

# The Agate Explorer

July 2018



**Potluck Picnic**  
Sunday, July 29th  
Meal at noon  
Hallett House,  
22418 MN Hwy., Crosby

*Bring a lawn chair and a dish to share.  
Meat and some beverages provided.*

*If you plan to attend, please R.V.S.P. to  
theisma@hotmail.com or call/text 320-250-8120  
with number of people.*

## Once in a Lifetime Rock Sale!

### Harry Wagoner Collection

*70+ years of collecting  
rocks and minerals*

**You set the price—  
what they are worth to you.**

*All rocks must go.  
Leaving the state.*

**Cash only.**

**Sat., July 21 & Sunday, July 22  
10 a.m.—3 p.m. ONLY**

**36776 304th Lane, Aitkin, MN**

## Kemmerer Wyoming Trip

Early August  
dates determined by interest



Kemmerer is  
the home of the  
famous fish  
fossils. This  
will be a quick

trip, perfect for those with only a short  
amount of time to spare.

Spend one long day from Minnesota to  
Kemmerer, spend three days at two sites  
(day and night picks available),  
then one long day home. Carpooling in 4  
wheel drive vehicles. Motel in town.

Contact Jim Reed; 218-825-0754  
jareed@charter.net



Franklin Art Center

## Club Information

### Meeting Place

Lower level  
Franklin Arts Center  
1001 Kingwood St, Brainerd, MN 56401

### Directions

.4 mile east of Business Hwy. 371  
& Hwy. 210 intersection.  
(Castle turret water tower.)

### Date/Time

the 2nd Saturday of each month  
at 2 p.m. unless otherwise noted.

### Club Dues

**\$20/ family**

**Free /unaccompanied juniors**

**Membership runs  
from Jan. 1-Dec. 31st.**

### Club Purpose:

*To foster an interest (& encourage  
young & old) to study earth  
science, enjoy the art of lapidary,  
hunting for rocks, and semi-  
precious stones. We also strive to  
use what we know and acquire to  
further educate everyone who has  
an interest in our hobby.*

*We are a not-for-profit  
organization.*

## Club Calendar

### NO JULY MEETING.

**July 29**—Potluck Picnic, Hallett House, Crosby; eat at noon

**Late July/early August**—Kemmerer, WY field trip

**July 31-August 4**—Crow Wing County Fair

**August 12**—Get Pickin' field trip

**August 18**—Outing Corn Feed

**August 23**—Franklin Arts Center 10th Anniversary Celebration



**Information subject to change.**

## Pebble Pup Day Camp Photos

27 students  
Participated  
June 8 & 9.



## Jewelry Making Tip

By Brad Smith  
[www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)

### Silver Discoloration

Working with jewelry involves an ever increasing number of skills. Chemistry is one of them that comes into play when dealing with a discoloration on the metal caused by a chemical reaction between it and the environment.

In the case of Sterling silver there are three discolorations we typically encounter: a tarnish, a firescale, and a firestain. Each is different in its cause, in its cure, and in its prevention. All three have to do with the metals in the Sterling alloy (92.5% silver and 7.5% copper) and how they react with oxygen and the heat of soldering or with pollutants in the air over the long term.

Tarnish is a grayish coating that builds up slowly on the surface as a result of a reaction of the silver with sulfur-based compounds in the air. Typically these are pollutants from the burning of petroleum fuels, but they can come from other sources as well. I once tarnished all the silver in my display case by putting a pretty specimen of iron pyrite in with the jewelry. Turns out pyrite has sulfur in it! Sulfur combines with the silver to form a grayish silver sulfide film on the surface.

Preventing tarnish involves keeping sulfur away from the metal. Plastic bags will help, and anti-tarnish strips are available from jewelry supply companies to pack near your items. Tarnish is easily removed by hand polishing with a jeweler's cloth or with one of the products sold for cleaning the good silverware for holiday dinner. Another way is to remove it chemically. Put a piece of aluminum in the bottom of a dish large enough to contain your piece. Heat enough water to cover the silver. Mix in 2 tablespoons of sodium carbonate per cup of water and pour into the dish. Be sure the silver touches the aluminum. Sodium carbonate is the main ingredient in washing soda. Read the labels in grocery and hardware stores.

