^{2+}_3\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{OH}$ and is brown to black, yet both are tourmaline. As families are related, in the puzzle below you will find that all of the members of the family will be linked or close to other members of the family. The words can be forward, backward, or on a diagonal. A hint (shaded word) is provided.

Word List (Family name included)

Beryl

- Aquamarine
- Emerald
- Goshenite
- Heliodor
- Morganite
- Red

Garnet

- Almandine
- Calderite
- Grossular
- Spessartine
- Uvarovite
- Pyrope

Opal

- Common
- Fire
- Precious

Tourmaline

- Dravite
- Elbaite
- Rubellite
- Schorl

Corundum

- Emery
- Ruby
- Sapphire

Quartz

- Amethyst
- Blue
- Citrine
- Prasiolite
- Rose
- Smoky

R	A	G	M	A	P	F	M	S	B	T	U	N	Z	Q	U	T	T	E	R	J	O	R	N
A	W	L	C	D	R	R	T	S	V	V	C	I	G	N	G	I	R	O	V	T	J	V	O
B	X	F	T	A	Q	U	A	R	T	Z	S	U	O	I	C	E	R	P	H	A	P	L	V
J	O	C	F	F	R	W	M	S	M	U	W	M	T	W	A	R	Z	E	B	Q	U	G	T
S	C	I	T	R	I	N	E	C	I	N	M	O	D	O	Q	I	B	S	C	H	O	R	L
A	O	L	T	R	T	B	T	B	C	O	I	C	H	D	U	F	W	B	B	G	G	U	P
P	R	W	Q	G	B	Y	H	L	C	P	L	H	P	O	A	R	N	Y	G	D	Y	B	K
P	U	L	S	M	O	K	Y	U	D	A	D	I	L	D	M	E	M	L	S	R	N	E	N
H	M	E	E	E	R	O	S	E	T	L	V	C	T	B	A	M	L	A	E	A	O	L	I
I	D	R	T	T	B	T	A	L	M	R	E	M	E	R	A	L	D	L	V	R	L	R	
R	U	B	Y	I	M	D	N	V	Y	Y	E	Z	O	R	I	J	Y	E	B	I	T	I	A
E	M	G	I	R	T	H	E	L	I	O	D	O	R	Y	N	P	H	Y	A	T	N	T	V
M	V	P	G	E	E	T	I	N	E	H	S	O	G	L	E	S	R	N	I	E	T	E	C
E	C	Y	E	D	I	T	E	E	H	S	O	G	A	C	I	G	N	G	T	D	Y	B	F
R	A	R	A	L	U	S	S	O	R	G	A	R	N	E	T	M	N	E	R	N	E	O	
Y	X	O	T	A	R	W	U	V	A	R	O	V	I	T	E	N	I	D	N	A	M	L	A
O	I	P	E	C	T	U	K	M	E	C	X	O	T	A	C	I	G	N	G	D	I	Y	E
S	P	E	S	S	A	R	T	I	N	E	O	A	E	H	T	M	I	T	E	R	I	N	E

Answer on Page 5

AFMS Code of Ethics

- I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- I will keep informed on all laws, regulations, or rules governing collecting on public lands and will observe them.
- I will, to the best of my ability, ascertain the boundary lines of the property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind - fences, signs, buildings.
- I will leave all gates as found.
- I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material - matches, cigarettes, etc.
- I will fill all excavation holes, which may be dangerous to livestock.
- I will not contaminate wells, creeks, or other water supplies.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field trip leaders and those in designated authority in all collecting areas.
- I will report to my club or Federation officers, Bureau of Land Management, or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule," will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and public image of rockhounds everywhere.

AFMS Land Use Policy

1. Adherence to the AFMS Code of Ethics assures compliance with most statutes and regulations governing collecting on public lands and encourages respect for private property rights and the environment. Clubs are urged to read the AFMS Code of Ethics in at least one meeting every year, to publish the Code frequently in the club newsletter, and to compel compliance on club field trips.
2. Individuals and clubs are urged to write their elected representatives and land use management agency supervisors regarding issues of rulemaking, legislation, and enforcement affecting field collecting of minerals and fossils.
3. Individuals and clubs are urged to join and support activities of the American Lands Access Association (ALAA), a sister organization with responsibility for advancing the interests of earth science amateurs with legislatures and land use management agencies.
4. The AFMS will receive a report from ALAA at its annual meeting.
5. The AFMS endorses the principle of multiple use of public lands as a guarantee of continuing recreational opportunities.
6. Wilderness and monument designations are inconsistent with the principle of multiple use. In view of the vast amount of public land already designated as wilderness and monuments, future such designations should be minimal, taking into account the increased demand for recreational opportunities, including rockhounding, created by a growing population.
7. In furtherance of the principle of multiple use, the AFMS believes that laws, regulations and rules established by relevant governmental authorities should be designed to allow freest possible access to all public lands, coupled with minimal restrictions on the recreational collection of minerals, fossils, gemstone materials and other naturally occurring materials.
8. A right to collect minerals and fossils on public lands should be protected by statute.
9. The AFMS urges its members to work with any or all government authorities to achieve a good working relationship in order to improve the public image of recreational collectors.



