



## Wickenburg Gem & Mineral Society, Inc.

P.O. Box 20375, Wickenburg, Arizona, 85358

E-Mail — [wgmsociety@gmail.com](mailto:wgmsociety@gmail.com)

[www.wickenburggms.org](http://www.wickenburggms.org)

*The purpose of this organization shall be to educate and to provide fellowship for people interested in rocks and minerals; to foster love and appreciation of minerals, rocks, gems, and the Earth.*

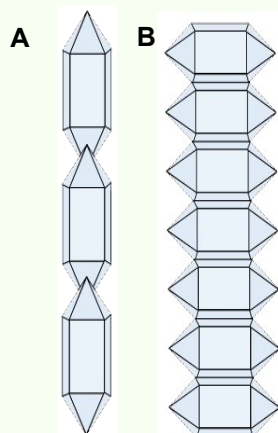
*Membership shall be open to all interested people.*

## QUARTZ VARIETY CHALCEDONY

### JASPER

By Susan Celestian

Named for the once-town of Chalcedon (now Kaldiköy), Turkey, technically chalcedony is an aggregate of microscopic to sub-microscopic, parallel, fibrous quartz. According to *Mindat.com*, at least two types have been identified: length-slow and length-fast (Figure 1). Commonly, chalcedony contains water and 1%-20% Mogánite ( $\text{SiO}_2$ ). [Mogánite is a polymorph of quartz: same composition as quartz, which is in the hexagonal system; however, mogánite is in the monoclinic system.] Over time mogánite converts to quartz.



**FIGURE 1 Chalcedony**

Chalcedony is technically formed of fibers of quartz stacks, with the crystals stacked in a couple of ways. (A) depicts what is referred to as length-slow. (B) depicts length-fast. These fibers may or may not be aligned parallel to each other. *Diagram by Susan Celestian, based on a graphic on mindat.com*

In more common parlance, chalcedony is more simply referred to as micro-crystalline quartz. And there are many varietal names that are used: agate, chert, jasper, onyx, chrysoprase, pietersite, aventurine, carnelian, sard, sardonyx, tiger's eye, bloodstone (could be considered a variety of jasper) binghamite, plasma, and others. Orientation of crystals, color, banding, and inclusions are the bases for the different varieties.

The name "jasper" is derived from Latin *iaspis*, and Old French *jasper* -- both ultimately derived from a Greek word for 'spotted stone'. Jasper is opaque chalcedony, and includes impurities that impart to it various colors and patterns. Generally, it includes red, green, brown, yellow, orange, and uncommonly blue. Figures 2-.

**Composition** -  $\text{SiO}_2$

**Hardness** - 6.5-7

**Luster** - Vitreous, waxy

**Streak** - white

**Colors** - red, brown, yellow, green, orange, blue

**Diaphaneity** - Opaque

**Specific Gravity** - 2.5-2.9

**Fracture** - conchoidal to sub-conchoidal

**Tenacity** - brittle

**Habits** - massive, botryoidal, mammillary

Jasper is associated with sedimentary, igneous, and metamorphic processes; and is generally thought to form by the action of hydrothermal fluids in association with silica-rich sediments or volcanic ash, and often replacing other minerals (as in the case of tiger's eye, which is chalcedony after asbestose serpentine). It may form in thick, extensive beds; as crack in-fillings; or as nodules.

*Chalcedony continued on page 3.....*

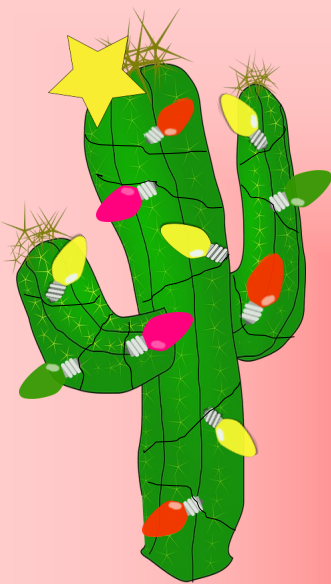
### INSIDE THIS ISSUE

Chalcedony - Jasper	1, 3-4
2017 WGMS Show & Christmas Party announcement	2
Minutes	3
Field Trips	5
Show list, Club Information	6

