

## The Agate Explorer

## April 2023

## Possible 2023 Field Trips

Late April Western South Dakota for Fairburn and Scenic agates
Summer-Remer MN Northland Monument Granite Company tour Late June Thunder Bay Canada for amethyst
Early August Billings MT American Federation's yearly conference, includes rock show and most likely five days of field trips to various locations. Could include Montana moss agate, Bear Canyon agate, Kemmerer fish fossils.

Throughout the spring/summer/fall—any location to pick Lake Superior agates.
On longer trips participants may come or go at any time; no need to attend the entire trip. If you are interested in any of the above trips, please contact Ed Opatz at 320-250-1363 or opatz1@att.net.

The Club is always looking for places to pick Lake Superior agates or other Minnesota rocks. If you know of somewhere that we can get permission a group to pick,
please call Ed Opatz at 320-250-1363.
A stipend is paid to the landowner.

## April Meetings

## April 1

10:00 Clubhouse openMachines available for use; Rock room open for business; Spinning wheel rocks need to be sorted. Those who help with sorting get a free pound of slabs from the rock room.
12:00 Board Meeting
2:00 General Meeting
Rock room closed during meeting Speaker Jon Hellerman: Minerals Worldwide \& Crystal Formations. (rescheduled from March.)

Sign up sheets available for May 13-14 show volunteers and summer spinning wheel events.

Looking for donations of small, unpolished agates for the show's rock pile for kids.

April 29
Show prep-packing and organizing starting at 10:00 a.m.
there are seven topics. Volunteers can suggest topics or select from the full list when it becomes available.
A few volunteers can be used for other activities, such as signing in participants, prepping simple snacks, and taking photos.
If you are interested in helping, please contact Marcia Opatz at 320-250-8120 or theisma@hotmail.com.

## Club Calendar

April 1- meeting date, changed due to Easter


April 29-meeting date, show prep
May 13-14-Annual Show at Crow Wing County Fairgrounds
June 9—Pebble Pup day camp
June10-Pebble Pup agate pick; meeting date
July 8-meeting date

## Information subject to change.



Franklin Art Center

## Club Information

Website-www.cuyunarockclub.org Email-cuyunarockgemclub@gmail.com

## 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 2 nd 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 semiprecious 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.


Sky Eye Jasper is soft foggy grey, turmeric yellow, earthy tan, and delicate rosewater pinks. Like other jaspers it is a combination of
chalcedony and quartz.
Sky Eye Jasper is from Mexico.
https://www.limabeads.com/Sky-Eye-Jasper-Tumbled-Nugget-10_15x9_10mmP57659


## Labradorite

Labradorite was first discovered in 1770. It was named after Newfoundland and
 Labrador in Canada, but it is also found in other areas of the world.

Labradorite is a type of feldspar (the most abundant mineral family) with stunning colors and visual effects. Its colors can range between violet, blue, green, yellow and even orange-red. These colors are only viewed when rotated at an angle and appears through the entire surface of the stone.
https://uwaterloo.ca/earth-sciences-museum/resources/just-kids/minerals-kids

As a member of the Cuyuna Rock Club you are also a member of the Midwest Federation of Mineralogical and Geological Societies. If you are interested in a MWF membership card they are available at the Clubhouse.

## Do you have any suggestions for

 speakers, class ideas or instructors? Contact a Board member. Board member contact information is on the last page of the newsletter.
## Cuyuna Rock, Gem \& Mineral Society Meeting Minutes <br> Saturday, February 11, 2023

## Board Meeting

Call to Order- The meeting was called to order at 12:05 by President Ed Opatz (via phone). Present were Vice-President Lori DuBois, Treasurer Kevin Martini, Secretary Joanie Hanson, and Board Members-at-Large Vern Iverson, Jo Schwalboski (by phone).
Approve minutes from the January 2023 meeting. - Motion approved.

Treasurer's Report- will be posted at the rock club. Kevin and Ed are in the process of changing the bank account due to issues with the current bank. The new bank will be Mid Minnesota Credit Union.

A motion was passed to pay the bills for the month. Kevin will be purchasing tools for the rock club. He is looking at the cost of a belt sander for polishing rock. He and Ed are also purchasing more grit for the rock room. The cost of grit has gone up so there will be a slight increase to members.

