



Member: South Central **Federation of Mineral** Societies



Affiliated: American Federation of **Mineralogical Societies** 



June 2021 Vol. 55, Issue 6

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

#### **JADE**

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

When you think of Jade, what do you think of? Do you think of beautiful Chinese jade carvings? Or do you think, perhaps, of the simple to elegant figures, masks, tools, and ornamental carvings of Mesoamericans? Perhaps you have a little more rockhound influence and think that there are two different minerals called jade?

It doesn't matter what jade brings to mind, because all of the above plus many more possibilities are correct.

Two different minerals are called jade. Nephrite and Jadeite. Nephrite is a metamorphic Calcium, Magnesium, and Silicate mineral that has a Mohs hardness of 6.0 to 6.5 and a splintery to granular fracture. It is very tough (resistant to fracture) due to the interlocking fibrous matrix of calcium, magnesium, and silicate. For toolmakers, this makes it ideal for hammers, axes, and puncturing tools. It was also fabricated into knives with very strong blades. Nephrite jade comes in a variety of colors. Translucent white to yellow nephrite jade was known in China as Mutton Fat jade. Opaque white to light brown or gray was known as Chicken Bone jade. The favored color for nephrite jade in China was Imperial Green – a transparent deep green color. Nephrite jade was used in China almost exclusively before the early 1800s. The primary source of nephrite in the Neolithic period was the now depleted deposits from the Ningshao area in the Yangtze River Delta. After the Ningshao deposit was gone, the majority of the nephrite came from the Khotan region in the western province of Xinjiang. Since the early 1800's the majority of the nephrite jade in China has been imported. Today the most productive nephrite jade deposits are found in British Columbia, Canada.

Jadeite started its life as Albite, a Sodium Aluminum Silicate is often found as a matrix stone for other semi-precious minerals. During metamorphism, albite subjected to high temperatures and pressures breaks down into jadeite and quartz. Jadeite is also a Sodium Aluminum silicate but has a higher density than albite. It is an inosilicate with interlocking tetrahedra silicate chains. These interlocking tetrahedra silicate chains make jadeite a very tough mineral that resists fracture. Jadeite was often used for axes and hammers by the early stone-tool makers. With a Mohs hardness of 6.5-7.0, jadeite is slightly harder than nephrite. Jadeite ranges in color



Jade vase carving of a Carp transforming into a Dragon. In ancient China, this symbolized successful completion of civil exams. Specimen on display at Perot Museum of Nature and Science.

Chips and Chatter June 2021 Visit us: www.pogmc.org "Like" us on Facebook from white to green to blue and purple. If it has trace amounts of iron and chromium in the crystalline matrix it can be very dark green to black. Purple and Blue jadeites are generally associated with mines in Guatemala but have been found in deposits from Turkey. The Mesoamerican cultures (Olmec, Maya, and Aztec) primary source for jadeite was Guatemala. The primary jadeite source for Neolithic European countries was from deposits in Italy. As an example, over 180 jadeite ax heads from northern Italy have been found in the British Isles. Other major deposits of jadeite include Myanmar, New Zealand, United States (California), and Japan.

The fact that jade was two different minerals was discovered in 1863 by French mineralogist Alex Damour. However, many of the Chinese artisans that worked the jade knew that there were two varieties. Their preference was for the harder jadeite when a selection was available. Because jade is beautiful and valuable, there are a lot of look-alikes but less expensive materials to take your money. Some of the most common are serpentine and green varieties of quartz including green quartz, aventurine, Prasiolite, and chrysoprase. Soapstone (talc) is often used to simulate jade figurines. Chalcedony has been used to simulate white (mutton fat and chicken brown) jade. It has also been used to simulate blue, green, and purple jade. These simulated jades should be easy to identify using hardness, fracture, and density. Glass has also been used to simulate jade but can be identified with a 10-power loupe to look for air bubbles in the glass. A buyer should also be aware that some jade is enhanced or "stabilized" by the use of resins and dyes. Some dealers will refer to the use of resin to improve the color and transparency of the jade as Type B jade. The use of dyes to enhance the color is sometimes called



Type C jade, and the use of resin and dye in combination is sometimes called Type B+C jade. More often there will be no mention of the enhancements. Infrared spectroscopy can be used to identify the use of resin to enhance jade. Dyes can be identified if the color is uneven, dull brown, and if the jade lacks transparency. One other type of enhancement is using a doublet, normally a plastic or rock backing of the jade. This can be detected by a careful visual search of the finished piece. A doublet is called Type D jade.