The second type of tarnish is called firescale. It is the dark gray to charcoal colored film that forms on Sterling or other copper alloys like brass or bronze when we heat it with a torch. The copper in the alloy reacts with oxygen in the air to form a dark cupric oxide coating on the surface. Luckily, the oxide is easily removed by dissolving it in a mild acid - generally called a

pickle. It's important that we not let firescale form on a solder joint because it will block the flow solder over the joint. There are two ways to prevent firescale. Most common is to use a flux, a borax-based solution applied to the metal before soldering. When melted, borax forms a thin glassy layer that keeps oxygen away from the metal. A second way is to do your soldering on a charcoal block. Together with the flame, charcoal greatly reduces the amount of oxygen in the area being soldered. In either case, oxygen is prevented from reaching the metal, so no cupric oxide firescale is formed.

A second oxide can also be formed when soldering copper or a high copper content alloy like bronze or brass. It's called cuprous oxide and is reddish in color. That's why a black looking piece you put in the pickle sometimes comes out red. Problem is that while the black cupric oxide is dissolved by a pickle, the red cuprous oxide is not. The discoloration can be sanded or polished off, but an easier way is to use a "super pickle". This is a mixture of fresh pickle with a healthy shot of hydrogen peroxide from the local store.

I've saved the worst form of discoloration, firestain, for last. Think of firescale (above) as like getting dirt on your shirt that you have to wash off. Firestain is like getting ink on it. The discoloration is not just on the surface, it seeps down and stains the material. Firestain happens when we heat a piece of silver too hot, too long, and/or too many times.

Firestain occurs when the oxides start to build up below the surface of the metal. You generally don't notice it until after polishing. It appears as a darker area of the surface and is easy to spot when viewed under light bounced off a piece of white paper. Because firestain is below the surface, there's no easy bench tip solution. Depletion gilding may work for some pieces. Otherwise, removing it calls for sandpaper and aggressive polishing. A much better approach for a piece that will require a large number of solderings is to protect the metal from developing firestain by applying liberal amounts of a firecoat. Regular soldering flux will provide some protection but is not as effective as preparations made specifically for the task. Jewelry supply companies offer several commercial solutions, but my favorite is the Prips mixture. I use it every time I intend to do more than two solderings on a piece.





## Rox Box

A place to advertise rock items to sell and to inquire about items to purchase.



*The Cuyuna Rock, Gem & Society accepts no responsibility for any dissatisfaction that may occur by either party, seller or buyer. The Society does not profit in any way by sales transactions.*

### For Sale: Knapped Replica Points;

Many to choose from - most priced at \$5 per inch or less. Many made by Cherokee native in Oklahoma.

Contact Harry Wagoner at 218-927-9983 or hpwagy@centurylink.net.



**For Sale:** Large sphere machine; large and small sets of three cups; includes a number of abrasive pads. Peter Kovach, 612-868-949 or pjkovach@comcast.net



**For Sale:** Sterling silver and 14 kt gold-filled wire for sale, by the foot. Selling at 60% of retail prices. All wire was purchased from a reputable dealer when I was wire-wrapping. Will bring to picnic or call JoAnn Moe, for details @ 602-689-4319.



### For Sale: Thumler

Model B Tumbler 15 lb. capacity; hex steel barrel, rubber liner. 2 units available. \$150 each. Contact Harry Wagoner—218-927-9983 or hpwagy@centurylink.net



### For Sale: I have

one of these for sale - \$30; Harry Wagoner; hpwagy@centurylink.net or 218-927-9983.



**Wanted:** Rough specimens of orbicular granite especially from Peru. Also orbicular diorite or other plutonic rocks. Harry A. Wagoner 218-927-9983.

