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1st Place, 2019 SCFMS Mini-Bulletin
1st Place, 2020 SCFMS Mini-Bulletin
1st Place, 2017 AFMS Mini-Bulletin

Shattuckite

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

Shattuckite is a beautiful blue, translucent mineral that has long been popular as a mineral specimen. However, it has lately become popular for use in lapidary. It is somewhat surprising that it is used in lapidary as it has a Mohs hardness of only 3.5. Being so soft, it would not be suitable for a ring (unless protected from scratches and bumps by a huge mounting) but could be used for a pendant, earrings, bolo-tie, or similar jewelry items. Shattuckite is one of the rarer copper silicates. Other more common copper silicates include diopside, plancheite, and chrysocolla. Of these more common copper silicates, shattuckite and plancheite are often confused with each other. Both shattuckite and plancheite form in the orthorhombic crystal system and are generally found in massive form or as acicular specimens. Acicular is a crystal habit of needle-like crystals growing from a central point. In two dimensions they look like fans. In three dimensions they look like partial or complete globes. If they are not complete globes, the fan of crystals is easily seen. If the globes are complete, they will look like a prickly surfaced ball. The easy way to differentiate shattuckite and plancheite is by hardness. The Mohs hardness of shattuckite is 3.5 while the hardness of plancheite is 5.5 to 6. Shattuckite globes are sometimes covered by drusy quartz. The globes will look as though they are covered by light blue quartz. The drusy quartz-covered shattuckite specimens are strongly desired by mineral collectors.



Shattuckite is named after the type locality (the type locality is where the mineral was originally discovered). It was discovered in 1915 at the Shattuck Mine, Bisbee Arizona. Today the best mineral specimens come from copper mines in the Kaokoveld District in Namibia, from the Katanga Copper Belt in the Democratic Republic of the Congo, and the Shattuck Mine (Bisbee, Cochise County) and the New Cornelia Mine (Ajo, Pima County), Arizona.

Reference:

- The Mineral Shattuckite, Minerals.net, <https://www.minerals.net/mineral/>
- Wikipedia, Shattuckite, <https://en.wikipedia.org/wiki/>

Picture:

- Don Shurtz, Shattuckite specimen displayed at Perot Museum of Nature and Science

From the Desk of the President

Judy Beck, AFMS President 2020-2021
From the June AFMS Newsletter

Greetings Fellow Rockhounds!! Our first Rock Show in 1 ½ years was AWESOME! Central Texas Gem & Mineral Society in Abilene, TX had a great show! We enjoyed the vendors, displays, and the warm and welcome people that we met there! My grandgirl won a gem tree (which I have to pick-up when I see my son next) and was soooo excited! And next up...It's almost here-the annual convention in Big Piney, WY is just a few weeks away! I'm looking forward to seeing old friends and making new ones! Plan to come early and stay late for the field trips that are being planned. In addition to conducting our business, visiting the displays and vendors, plan on attending some of the interesting seminars that are being planned. Our ad hoc Juniors committee has been hard at work preparing an informational workshop on Saturday to help you generate new ideas for the youth in your local area and we'll be hosting a Pizza Party for interested youth and adults on Sunday! Lastly, Larry & I would like to invite you to a Social Hour on Friday, June 18th from 5-7! Come by and say Hi! Sadly, we learned that the Eastern Federation is canceling their annual convention due to continuing restrictions from COVID. I know this decision was not reached easily and it points out that we are still dealing with this pandemic! Summer is here and that means that the AFMS newsletter will be on vacation for the next couple of months! I'm sure I'll have lots to tell you when we catch up again in September! Have a great summer, stay well and I hope to see you in Big Piney this month!



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

- JUL 16-18, Frisco, TX, Texas Mineral and Fossil Dallas/Frisco Show, Embassy Suites by Hilton Dallas Frisco Hotel Convention Center & Spa. Free admission, info@rockygems.com, www.rmghmpromotions.com
- JUL 17-18, Tulsa, OK, Tulsa R&MS, Tulsa Fairgrounds, www.tulsarockandmineralsociety.org
- JUL 23-25, Dallas, TX, International Gem and Jewelry (IGEM) Show, Market Hall, <https://www.intergem.com/>
- Aug 14-15, Gonzales, LA, Baton Rouge G&MS; Larmar Dixon Expo Center – Trademart Bldg., www.brgemandmineral.org
- Aug 21-22, Bossier City, LA, ARKLATEX G&MS, Bossier Civic Center, dglasner2001@yahoo.com

Ref:

- January - February 2021 SCFMS Newsletter
- Rock & Gem Show Dates, <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

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

Ruby, July Birthstone

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas
Reprinted from the July 2014 Chips and Chatter