Editor's Corner – July Meeting, a Tradition

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

Our next meeting on July 7 will be the continuation of a recent tradition (is that an oxymoron?). Over the years, we too often found that we could not get anywhere near the Garland Women's Activity Building for our Thursday meeting due to Garland's downtown 4th of July activities. The activities tended to last all week and then some. We started meeting at the Spring Creek BBQ in Richardson to avoid the hassle. Garland has since moved their 4th of July activities to the Firewheel area, but traditions are like habits – hard to break. See you at Spring Creek BBQ in Richardson!

Shows and Activities – Upcoming Show and Activity Dates

Check with the show contact to verify the show status

July 2022

- 1-3 July, Farmington, NM, San Juan County G&MS, McGee Park, Email: torycbonner@gmail.com
- 16-17 July, Tulsa, OK, Tulsa R&MS, Exchange Center at the Expo Square, website: www.tulsarockandmineralsociety.org

August 2022

- 5 - 7 August, Grapevine Texas, AKS Beads & Jewelry show, Grapevine Convention Center, www.aksshow.com
- 13 - 14, Gonzales, LA, Baton Rouge G&MS, Lamar Dixon Expo Center-Trademark Bldg., www.brgemandmineral.org
- 20-21 August, Bossier City, LA, Ark-La-Tex G&MS, Bossier Civic Center, website: larockclub.com

September

- 24-25 September, Lubbock, TX, Lubbock G&MS, Lubbock Memorial Civic Center, website: www.lubbockgemandmineral.org
- 24-25 September, San Antonio, TX, Southwest G&MS, Wonderland of the Americas, website: www.SWGMS.org

October

- 1-2 October, Cabot, AR, Central Arkansas GM&GS, Cabot Event Center, centralarrockhound.org
- **8-9 October, Tri-City G&MS, Mayborn Civic and Convention Center, email: selovelace@showdirection.com**
- **14-16 October, Westwego, LA, G&MS of Louisiana, The John A Alario Event Center. SCFMS & AFMS Show and Convention, Contact J. David Cope, (504) 214-6754.**
- 21-23 October, Austin, TX, Austin G&MS, Palmer Events Center, www.agms-tx.org
- 29-30 October, Oklahoma City, Oklahoma G&MS, State Fair Park- Modern Living Bldg., omgs-minerals.org

November

- 5-6 November, Amarillo, TX, Golden Spread GM&TS, Amarillo Civic Center Complex, website: www.amarillotreasure.com
- 11-13 November, Humble, TX, Houston G&MS, Humble Civic Center, website: hgms.org
- **19-20 November, Mesquite, TX, Dallas G&MS, Mesquite Convention Center, website: dallasgemandmineral.org**

Ref: Rock & Gem Show Dates, <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

Ref: January – February 2022 SCFMS Newsletter

Bench Tips from Brad Smith

By permission of the author, Brad Smith. Received as an email from Brad Smith. Not for commercial use

HOMEMADE WAX TOOLS

Save your used X-Acto or scalpel blades for utility work on the bench. They're wonderful for delicate waxwork. Use a cutoff wheel or other type of grinding wheel to shape the blades to what you need.



For instance, you can carve away excess metal on the spine to make yourself some narrow carving knives that do a great job of detailing small pierced areas of your waxes.

REMOVING A STONE FROM A BEZEL

If you've forgotten to use dental floss and got your stone caught in a bezel, there's one thing you can try before starting to pry.

Find some sticky wax or beeswax. Roll it into a pencil-sized cylinder and stick the end onto the top of the stone. Mold it on well and yank.

But if the stone is really stuck, there are two other tricks - but each with risks and consequences. The first is to pry open the bezel with a sharp knife blade being very careful not to wrinkle or tear the bezel. If you try this, make sure to pry gently in several passes around the stone.

The last solution is to drill a small hole into the bezel setting from the backside so that you can push the stone out. Note that this does leave a hole, but in some cases, you can use it to saw out a design under the stone.