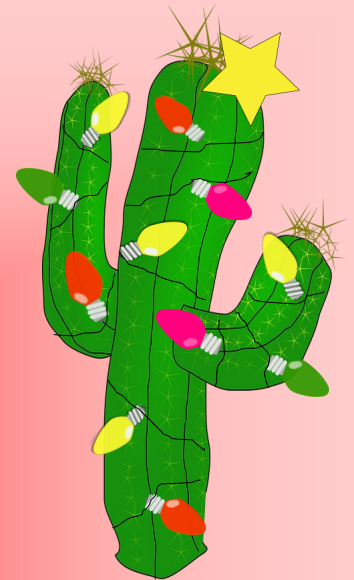
**REMEMBER:**  
**WGMS ROCK & MINERAL SHOW**  
**Nov 25 & 26, 2017**  
 Sat 9-5; Sun 9-4  
**Hassayampa Elementary School**

This is our club's show, and it is important that we all participate as much as we can.

Attend, and please consider **VOLUNTEERING!**

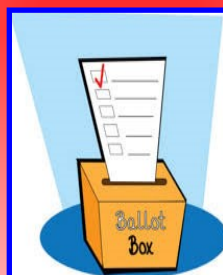
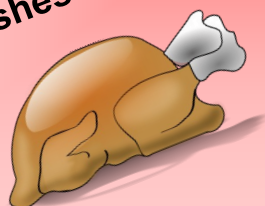


**HARK!**



**CHRISTMAS PARTY!!**  
**DECEMBER 1, 2017**  
**AT 6:00 PM**

**POTLUCK**  
 Club provides meat, plates, utensils. Club members bring side dishes and desserts.



**ELECTION**  
**OF OFFICERS**

**WHITE**  
**ELEPHANT**  
**GIFT**  
**EXCHANGE**  
 (OPTIONAL)



**Meeting Minutes — November 10, 2017**

The meeting was called to order by Craig Jones after a potluck dinner with 41 people in attendance. The pledge of allegiance was said.

The minutes for the October meeting were not available. The treasurer's report was approved as presented by Debbie. Guests and 6 new members were introduced.

Unfinished Business: Steve H is researching the Helicopter rescue insurance.

New Business: Election of officers will be held at the December meeting. Open positions are president, vice president, and secretary.

Club Show is on Saturday November 25<sup>th</sup> 9AM-5PM, and Sunday the 26<sup>th</sup> 10AM-4PM: Signup sheets available for the 4 show cases, and to help with Kid's table, silent auction, best rock contest, raffle ticket sale, door prize ticket, and UV light display. Rocks will be needed for the Silent auction, along with prizes to give away in the hourly door prize drawings. Enter the best rock you ever found in the 4<sup>th</sup> annual Best Rock Contest. Beth asked for everyone to be at the school for set up at 7am Friday the 24<sup>th</sup>. Vendors will be arriving at 11 am.

Karen announced she has already sold \$260 of raffle tickets for the 2 gold nuggets that will be awarded at the end of the show.

A field trip schedule was handed out with 14 trips planned for the upcoming season. Next trip will be November 16, to the Cave Creek area, looking for red jasper.

Craig will be baking a turkey and taking a group out for Thanksgiving Day in the desert at Date Creek Road, for quartz crystals. Call Craig if you will be attending.

Show-and-tell prize was won by Steve, and the first door prize winner was Paula.

Next meeting will be Dec. 1, with a pot-luck dinner starting at 6PM. Craig will be furnishing the turkey, and Kristen will be baking the ham. Paula will be leading the white elephant Christmas gift exchange, with a new twist that everyone will enjoy.