## Mineral Encyclopedia



### Scapolite

Scapolite is a name used for a group of aluminosilicate minerals that includes meionite,

marialite, and silvialite. Meionite and marialite are end members of a solid solution series. Silvialite is a mineral that is very similar to meionite.

These minerals have very similar compositions, crystal structures, and physical properties. They cannot be easily distinguished from one another in the field or during hand specimen examination in a laboratory. The name "scapolite" is a term used for convenient communication. These minerals are found in small quantities in some metamorphic and igneous rocks. Their compositions are compared in the table below.

### Physical Properties of Scapolite

Scapolite has an appearance that is very similar to many feldspars. As a result, it can easily be overlooked in the field and during hand specimen examination in a laboratory. Massive scapolite is found in regionally metamorphosed rocks such as marble, gneiss, and schist. These massive specimens often exhibit a wood-grain or fibrous texture which facilitates their identification.

Well-formed, gem-quality, prismatic crystals with a square cross-section are sometimes found in marbles.

In metamorphosed igneous rocks, especially gabbro and basalt, scapolite often occurs as complete or partial replacements of the feldspar grains. Crystals of scapolite are sometimes found in pegmatites and rocks altered by contact metamorphism.

Scapolite minerals are easily attacked by weathering. They are some of the first minerals attacked in their host rocks and easily alter to micas and clay minerals. As weathering begins, the mineral grains lose their transparency, become opaque, and have a reduced hardness.

### Uses of Scapolite

Scapolite does not have a role as an industrial mineral. It is rarely found in minable quantities and does not have a composition or physical properties that make it of industrial use.

The only use of scapolite is as a minor gemstone; however, in that use it can be beautiful and interesting. Yellow and pink transparent scapolite can be cut into very attractive gems like the yellow scapolite shown on this page. Some specimens contain tiny fibrous inclusions that produce a "silk" within the stone that reflects light to form a cat's-eye.

Scapolite has a Mohs hardness of between 5 and 6, which is too soft to serve as a ring stone. Its use is therefore limited to being a collector's stone and being mounted in jewelry such as earrings and pendants that have a low risk of impact or abrasion.

<https://geology.com/minerals/>

### Physical Properties of Scapolite

**Chemical Classification** Silicate

**Color** Colorless, white, gray, yellow, orange, pink, purple

**Streak** White

**Luster** Vitreous

**Diaphaneity** Transparent to translucent

**Cleavage** Good

**Mohs Hardness** 5 to 6

**Specific Gravity** 2.5 to 2.7

**Diagnostic Properties** Luster,

specific gravity, massive specimens often have a wood-grain or fibrous appearance, prismatic crystals have a square cross-section

**Chemical Composition** A solid solution between marialite ( $\text{Na}_4(\text{AlSi}_3\text{O}_8)_3\text{Cl}$ ) and meionite ( $\text{Ca}_4(\text{Al}_2\text{Si}_2\text{O}_8)_3(\text{CO}_3, \text{SO}_4)$ )

**Crystal System** Tetragonal

**Uses** Faceted gemstones and cat's-eye cabochons

## New Heavily-Armored Dinosaur Species Found in Mexico

Researchers discovered the remains of a new species of dinosaur, which lived 85 million years ago in what is now Mexico's Coahuila state.

A team of paleontologists from the Desert Museum in Coahuila found the dinosaur—which has been named *Acantholipan gonzalezi*—in the arid Ocampo region, Reuters reported.

The team has been analyzing the fossil for more than eight years and have now revealed that it represents a new genus, or group of species, of nodosauridae—a family of heavily armed dinosaurs, which roamed the Earth between the Late Jurassic period (roughly 163 to 145 million years ago) to



the Late Cretaceous (around 100 to 66 million years ago).

Examinations of the fossil suggest the animal was a juvenile, but it was by no means

small, measuring 11.4 feet in length and weighing more than half a ton. It was likely herbivorous and walked on all four limbs, according to a Reuters video report.