Many identify jade with China and Mesoamerican cultures. There are, however, many other cultures where jade was a significant aspect. Jade is the national stone of Japan. Japanese wore jade bracelets as a symbol of wealth and power. In Korea, jade carvings in the shape of commas or tubes were sometimes found in burial sites. About 850 BC the comma-shaped jade pieces were found on the gold crowns of royalty and in burial sites of the Korean Three Kingdoms. India has a 5-foot-tall jade sculpture of Mahavira. India also

had knives and sword hilts carved from serpentine (false jade). In the Philippines, there is evidence of a significant jade culture. Archeological investigations have yielded many green and white Nephrite jade artifacts (tools and personal ornaments). It is believed that most of the jade for the later artifacts was mined in the Philippines, but the early artifacts were made from Nephrite jade from Taiwan. It is believed that there was a significant jade trade between Taiwan and the Philippines around 1000 BC. The Māori used the jade found in New Zealand to carve tools, weapons, and ornaments for wear. Previously we mentioned the 180 jade ax heads from Italy that made their way to the British Isles. The Italian jade was found throughout Europe as tools and jewelry.

#### Reference:

- Wikipedia, https://en.wikipedia.org/wiki/
- Mindat, https://www.mindat.org/
- Mayson Kay Jade, Jade simulants, https://www.masonkay.com/jade-simulants
- Maya Jade Pendant. Photograph of a pendant in the Yale University Art Gallery. Photograph released to Public Domain, from Wikimedia Commons, https://en.wikipedia.org/wiki/

#### 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

- JUN 18-20, Big Piney, WY. Sublette County Rock Hounds, Sublette County Fairgrounds, AMFS & RMFMS Conventions
- JUN 19-20, Grapevine, TX, Arlington G&MC, Grapevine Convention Center, www.agmc57.org
- 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.rmgmpromotions.com
- JUL 17-18. Tulsa, OK, Tulsa R&MS, Tulsa Fairgrounds, wwwltulsarockandmineralsociety.org

#### Ref:

- September October 2020 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 2<sup>nd</sup> 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 3<sup>rd</sup> Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)

Dallas Paleontological Society, meets 2<sup>rd</sup> Wed. of each month at 7:00 pm, Brookhaven College, Building H, 3939 Valley View Lane, 75244

Fort Worth Gem & Mineral Club, meets 4<sup>th</sup> 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

### **Town and Cities of North America Word Search Puzzle**

Compliments of the Mid-Georgia Gem and Mineral Society and Tina Perkins, editor of the Mid Georgia Gem Clips, the Official Bulletin of the Mid Georgia G&MS

Created with TheTeachersCorner.net Word Search Make

# **Town and Cities of North America**

Find the Names of Towns and Cities in North America that are Rocks, Minerals, Gemstones, or Elements

P	Α	D	V	M	E	M	С	Н	R	Υ.	S	0	Т	1	L	E	E	Υ	I
J	Z	Α	D	Q	D	S	V	Ν	Т	Т	Q	Υ	0	R	G	N	D	Н	Χ
E	N	R	С	0	Ν	S	Α	M	Υ	Т	Α	Н	S	E	0	J	L	K	L
E	Z	K	В	1	0	U	S	Р	Ε	R	I	D	0	T	D	I	G	С	Н
F	R	M	E	R	M	В	В	E	В	D	Υ	Q	S	S	Q	В	L	С	С
Ε	T	1	С	L	Α	С	Ε	Т	В	J	Α	D	Q	Α	D	0	٧	R	S
Χ	Χ	R	Ε	С	I	L	S	1	Р	Р	Ν	Н	N	В	Т	Н	T	M	L
N	G	Ε	0	Т	D	Ε	T	Н	0	Α	I	I	L	Α	0	D	Н	W	D
G	R	В	Ν	G	I	Τ	0	P	S	G	G	D	Т	L	G	T	Q	L	J
M	Α	W	Α	0	Α	Ν	S	Α	M	I	0	D	P	Α	U	N	Α	W	G
E	Т	С	Ν	U	Т	L	0	R	F	Н	G	E	В	M	Z	R	Α	E	0
R	Ν	L	T	W	Χ	S	Ε	G	G	M	٧	Ν	S	R	Ε	Q	Z	Υ	D
С	Н	W	seppore	1	J	1	E	Ν	Α	0	R	1	Χ	M	R	Α	Н	R	F
U	L	R	M	Н	Ν	L	Т	M	Α	R	В	Т	E	E	Р	Ε	Ε	Н	Z
R	G	Т	0	P	F	0	M	E	I	L	Α	E	P	0	T	Α	M	Υ	Ε
Υ	Υ	R	Ν	R	U	F	L	U	S	L	M	S	T	1	G	I	Α	0	1
D	Р	Z	Υ	Management	J	K	Н	1	S	S	Α	U	R	Α	W	Ρ	Т	L	В
Υ	S	U	Р	С	L	J	L	Α	Т	J	W	0	Т	F	D	D			G
T	U	Υ	F	Z	V	F	M	Z	L	E	1	E	0	В	E	K	T	Т	Z
R	M	F	В	Α	R	I	Т	E	S	D	D	W	R	U	В	Υ	E	E	-