Ruby, the birthstone for July, is the pink to red variety of corundum. Corundum (including ruby) is a hard stone. It is the defining stone for Mohs hardness of 9. Diamond and Moissanite are the only natural minerals that are harder than corundum. Like all corundum minerals, it is formed from Aluminum and Oxygen (Al_2O_3). The name ruby comes from the Latin word “ruber” meaning red. Ruby derives its red color from trace amounts of Chromium replacing a small fraction of the Aluminum atoms in the crystal matrix. Surprisingly, chromium is responsible for the green coloration in Emerald, a variety of Beryl. Of the various factors in the value of a ruby, color is most important. The most valuable rubies are blood red while the pink rubies are generally of lesser value. Another factor in the value of a ruby is the clarity of the stone. A clear ruby will generally be more valuable than a cloudy ruby



or a ruby containing excessive amounts of rutile. However, absolute clarity is also one of the primary indicators of a ruby being lab-grown – nature just does not produce a lot of absolutely clear rubies. Size is also important to the value of a ruby. A single 10-carat ruby would be considerably more valuable than ten 1-rubies.

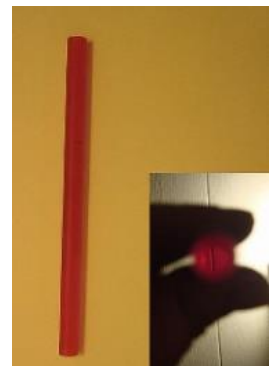


As indicated, ruby is the pink to red variety of corundum. The other gem corundum minerals are called sapphire and come in a variety of colors. Sapphire is the birthstone for September

In antiquity, rubies were treasured for their ability to arouse the senses and stir the imagination. They were also thought to bring health, wealth, and wisdom. In ancient Asia, rubies were buried beneath the foundation of buildings to bring good fortune to the building’s structure.

Although rubies are found in several locations, for centuries the Mogok Valley in Myanmar (Burma) has supplied most of the world’s rubies. In more recent times, rubies have been found in India, Afghanistan, Pakistan, Tanzania, Madagascar, Viet Nam, and Nepal. A few rubies have been found in the United States in Montana, North Carolina, South Carolina, and Wyoming.

As mentioned earlier, very clear rubies are often thought to be lab-made. Not that many years ago, ruby was grown extensively in laboratory facilities for use in some of the early red lasers. In fact, the first operational laser was a ruby laser that was developed in 1960. Many of the rods of synthetic ruby were eventually replaced by solid-state lasers, and the ruby rods have found their way into jewelry. However, these were not the first lab-grown rubies produced. The first synthetic ruby was made in 1837 by Gaudin. Verneuil made the first commercially viable synthetic rubies in 1903 and by 1907 was producing 2,000 pounds of gem grade synthetic ruby per year.



Reference:

Birthstones, <http://www.americangemsociety.org/september-birthstone>

Ruby, <http://en.wikipedia.org/wiki/Ruby>

Synthetic Ruby, <http://www.madehow.com/Volume-4/Synthetic-Ruby.html>

Pictures:

Rough ruby, picture by Don Shurtz of ruby on display in the Perot Museum of Nature and Science

Cut ruby, http://commons.wikimedia.org/wiki/File:Ruby_oval_1.29cts.jpg, photo by Wiener Edelstein Zentrum, used under the Creative Commons Attribution-Share Alike 3.0 Unported license

Ruby laser rod, http://commons.wikimedia.org/wiki/File:Ruby_laser_rod_and_view_through.JPG, photo by Zaereth, release to the public domain.

Bench Tips from Brad Smith

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

BEZEL PROBLEMS

When bezel setting a cab that has rather sharp corners, have you ever had problems pushing the metal down at the corners? It's a common problem often causing a wrinkle in your bezel and a grimace on your face.



In order for a bezel to capture the stone, the top edge of the bezel must be compressed and become shorter to lay down onto the stone. With a round or oval stone, this naturally happens as you push and burnish the bezel. But when

setting a stone with corners, the tendency is to push the long sides of the bezel down first. No compression occurs along the sides, and all excess metal is left at the corners. Compressing everything there is difficult. Often the only way to remove the extra metal at the corner is to make a saw cut and fold the two sides in to touch.

If you want a smooth bezel all around the corners, the simple solution is to set the corners of the bezel first. Then push in and burnish the sides. In this way, the necessary compression is distributed along the length of all sides and not forced to occur at the corners. With the corners set first, the top edge of the bezel can easily be compressed along the sides.

CHEAPER & BETTER PICKLE

Most jewelers use a granular pickle mixed with water. The active ingredient is sodium bisulfate. This can be purchased online (<http://amzn.to/2HkNTro>) or from local stores as a common pool chemical used for adjusting the acidity of the water. It's sold under various names, so be sure to check the list of active ingredients for a brand that is 95% or more sodium bisulfate.

An added benefit is that the pool chemical is more pure in form than what is sold for jewelry use and does not cause the brown grime often found floating on the top of the pot.