The fossils of *A. gonzalezi* differ from those of its close relatives—which include *Nodosaurus* and *Niobrassaurus*—in a number of ways. For example, the ulna—a long bone found in the forearm—is larger than in other nodosaurs. Researchers said the specimen is the oldest dinosaur ever found in the region.

“There was no land in Coahuila. That is

why we had not found any dinosaurs, from this period or before then,” Hector Rivera, a paleontologist from the museum, told reporters at a press conference. “It’s a marine animal. The obvious question is, how a terrestrial dinosaur was found on land that used to be a seabed.”

The dinosaur’s name derives from the Greek word “*acanthos*” meaning “spine” and “*Lipan*”—the name for an Apache people who inhabited region where the fossils were found.

Many dinosaur fossils are in Mexico, including those of animals such as *Albertosaurus* and *Apatosaurus*. The country is also notable for being the place where the asteroid that is thought to have wiped out the dinosaurs struck around 66 million years ago.

<http://www.newsweek.com/new-heavily-armored-dinosaur-species-weighs-half-ton-found-mexico-978852>

### Spectrum Sunstone Mine, located near Plush, Oregon

Spectrum Sunstone Mine, located near Plush, OR, in Lake County Oregon, is an Oregon sunstone mine open to the public for mining Oregon sunstone.

Visit Spectrum Mine and dig for Oregon sunstone gems from a designated pile of fresh unprocessed ore for free all day and keep what you find (mine personnel must

be present). Additional days are \$50 per person per day, keep all. Kids 12 years old and younger are free, always. Rock clubs and families and all rockhounds welcome. Some equipment provided. Reservations are NOT required for digging.

<http://www.geologyin.com/2017/02/part-ii-top-spots-for-gem-hunting-in-us.html#EmH7h1CuSt8Ahdwi.99>  
Follow us: @GeologyTime on Twitter



### July Birthdays

Pat Higgins	7/01
Paulette Durnan	7/09
Emily Klemmer	7/11
Rod Hanson	7/22
Keith Lorensen	7/23
Jim Kropp	7/25
Javan Hemsworth	7/30

### July Anniversaries

Kathy & Mark Keil	7/14
Dennis & Vi Rowley	7/20

## The World of Jaspers Kambaba



Stromatolites, colonial structures created by cyanobacteria (commonly called blue-

green algae) are among the oldest fossils on earth, being found in rocks over 3 billion years old. Once the dominant life form on the planet, stromatolites are now found in only a few places, such as Madagascar.

Cyanobacteria form these mound-like structures by growing through sediment, binding the particles together resulting in successive layers which, over very long time periods, may harden to form rocks. These structures may be from fractions of an inch to several feet in diameter.

Cyanobacteria were likely responsible for

the creation of earth's oxygen atmosphere. They were the dominant life form on earth for over 2 billion years. Today they are nearly extinct, living a precarious existence in only a few localities worldwide.

Fossil stromatolites constitute our earliest and most pervasive record of life on earth. Although many stromatolites are fossils, there are a number of locations on the modern-day earth where stromatolites are still forming.

Kambaba (sometimes called Kabamba) Jasper is a rare fossilized jasper from Madagascar. Jasper is a micro crystalline variety of quartz, a silicon dioxide mineral with a hardness of 6.5 to 7. Jaspers can include up to 20% foreign materials, which account for its wide variety of colors and patterns.

[www.spiritrockshop.com/Kambaba\\_Jasper.html](http://www.spiritrockshop.com/Kambaba_Jasper.html)



## **Cuyuna Rock, Gem, and Mineral Society Board Meeting Minutes June 9, 2018**

The meeting was called to order by President Ed Opatz at 12:35 pm. Present were: Secretary Joanie Hanson, Treasurer Kevin Martini, Board Members at Large Keith Lorensen and Sharon Smith.

Ed met with the Mounted Patrol and discussed the Fairgrounds dates with them. They will decide which weekend they want after next years' show and let us know. The board discussed the website- Joanie is keeping it updated and will learn how to upload videos.

Treasurer's Report- Kevin Martini: the report will be posted at the clubhouse.