Business after hours (March 14th 3:30 to 7 pm ). We will give out Club information, a donation item for their raffle, rock to give out. We will need to clean the rock room. Volunteers for this are Joanie and Lori, as well as Mike \& Kathee Stanwood.
MWF will have their board meeting during the show, at the Clubhouse.
Dan Hammond- slabs for rock room. We will spotlight cabs for sale at the meetings for a discounted rate.

Sales sheets for the rock room. Please use the new sales slips when shopping in the rock
room.
Finish sorting spinning rock.
Contract set for 2 wash stations and 4 toilets. ATM is coming, Ed is working on security. Lori will contact the new Crow Wing County sheriff.

## General Meeting

Call to order- The meeting was called to order at $2: 15$ by Secretary Joanie Hanson. 20 members were present.
Treasurer's Report- will be posted at the rock club.

Dues are due!!
Kevin is continuing to work on updating the rock polishers.

Need another volunteer for Business after hours March 14th. - Mike \& Kathee
Stanwood have volunteered to help.
Signups are available for the Moose Lake Agate Show and the Outing Corn Feed.
Need volunteers for Kid's Camp June 9 \& 10
Need donation of small unpolished agates for the rock pile at the rock show.
No speaker today- will show YouTube video on mineral prospecting.

Machines are available for cutting and polishing.
Door prizes- Lori DuBois, Mike Stanwood, Gary Stevens, Alan Busacker.

Respectfully submitted,
Joanie Hanson, Secretary

## Rock Room

This Club is unique because it has its own rock store. Here is an inventory of what is available for Club members to purchase. Stop in when you come to the Clubhouse!

Grit and Polish
Oregon Geodes
Chalcedony
Desert Rose
Plume Agate
Yellow Jasper
Bruno Jasper
Owyhee Picture Jasper
Brazilian Agates
Amethyst
Obsidian
Mineral specimens
Dinosaur bone
Condor Agate
Hauser Bed Agate
Thundereggs
Mexican Geodes
Montana Petrified Wood
Montana Moss
Tee Pee Canyon Agate Slabs of all sizes and types Septarian Nodules-Utah 79 Bed Geodes-Oregon

Moroccan White Agate
Mexican Luna Lace Agate
Staurolites (Cross Rocks)
Small Botswana Agate
Smokey Quartz crystals - Colorado
Snowflake Obsidian
Utah Petrified Wood
African Blue Lace Agate
Carnelian Agate
Tiger Eye-red and blue
Coming Soon!
Tiger Eye - gold \& blue variegated Obsidian Condor Agates

Agua Nueva Agates
Polychrome Jasper
Tabasco Agate Pairs
Sunset Jasper
Noreena Jasper
Tiger Iron
Kumerha Jasper
Swazi Agate
Calandria Agate (Mexico)
New Moroccan Agate


## April Birthstone— Diamond

Due to their extreme hardness, overall durability, and undeniable beauty, diamonds are associated with strength and eternal love. It is no wonder that they are commonly used in both engagement and wedding ring designs.

While the vast majority of diamonds are colorless, they may express a full rainbow of fancy colors. From rare reds to deep blues to warm yellows, there is a fancy colored diamond for all preferences and occasions.
https://www.gemsociety.org/article/birthstone-chart

Minnesota Rock Shops<br>Agate City 721 7th Ave., Two Harbors 218-834-2304<br>AM Rock Shop 710 E River Rd, Anoka 763-421-2807<br>Art \& Soul 5124202 Main St Stillwater, 651-275-0255<br>Beaver Bay Agate Shop 1003 Main St., Beaver Bay 218-226-4847<br>Christy's Crystals 407 N Riverfront Dr, Mankato 507-720-1061<br>Designed In Stone 841 Forest Ave E Suite<br>110, Mora 651-248-8768<br>Dream in Jasper Crystal Shop 107 N<br>Meridian St, Belle Plaine 763-301-1058<br>Enchanted Rock Garden 1228 E 66th St,<br>Richfield 612-866-1140<br>Jon's Gem Emporium 184 North Hwy 10, Motley 218-640-1047<br>Magic Mushrooms in the Crystal Garden 171 Lake St N, Big Lake 612-805-7111<br>MO'R Designs 2100 Snelling Ave N<br>Suite 13, St Paul 651-294-3069<br>Naturally Unique 137 Western Ave N,<br>Park Rapids 701-429-0409<br>Rocks and Things 201 N Rum River Dr, Princeton 763-389-0979<br>Rocks \& Tools SeashellsbyShelly Rock and Crystal Shop 2625 County Rd 37 NE, Monticello 763-295-2440<br>Sacred Sage and Crystals 118 Broadway E, Little Falls 320-360-3611<br>Sample's Agates Gem and Mineral Shop $18581 \mathrm{MN}-371$, Brainerd 218-821-6623<br>Taylors Falls Bead Store 364 Bench St, Taylors Falls<br>Those Blasted Things 924 Kniss Ave., Luverne 507-283-4027<br>Twin Pines Trading Post 31049 Front St, Pequot Lakes 218-839-0829<br>ZRS Fossils and Gifts 3018 Lyndale Ave S, Minneapolis 612-824-1068