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



JULY MEETING – BBQ POT-LUCK DINNER AT THE MEETING ROOM July 1, Garland Activities Build starting at 7:00 PM

Our July meeting has traditionally been a BBQ dinner at Spring Creek BBQ. This was in reaction to 4th of July activities in downtown Garland. Over the last few years, Garland has moved a lot of the 4th of July activities away from the city center. Also, with the 4th on a Sunday this year, most of the activities are on Saturday or Sunday. Bottom line: our meeting on July 1st should be free from interference. So, anything Spring Creek can do, we can do better – right? **We will have a Potluck BBQ Dinner catered by all of us.** The club will be providing Beef Brisket, everyone should bring a dish to share. It can be an appetizer, vegetable dish, salad, desert, or drink. The more people that attend, the bigger the selection! See you there.

Plan to start at 7:00 for a meet and greet, then dinner starting at 7:30. We'll finish the evening with a nice door prize.

PRESIDENT'S MESSAGE

Ling Shurtz, POGMC President

The July meeting will be a 4th-of-July BBQ Pot-Luck dinner – bring a dish to share. The July IGEM show is July 23 -25. Set up will be July 21.

CLUB OFFICERS FOR 2021

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

MEETING MINUTES

June 3, 2021

POGMC President Ling Shurtz called the June 3, 2021 club meeting to order at 7:40 pm.

We recited the Pledge of Allegiance to the Flag

Quorum: We have a quorum.

Sunshine Report: Patti Mitchel remains at a nursing home and is fine.

Visitors: Former Member David Dobson and his daughter Gabriella were visitors. David was this evening's presenter.

Minutes: We reviewed the minutes of the May meetings as printed in the June 2021 Chips and Chatter. Julie made a motion to accept the minutes. Warner seconded the motion. The motion passed.

Treasurer's Report: Don read the Treasurer's Report for April and May. Carolyn made a motion to accept the minutes. Carol seconded the motion. The motion passed.

Old Business:

- Club meeting place. Bill will be due soon, and the GAB is not inexpensive (\$600.00 last several years).
- Our contract for the July Dallas IGEM show has been sent in. The show is July 23 – 25 with setup on Wednesday, July 21

New Business:

- David Dobson was accepted as a new member.
- Area shows and events:
 - May 7 – 9, Murphy, TX, David Dobson Rock Sale

- MAY 22-23, Tyler, TX, Keith Harmon Show & Sale, East Texas Fair Grounds, keithharmon19@yahoo.com
- MAY 29-30, Fort Worth, TX, Fort Worth G&MC, Will Rogers Memorial Center, www.fortworthgemandmineralclub.org

Break:

Presentation: Plate Tectonics by David Dobson

Ling adjourned the meeting at 9:10 pm.

PRESENTATION REVIEW

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

Plate Tectonics was a theory introduced in the 1930s by Arthur Holmes. The theory held that the lithosphere (crust) of the Earth was floating on the molten asthenosphere and the lithosphere was broken into pieces (plates) that could move. It was not until the 1960s and the discovery of ocean spreading along the mid-oceanic ridges pushing the oceanic lithosphere apart substantiated the Plate Tectonic Theory. The pushing of the plates apart causes the other side of the plate to push under the edge of the continental plate, a process known as subduction. Subduction causes earthquakes, volcanoes, and the movement of the continental plates. A predecessor to Plate Tectonics was the theory of Continental Drift proposed by Alfred Wegener in the early part of the twentieth century. His theory tried to explain why the coastline of Africa and South America seemed to fit together and that ancient plants and animals were the same. He was also trying to explain why rocks and geologic formations in Scotland and Ireland were nearly identical to formations in St. Johns and New Brunswick in North America. Wegener conceived of a time when all the continental landmasses were one large, continuous slab. The slab broke apart into major and smaller slabs (plates) when moved to their current locations on the earth.

JULY MEETING

JULY 1 starting at 7:00 PM

Celebrating our Country's Independence

VISITORS ARE ALWAYS WELCOME

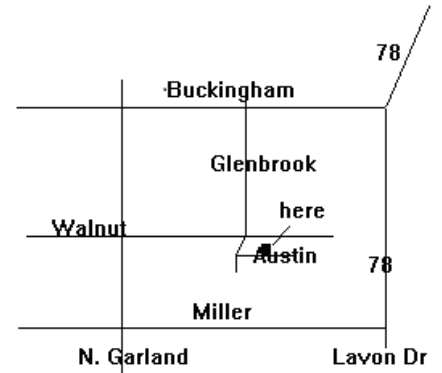
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PLEASANT OAKS GEM and MINERAL CLUB of Dallas



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 next meeting is on July 1, starting at 7:00

We will be celebrating Independence Day with a BBQ Potluck Dinner

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