A motion was voted on and passed to purchase a laptop computer for the club as well as a copier/scanner. The one we have can only print.

The club treasurer's books will be audited by the president, secretary and one general

member that is not currently on the board. Ed asked for a member at the general meeting to volunteer and Lisa Hughes volunteered.

The Get Pickin' trip is tentatively scheduled for Sunday August 12th, this trip is for all of the members that volunteered to work at the rock show this year, as well as a few nonmembers that worked.

The Franklin Arts event will be the evening of August 23rd. More information to follow as we get closer to the time.

The board voted to remove the Rock Box from the Welcome Center due to issues with how it was being handled. We will still keep brochures and business cards there.

Lilly Peterson has volunteered to babysit the large tumbler at her house.

Meeting adjourned at 1:50 pm.

Respectfully submitted,  
Joanie Hanson, Secretary

## **Cuyuna Rock, Gem, and Mineral Society General Meeting Minutes June 9, 2018**

The meeting was called to order at 2:15 pm by President Ed Opatz

19 members present.

Ed reminded the general membership to please sign up to volunteer at the various summer shows and Fair.

Update of Utah trip- Ed is talking to various mine owners and searching for locations for the club to visit. September 30th is the tentative meeting date in Utah. More information to follow. Please let Ed know if you are interested in going or have questions about how club trips like this work. It is the individual members responsibility to get there and find accommodations.

We are always looking for speakers for meetings. If you would like to do a presentation or know somebody that would be able to do one please let Ed know.

Kid's Camp was a huge success and the kids are looking forward to next year's camp. Members that volunteered gave their thoughts and suggestion for next year. Many thanks to all that volunteered. We continue to look for places to pick agates. If you have a location please let Ed know.

The summer club picnic will be July 29 at the Hallett House in Deerwood. Arrival time 11:00 am. Eat at noon. Potluck, club provides the meat and buns. There will be a short board meeting at the picnic.

Please keep address and email info up to date. It is far easier and cheaper to email newsletters then to mail them. Thanks.

Door prize winners: Sharon Smith, Lilly Peterson, Lanney Spencer, Cody Lori DuBois, Ed Walton, Matt Metzler.

Speaker: Dr. William Cordua on Wisconsin boulder that has a connection to Brainerd.

Respectfully submitted,  
Joanie Hanson



*The winner of the Grand Prize Drawing (Rock Tumbler) was Jonie Hardenbrock.*

### **Sunshine Requests**

If you know someone who could use a little sunshine—birth, illness, surgery, family death—please contact Christi Higgins at 320-224-6650.



### **Cuyuna Rock, Gem, & Mineral Society on the Web**

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



## Crow Wing County Fair Volunteer List

The booth at the Fair has Club information, the spinning wheel, geode cracker and a rock and mineral display. Please contact Joanie Hanson to sign up: 218-831-2665 (PLEASE leave message) or jkh2upnorth@msn.com

### Tuesday, July 31

10 a.m.—1 p.m. Bev Williams

1 p.m.—5 p.m.

5 p.m.—10 p.m.

### Wednesday, August 1

10 a.m.—1 p.m. Keith Lorensen

Bev Williams (if needed)

1 p.m.—5 p.m.

5 p.m.—10 p.m.

### Thursday, August 2

10 a.m.—1 p.m. Bev Williams (if needed)

1 p.m.—5 p.m. Sandi Hilsen

Sherry Busse

5 p.m.—10 p.m.

### Friday, August 3

10 a.m.—1 p.m. Lisa Hughes

1 p.m.—5 p.m.

5 p.m.—10 p.m.

### Saturday, August 4

10 a.m.—1 p.m. Ed Walton

1 p.m.—5 p.m.

Lisa Hughes

5 p.m.—10 p.m.

Lisa Hughes

+clean up

## Descriptions of Crystal Structures

Crystallography uses additional descriptive terms to explain the crystal structures exhibited by various mineral species. These include the following.

### *Prismatic*

Crystals that form in a prismatic structure have well-developed, elongated, prism-like crystal faces.