Respectively submitted,  
Debbie Keiser

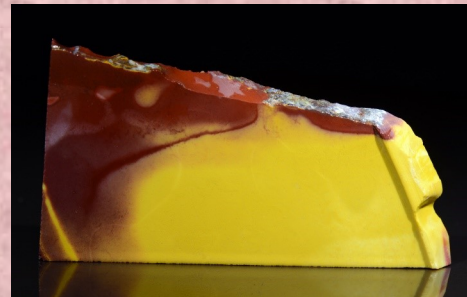
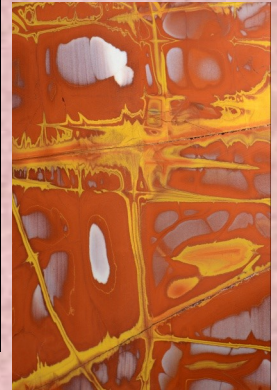
...Chalcedony continued from page 1

**Some of the many varieties of jasper:**

Photos by Stan  
Celestian



Ocean Jasper



Mookaite



Owyhee  
Cherry  
Creek  
Jasper



Picasso  
Jasper

Chalcedony continued on page 4...

...Chalcedony continued from page 3



Brenda Jasper



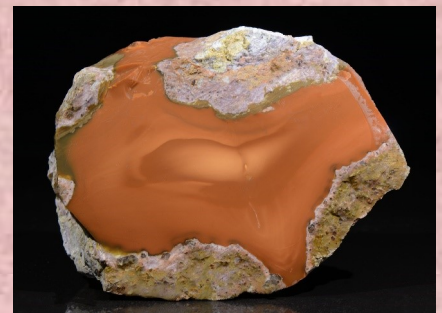
Petrified Wood



Stone Canyon Jasper



"Tilgillites"



Bruneau Jasper - rough and tumbled



## UPCOMING WGMS FIELD TRIPS

**WHEN:** Saturday, December 30, 2017

**WHERE:** Date Creek

**WHAT:** Quartz

**WHEN:** Monday, January 1, 2018

**WHERE:** Dragon Mine area

**WHAT:** Pegmatite minerals, geodes

**WHEN:** Wednesday, January 17, 2018

**WHAT:** Fluorite

**WHEN:** Saturday, January 20, 2018

**WHERE:** Vulture Mine

**WHEN:** Wednesday, January 31, 2018

**WHERE:** 4th of July Peak

**WHAT:** Chalcedony

**WHEN:** Tuesday, February 6, 2018

**WHERE:** Camp Verde

**WHAT:** Glauberite pseudomorphs

**WHEN:** Tuesday, February 13, 2018

**WHERE:** Robson Mining World

**WHEN:** Tuesday, February 20, 2018

**WHERE:** Bullard Mine

**WHAT:** Chrysocolla

**WHEN:** Tuesday, February 27, 2018

**WHERE:** Signal City

**WHEN:** Tuesday, March 6, 2018

**WHAT:** Mushroom rhyolite

**WHEN:** Wednesday, March 14, 2018

**WHERE:** Bagdad

**WHEN:** Wednesday, March 21, 2018

**WHERE:** Black Light outing

**WHEN:** Wednesday, March 28, 2018

**WHERE:** Burro Creek

**WHAT:** Lapidary

DATES & PLACES SUBJECT TO CHANGE

If you all have some place that you would like to go, let Craig J. 208-681-4770 or Mel C. 502-641-3118 know. This is your club. Let's go out and have some fun.

## The Hunt for Cave Creek Jasper 11-16-1017



Seven vehicles and their occupants ventured forth in search of the blood-red Cave Creek jasper. A second stop was made at the Seven Springs onyx mine.

*Photos by Stan and Sue Celestian*

## UPCOMING AZ MINERAL SHOWS

**November 18-19 - Payson, AZ** Payson Rimstones Rock Club, Inc.; Payson H.S./Longhorn Gym, west of Longhorn Rd., east of McLane; Sat 9-5, Sun 10-4; Admission: \$2, children 12 and under free.

**November 25-26 - Wickenburg, AZ** Wickenburg Gem and Mineral Club; Wrangler Event Center, 251 S. Tegner St.; Sat 9-5, Sun 10-4; Admission: free.

**January 5-7 - Mesa, AZ** Flagg Mineral Foundation -- Flagg Gem & Mineral Show; Mesa Community College; 1833 W Southern Av; Fri-Sun 9-5; Admission: free.