#### **Word List**

ACTINOLITE	AGATE	ALABASTER
ANTIMONY	ARAGONITE	<b>ASBESTOS</b>
BARITE	BAUXITE	BISMUTH
CALCITE	CHRYSOTILE	DIAMOND
DIORITE	EMERALD	FLINT
GALENA	GRAPHITE	GYPSUM
HEMATITE	HIDDENITE	JASPER
LIMESTONE	MERCURY	MICA
PERIDOT	RHYOLITE	RUBY
SANDSTONE	SULFUR	TOPAZ

Chips and Chatter Page 4 June 2021 Visit us: www.pogmc.org "Like" us on Facebook

#### PRESIDENT'S MESSAGE

Ling Shurtz, POGMC President

The IGEM show is scheduled for July 23 - 25with setup likely on Wednesday, July 21.

Ling noted Gary W. Bowersox's Facebook page is advertising buying gems direct from the sellers in Afghanistan. Gems include Emerald, Ruby, and Tourmaline. The lots will be sold in Dubai from July 12 to July 15. Even if you don't want to buy any gems, it is still worthwhile to check out his page.

We also received an email advising that there will be a memorial service for Bob and Jerrye Parker on Saturday, June 17, 2:00 PM in the Wildwood Chapel at Restland Park, Dallas

We have paid to continue to have our meetings at the big room at the Garland Activities Building through December 2021.

#### **CLUB OFFICERS FOR 2021**

President: Ling Shurtz Carolyn Grady 1st VP, Programs:

2<sup>nd</sup> VP, Field Trips: Open

Secretary: Cheryl Ogletree Treasurer and Editor Don Shurtz E-mail: don.shurtz@gmail.com, L.SHURTZ@gmail.com

# **MEETING MINUTES** May 6, 2021

This was our Taco Tuesday on Thursday celebrating the Cinco de Mayo meeting. We started with the Pledge of Allegiance to the Flag. Eden Vulk then offered a prayer and blessing of the food. Everyone brought something to share and we had some great Tacos, fixings, sides, desserts, and drinks. We were joined by Joe and Brenda Vulk, parents of Amy Vulk. As we neared the end of the evening, we convened a very short business meeting for the sole purpose of voting to accept Joe and Brenda as new members. The vote was unanimous. After the vote, we ended the meeting. It was a great evening.

# **MEETING Garland Activities Center**

Our June meeting will feature a presentation about Fossils from prior club member David Dobson.

## 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 Page 5

Chips and Chatter

Pleasant Oaks Gem and Mineral Club of Dallas, TX

they remain basically 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 reference provided citation is given.

## IN LOVING MEMORY

WANDA JOE FITZGERALD January 31, 1931 – December 28, 2020



If you ever visited Wanda's home in Farmers Branch, you immediately knew she was much more than a rockhound. Her front yard had numerous stones and fossils, including several large ammonite fossils between the walk and the street. But once you stepped into her home, you were in a totally different environment. She had collections of just about everything. The one that caught my attention was a collection of barbed wire. I never knew there were so many varieties of barbed wire.

My fondest memories of Wanda are the stories she wrote for the Chips and Chatter and how she took charge of the Christmas Party gift exchange. She added excitement to the gift exchange, making sure a lot of items were stolen. Her articles sounded just like she talked. Her use of verb tense and contractions was terrible, but I loved to listen to her anyway. To me, it was Wanda Talk and I could listen to her for hours. Her writing also sounded like Wanda Talk – the contractions were fixed but the verb tense misuse was still there. Her stories of rock hunting and with her husband Robert and some of the other early members of Pleasant Oaks were fascinating.

We lost touch with Wanda several years ago. She moved from her assisted living home in Irving and either changed or stopped her phone service. We would hear that she attended the Dallas Gem and Mineral Show, but no one ever bothered to get an address or phone number.

We loved you Wanda and will miss you very much.

June 2021

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

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



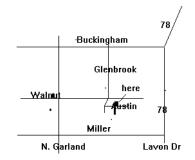
Meetings

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 Next Meeting: Thursday, June 3 at 7:30. Former club member David Dobson will give a presentation about Fossils

Features	Monthly Columns
Jade 1 – 2	Club and Meeting Information1, 5, 6
Town and City Word Search4	Minutes5
In Loving Memory – Wanda Fitzgerald5	President's Message
Notices	<b>Federation News</b>
Shows and Activities	From the Desk of the [AFMS] President3
Visit an Area Club3	
Copyright Notice5	
Chips and Chatter Pa	age 6 June 2021

Pleasant Oaks Gem and Mineral Club of Dallas, TX

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