### *Bladed*

A bladed crystal has slender and flattened blade-like formations rather than prism-like faces.

### *Acicular*

Acicular crystal formations feature slender, possibly tapered, needle-like crystals.

### *Filiform*

Filiform crystals are hair-like and extremely fine.

### *Equant*

Equant crystals have lengths, widths, and breadths roughly equal in size. Sometimes, equant crystals are referred to as stout crystals.

### *Pyramidal*

Crystals that form pyramidal structures resemble single or double pyramids.

### *Tabular*

Tabular formations feature a tablet shape with crystals slightly longer than wider.

You may encounter other terms for describing a mineral's appearance, such as octahedral (8-sided) and pyritohedral (12-sided). However, these terms are typically used in conjunction with a specific crystal system.

<https://www.gemsociety.org/article/crystallography-introduction-mineral-crystal-systems/>

[utm\\_source=igs\\_email&utm\\_medium=email&utm\\_campaign=may7\\_descriptive\\_crystallography\\_for\\_gemologists](#)

49th Annual

Carlton County Gem & Mineral Club Show

## AGATE DAYS

The world's premier Lake Superior agate show!

Saturday, July 14; 9 a.m. to 5 p.m.

Sunday, July 15; 10 a.m. to 3 p.m.

**ALL NEW LOCATION: Riverside Arena,  
20 Earl Ellen Dr., Moose Lake**

Kids Dig for ages 8 and under both days outside the Arena.

**Featuring the Clark-Olsen Agate Stampede  
3 p.m. Saturday**

400 pounds of agates and \$400 in quarters are added to a dump truck full of gravel and spread along Elm Avenue for a wild scramble of finders keepers!

Minerals \* Fossils \* Jewelry \* Equipment



**We're on  
Facebook!**  
Cuyuna Rock,  
Gem & Mineral Society

This is a closed group, so you must ask to join. After being approved you can follow the members' posts and add your own information.



## July Rock Shows

6-8—RALEIGH, NC: Frank Cox Productions; North Carolina State Fairgrounds, Daily 10-5; Free; Website: [frankcoxproductions.com](http://frankcoxproductions.com)

6-8—PORTLAND, OR: Gem Faire Inc.; Oregon Convention Center, Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7, under 12 free; Website: [www.gemfaire.com](http://www.gemfaire.com)

7-8—PINETOP, AZ: White Mountain Gem & Mineral Club; Hon-Dah Casino & Resort, Sat. 9-6, Sun. 10-4; \$2; Website: [www.whitemountain-azrockclub.org](http://www.whitemountain-azrockclub.org)

7-8—ERIE, PA: Gem City Rock & Mineral Society; JMC Ice Arena, Sat. 10-6, Sun. 10-5; \$4, Srs \$3.50, under 12 free; Website: [www.gemcityrockclub.org/show](http://www.gemcityrockclub.org/show)

13-15—SAN RAFAEL, CA: Gem Faire Inc.; Marin Center, Fri. 12-6, Sat. 10-6, Sun. 10-5; free; Website: [www.gemfaire.com](http://www.gemfaire.com)

14-15—MOOSE LAKE, MN: Carlton County Gem & Mineral Club; Riverside Arena, 20 Earl Ellens Drive, Sat. 9-5, Sun. 9-4; Free; Email: [danlynnssunrisefarm@yahoo.com](mailto:danlynnssunrisefarm@yahoo.com)

14-15—SYRACUSE, NY: Gem & Mineral Society of Syracuse; Oonodaga Community College SRC Arena, Sat. 10-6, Sun. 10-4; \$7, under 12 free; Website:

GMSS.us

14-15—TULSA, OK: Tulsa Rock & Mineral Society; Exchange Center Tulsa County Fairgrounds, Sat. 9-6, Sun. 10-5; \$6, under 12 free; Website: [www.tulsa-rockandmineralsociety.org/](http://www.tulsa-rockandmineralsociety.org/)