## Meet a Hardy Mineral Known as The Time Lord

The oldest known Earth stuff that remains on the surface of our planet is a mineral that's been called the "Time Lord" because it's so incredibly good at keeping geologic time. The mineral is zircon, and scientists have found bits of it that formed 4.37 billion years ago, not too long after the proto-Earth's epic collision with a Mars-sized object that spawned our moon.

Tiny crystals of zircon can look like sand, or useless crud. But don't be fooled. With a radioactive tick-tock that marks the passing of billions of years, these small but mighty minerals offer us a peek into the Earth's early development.
"They are really the best markers of Earth's time, or the history of the Earth," says Michael Ackerson, a geologist with the Smithsonian's National Museum of Natural History.
Zircon crystals originate in cooling magmas in continental crusts, along with other minerals, Ackerson says. But those other minerals tend to disappear over time.
"Most of the minerals don't survive," says Ackerson. "So things like quartz, things like feldspar - they are chemically or physically weathered and eroded to a point where they are no longer quartz and feldspar." By contrast, zircon is very resilient - which is "one of the main reasons" that this mineral is so useful, he says.
In the face of harsh winds, crushing pressures, or high heat, these hardy crystals persist. And eventually, they can end up getting incorporated into other rocks that are still forming. That means scientists can crush up the Earth's oldest rocks, pick through the debris, and find little grains of zircon that are even older.

In the Jack Hills region of western Australia, for example, there's rock that formed from a beach 3 billion years ago. The oldest zircons ever discovered came from this rock.
Ackerson once found a zircon that's 4.32 billion years old. Zircons that old "are extremely, extremely, extremely rare, and they're the only windows we have into the earliest Earth," he says.
These days, to know a zircon's exact age, scientists can zap it with a laser like the one
is a closed group, so you must ask to join. After being approved you can follow the members' posts and add your own information.

## Sunshine Requests

If you know someone who could use a little sunshine- birth, ill-
ness, surgery, family death-please contact Joanie Hanson at 218-831-2665.
at a geochronology lab at Penn State University. There, Joshua Garber shows how he can place a tiny crystal into a device that blasts a little hole into it and knocks off miniscule pieces.
"And then I torture them in an argon plasma to break them down to their smallest constituents," he says, explaining that a detector counts atoms of different chemical elements. The important ones are uranium and lead. Zircon loves uranium and will take it in as it grows, but zircon hates lead. That means if you find lead inside, it pretty surely came from the decay of uranium, which happens at a steady rate, like the ticking of a clock.
"If you were going to design a chronometer for Earth from scratch, you would basically design zircon and uranium-lead dating," says Jesse Reimink, a geologist at Penn State. "If you believed in a higher power, you'd say, 'Oh, the higher power created this mineral with this specific system because it is so perfect.'"

But looking at the chemical makeup of zircon can do more than just reveal its age or the age of its associated rock. It can also give scientists clues about the conditions that existed when that zircon originally got created. For example, Ackerson recently looked at aluminum concentrations inside ancient zircons to infer that plate tectonics may have begun 3.6 billion years ago.
And he says scientists used to think that Earth was a hot, glowing hellscape for its first 500 million years. But the oldest zircons found on Earth show that's not so.
"We know from just this one collection of zircon crystals that the Earth had continents, which we didn't think was possible, that were interacting with liquid water oceans," he says. "We're starting to understand how and when the continents arose, how and when the oceans arose, and how that might have helped us set the groundwork for the propagation of life on our planet."