**January 12-14 - Globe, AZ** Gila County Gem & Mineral Society; Gila County Fairgrounds; Hwy 60, 3 miles north of Globe; Fri-Sat 9-5, Sun 9-4; Admission: \$3 indiv, \$5 couple, students/children free.

**January 19-February 11- Tucson, AZ** There will be many separate shows throughout Tucson during this period. For a general schedule, go to: <http://www.tucsongemshows.net/coming.html>

**February 8-11 - Tucson, AZ** Tucson Gem and Mineral Society; Tucson Convention Center; 260 S Church Av; Thur-Sat 10-6, Sun 10-5; Admission: \$13, children 14 and under free.

**February 8-11 - Mesa, AZ** Apache Jct Rock and Gem Club; Skyline High School, 845 S Crimson Rd.; Sat 9-5, Sun 10-4; Admission: \$3 adults, \$1 students, children 12 and under free.

**March 24-25 - Anthem, AZ** Daisy Mountain Rock and Mineral Club; Boulder Creek High School Gym, 40404 N Gavilan Peak Pkwy; Sat 9-5, Sun 10-4; Admission: \$3 adults, \$2 seniors and children, children 12 and under free.

If you are travelling, a good source of shows AND clubs is <http://www.the-vug.com/vug/vugshows.html> or <http://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=AZ> For out-of-the-country shows: <http://www.mindat.org/shows.php?current=1>

A good source for a list of Arizona Mineral Clubs and contact information is [http://whitemountain-azrockclub.org/Public\\_AZ\\_Clubs\\_Links.html](http://whitemountain-azrockclub.org/Public_AZ_Clubs_Links.html)

## ELECTIONS COMING -- DUTIES OF CLUB OFFICERS

**The club will be holding election of officers in December.** Anyone willing to fill an opening please contact Craig or Debbie. The vitality of our club is dependent on the participation of the members! The club was founded in the early 1970's and the current membership is 127. Please consider lending your talents.

## Officers and Chairperson

**President:** Craig Jones.....208-523-9355  
**Vice President:** Mel Canter ..... 502-641-3118  
**Secretary:** Judy Zimmerlee..... 517-652-1355  
**Treasurer:** Debra Keiser..... 928-684-1013  
**Program Director:** Dale Keiser..... 928-684-1013  
**Publicity:** currently open position  
**Membership:** Roma Hagan ..... 602-469-7662  
**Editor:** Susan Celestian ..... 602-361-0739  
**Field Trip:** Craig J, Bob B, Mel C  
**Show Chair:** Beth Myerson.....480-540-2318  
**Scholarship Chair:** Steve Hill..... 928-533-3825  
**Historian:** Jeanine Brown..... 928-684-0489

Meetings are held the **2nd Friday most months** at **Coffinger Park banquet room**. Potluck dessert at 6:30 pm. Business meeting at 7:00 pm. **Exceptions: February and December** meetings are held on the **first Friday of the month**. We do not meet in the summer — **no meetings in June, July or August**.

**Membership Dues: \$15.00 Adults per Person  
\$ 5.00 Juniors and Students**

### Meeting Dates for 2017

**Wickenburg:** Jan 13, Feb 3, Mar 10, Apr 14, May 12, Sept 8, Oct 13, Nov 10, Dec 1

**Stanton meets** Thursday after the Wickenburg meetings. Jan 19, Feb 9, Mar 16, Apr 20, May 18, Sept 14, Oct 19,

<http://www.wickenburggms.org/>

If you ever have photos from a club field trip, send a couple to Dale, for posting on the website.

## NOTES FROM THE EDITOR

Have a geological interest? Been somewhere interesting? Have pictures from a club trip? Collected some great material? Write a short story (pictures would be great). I'd like topic suggestions also.

I would love to have some pictures from field trips! Snap a couple and send them to me.

Deadline for the newsletter is the 27th of the month.

Mail or Email submissions to:  
 Susan Celestian, editor  
 6415 N 183rd Av  
 Waddell, AZ 85355  
 azrocklady@gmail.com

Susan Celestian, editor  
For Wickenburg Gem and Mineral Society, Inc  
6415 N 183rd Av  
Waddell, AZ 85355