20-21—MINOCQUA, WI: Lakeland Gem Club; Lakeland Union High School, Fri. 10-6, Sat. 9-5; Free; Website: [www.lakelandgemclub.com](http://www.lakelandgemclub.com)

20-22—VIRGINIA BEACH, VA: Treasures of the Earth, Inc; Virginia Beach Convention Center, Fri. 12-6, Sat. & Sun. 10-5; \$5, under 17 free; Website: [www.TreasuresOfTheEarth.com](http://www.TreasuresOfTheEarth.com)

20-22—RAPID CITY, SD: Western Dakota Gem & Mineral Society; Rushmore Plaza Civic Center Barnett Arena, Fri. & Sat. 9-6, Sun. 10-4; \$4, under 13 free; Website: [wdgms.org](http://wdgms.org)

20-22—EUREKA, CA: Gem Faire Inc.; Redwood Acres Fairgrounds, Fri. 12-6, Sat. 10-6, Sun. 10-5; \$5, under 12 free; Website: [www.gemfaire.com](http://www.gemfaire.com)

21-22—BETHEL, ME: OCM&G Assoc.; Telstar High School Gym, Daily 9-4; \$3, under 12 free; Email: [mincoll@mega-link.net](mailto:mincoll@mega-link.net)

21-22—FRANKFORT, NY: Herkimer Diamond Gem Show & Festival; Herkimer County Fairgrounds, Sat. 9-6, Sun. 10-5;

\$5, under 13 free; Website: [www.herk-gemshow.com](http://www.herk-gemshow.com)

25-29—FRANKLIN, NC: Bellpoint Promotions; Echo Valley Showplace, Daily 9-6; Free; Website: [www.bellpoint-promotions.com](http://www.bellpoint-promotions.com)

27-29—ANDERSON, CA: Gem Faire Inc.; Shasta District Fair & Events Center, Fri. 12-6, Sat. 10-6, Sun. 10-5; \$5, under 12 free; Website: [www.gemfaire.com](http://www.gemfaire.com)

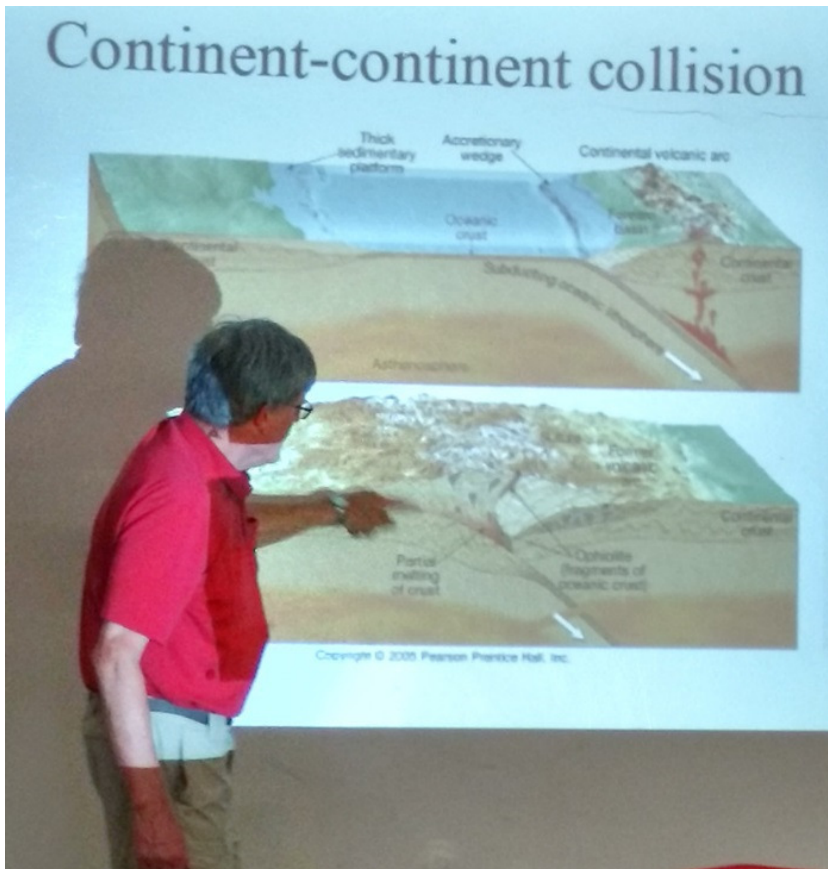
27-29—TENINO, WA: Washington Agate & Mineral Society; Parkside Elementary School, Fri. & Sat. 9-6, Sun. 9-5; free; Website: <https://wamsolympia.wordpress.com>