More smart solutions for your jewelry-making problems can be found in my metal arts books on Amazon at <http://amazon.com/author/bradfordsmith>

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



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 7:15 PM Bradfield Recreation Center, 1146 Castle Drive, Garland,
- [Wild West Bead Society](#), meets 3rd Tuesday of each month at 6:30 pm, Wild Beads, 1124 S. Bowen Road, Arlington, TX

CLUB OFFICERS FOR 2022

President: Don Shurtz
 1st VP, Programs: Carolyn Grady
 2nd VP, Field Trips: Judy Wilson
 Secretary: Amy Vulk
 Treasurer: Ling Shurtz
 Editor: Don Shurtz
 Contact us by e-mail: don.shurtz@gmail.com or
L.SHURTZ@gmail.com

Minutes of the June Meeting

POGMC President Don Shurtz called the June 2022 club meeting to order at 7:20 pm.

Quorum: We have a quorum.

Visitors: There were no visitors.

Minutes: There were no minutes for May – our Potluck Taco Thursday event. We did review the April 2022 Minutes as published in the May 2022 Chips and Chatter. Carolyn made a motion to accept the minutes as published. Hatt seconded the motion. The motion passed

Ling presented the Treasurer’s Report for April-May 2022. Cheryl made a motion to accept the Treasurer’s Report. Hatt seconded the motion. The motion passed.

Old Business:

- No old business

New Business:

- The June IGEM will be June 10, 11, and 12 (Friday – Sunday). At this time, we do not know what the club booth will cost, but is likely it will be \$400.00. As with the April IGEM, the club will pay for the booth and those selling will donate to the club the amount to cover their booth space. Those who will be selling from the club booth are
 - Warner and Julie
 - Don and Ling
- July meeting: The July meeting is traditionally our 4th of July celebration at Spring Creek BBQ in Richardson. Everyone was in agreement that we meet at the Richardson Spring Creek BBQ.
- August and subsequent meetings: Cheryl made a motion to continue at the Bradfield Recreation Center through November. Carole seconded the motion. The motion passed. After discussions, we added December so we would have a place to hold our Christmas Potluck dinner and party. Everyone was in favor of the addition. While the meeting

continued, Ling paid the \$45.00 per month rent for August through December.

- Sunshine Report:
 - Hatt requested prayers for his father who is in the hospital after a fall.
 - Amy and Eden were not able to attend the meeting due to illness

Break

Presentation: We watched some short video segments on the Internet – segments from Highland Park Lapidary videos and webinars so that everyone could see what Highland Park was doing.

Raffle: We held the raffle.

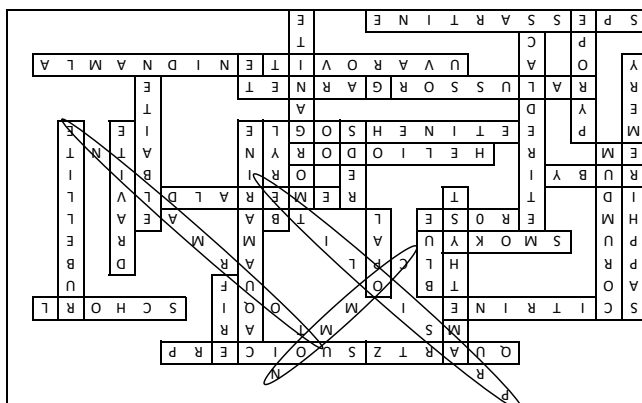
Don adjourned the meeting at 8:35 PM with a request to expedite the room clean-up.

JULY MEETING
July 7th starting at 7:00 PM
Spring Creek BBQ (Richardson)
270 N Central, Richardson, TX
Presentation: Food, Talk, Fun, ...

VISITORS ARE ALWAYS WELCOME

Copyright Information: This issue of the Chips and Chatter is copyright © by Don Shurtz. Unless otherwise noted, permission is granted for noncommercial reproduction of articles provided they remain essentially intact and credit is given to the author and original source. Where noted, the author retains the copyright and must be contacted for permission to reproduce the article. All articles may also be used as references provided a citation is given.

Word Find Answer – from Page 2



PLEASANT OAKS GEM and MINERAL CLUB of DALLAS



Meetings
First Thursday of each month. Next meeting is July 7 at the Spring Creek BBQ in Richardson

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

Our next meeting will be on July 7, 2022. This will be our annual BBQ Dinner at the Spring Creek BBQ in Richardson – North Central Expressway just north of Main Street at 7:00 PM

Features

Geodes	1
Mineral and Gemstone Families Word Find	2
Editor’s Corner – July Meeting, a Tradition	3
Bench Tips from Brad Smith.....	4

Notices

Shows and Activities	4
Visit an Area Club	4
Copyright Notice	5

Monthly Columns

Club and Meeting Information	1,3, 5, 6
Minutes of the June Meeting	5

Federation News

AFMS Code of Ethics	3
AFMS Land Use Policy.....	3

Chips and Chatter

See the Chips and Chatter online for color!

July 2022

Pleasant Oaks Gem and Mineral Club of Dallas, TX

Page 6

Visit us: www.pogmc.org Like us on Facebook