28—CANTON, SD: Sioux Empire Gem & Mineral Society; Jack Fox Park, 9-2:30; Free; Website: [www.segams.org](http://www.segams.org)

28-29—SOUTH BURLINGTON, VT: Burlington Gem & Mineral Club; Tuttle Middle School, Daily 10-5; \$4, Srs \$3, Children free; Website: <http://www.burlingtonagemandmineralclub.org/show.html>

## July 2018-August 2018

28-5—SPRUCE PINE, NC: Parkway Fire & Rescue; Parkway Fire & Rescue Show Grounds, Daily 10-6; Free; Website: <http://www.grassycreekgemshow.org>



Dr. Bill Cordua, spoke at the June meeting about the Baldwin Boulder and its connection to the Brainerd area.



## Rock Room

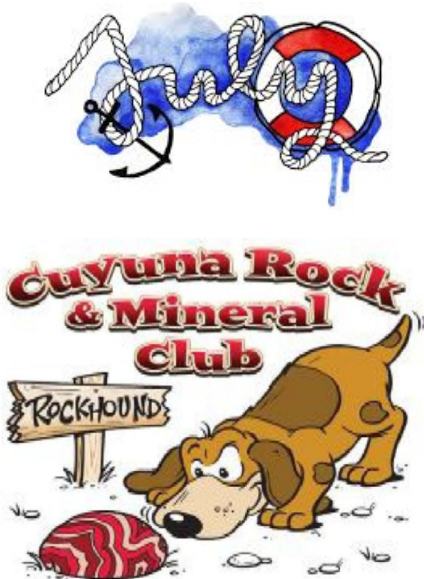
Here is an inventory of what is available for Club members to purchase. Stop in when you come to the Clubhouse!

Grit and Polish  
Montana Moss & Blue Agate  
Montana Petrified Wood  
Oregon Geodes  
Chalcedony  
Desert Rose  
Plume Agate  
Yellow Jasper  
Bruno Jasper  
Owyhee Picture Jasper  
Brazilian Agates  
Amethyst  
Tee Pee Canyon Agate  
Hauser Bed Agate—not priced yet  
Slabs of all sizes and types  
Condor Agate  
Septarian Nodules  
79 Bed Geodes—Oregon  
Moroccan White Agate  
Various slabs of many sizes



Marcia Opatz, Editor  
Cuyuna Rock, Gem  
& Mineral Society  
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Suite B-40  
Brainerd, MN 56401

## FIRST CLASS MAIL



## The Agate Explorer

July 2018

*Official Publication of the Cuyuna Rock, Gem & Mineral Society*

Members of AFMS & MWF



### Notes from the President

I'm looking forward to the picnic on July 29th because there is always great food, and a chance to catch up with people about their summer rock adventures. If you have something for show and tell that you found or purchased recently, bring it to the picnic.

If you'll notice on page 6, the volunteer list for the Crow Wing County Fair, has lots of blanks where there should be names. Please check your calendar, and volunteer for a shift if you can. The work includes running the spinning wheel, geode cracker, and talking to people about our club. Think of the rockhounds you could meet!

The decision has been made to go to Get Pickin' near Cloquet on Sunday, August 12. We are still working on transportation for this event. The Board decided to pay for the entry fee and one bag per person for those who volunteered in any capacity at our May 2018 show. If you have friends or relatives that are not members and helped at our show, they are invited too, and will get in free too. Make sure you contact them!

*Ed Opatz*

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