These are big philosophical questions that require looking back into deep time, he says - which is only possible thanks to tiny zircons.
www.npr.org/2022/12/29/1139782011/to-peer-into-earths-deep-time-meet-a-hardy-mineral-known-as-the-time-lord

## Gem Encyclopedia



Hessonite
Before the discovery and popularization of emerald-green tsavorite in the late 1960s to 1970s, orangish hessonite was the most popular gem variety of the unpopular grossular garnets. Unfortunately, that didn't amount to much. Even this gem's name (including an archaic variation, essonite) reflected its inferior reputation in the gem world. Its name comes from the word hesson, which literally means "inferior" in Ancient Greek. Hessonites can have a lower hardness than other types of garnets as well as other more well-known jewelry stones, like quartz and topaz.

Hessonite's orange may range from honey yellow to a reddish-brown, hence its cinnamon moniker. In past centuries, hessonites were one of several varied gems called jacinth or hyacinth. (In modern times, these terms receive little use but most commonly most refer to orange-red to red-brown zircon).

Sometimes, hessonites show a pinkish tone.

## Renowned Mining Team Just Delivered In A Big Way

Drill results near a past-producing silver mine in Mexico has a group of seasoned mining executives turning cartwheels. One of which is legendary gold and silver explorer, Bruce Bragagnolo.

He's familiar with success, such when he founded Timmins Gold, then oversaw its rise to becoming a 100,000+ ounce-of-gold-a-year producer.

So, you can imagine there's something substantial in motion when these normally reticent men get excited.

The fireworks started in August when they located what appeared to be a largemineralized zone just 1,600 feet from the historic Dios Padre silver mine. Operations at this mine go back to the 1600's, but none of the project's prior prospectors had detected this large anomaly.

What had been recovered near surface at Dios Padre suggests that this could literally be the tip of a resource-rich iceberg...a zone that could host multiple millions of ounces of gold, and multiple millions of pounds of copper.... making it extremely desirable to major mining companies.

Experience told Mr. Bragagnolo that despite an exceptional production history and obvious development potential, exploration drilling at the existing silver mine site was off target. Previous mine site operators drilled thousands

In Asbestos, Quebec, miners have found pinkish orange crystals among the asbestos.

In past decades, hessonites and other earth-tone gemstones haven't enjoyed the popularity of their brighter colored counterparts. However, fashions change. In the 1990s, the discovery of bright orange mandarin garnets, a variety of spessartite, saw an increased interest in orange gems.

While mandarin garnets are rare and expensive, hessonites offer a more readily available, relatively inexpensive option. In addition, a renewed demand for earth-tone jewelry also increased interest in these gems.
Since hessonites can have a hardness below 7 , they are susceptible to scratches from everyday hazards, like common household dust. In jewelry pieces, these gems should have protective settings.

Usually included, sometimes heavily, some hessonites may also contain eye visible inclusions. However, unless they affect structural integrity, such inclusions don't usually detract from hessonite's value.

Hessonites may display a visual effect that resembles roiled or disturbed water within the stone. This roiled appearance has also been referred to as a "heat wave" or "whisky in water" effect. Although similar effects may
of feet, trying to locate the mother lode at the source of the ore-rich surface. Everyone knew that it had to be there, they just never found it. Their failures are what caught his attention. They'd been drilling below the area where they were producing silver near surface.

Knowing the geology of the Sierra Madre Occidental as he did, and using the latest exploration software, Mr. Bragagnolo suspected that the volcanic source that fed precious metals to the surface at Dios Padre was beneath the anomaly and flowing laterally, not vertically as the others had presumed.
This flew in the face of conventional wisdom.
A 250-meter-deep ground-penetrating Induced Polarization (IP) survey confirmed its existence, leading to a drill program the company just concluded.
When Regency's drills punched through a fault underneath the anomaly, they entered a zone of high sulfidation which contained rich concentrations of gold and copper. The drilling revealed what could shape up to be one of the largest new gold and copper discoveries in years.
The initial grades of gold and copper are sizable.

The drill samples at Dios Padre suggest a vast swath of underground gold with copper in rarely found concentrations... some of it even bonanza grade.

Regency found 4.7 grams per ton gold, $0.67 \%$ copper and 23 grams per ton silver over a true
occur in other gemstones, its appearance in a garnet may help confirm its identification as hessonite. Such gems may appear more translucent than transparent.

However, please note that some relatively recent discoveries of hessonites lack this roiled effect. These include specimens from Afghanistan and Orissa, India. These gems have greater transparency than roiled specimens. So, the absence of a roiled effect in a garnet may not rule out hessonite.

Garnets typically receive no gem treatments. However, grossular garnets, including hessonites, are occasionally enhanced. For example, reports have noted hessonites with clarity enhancing fracture fillings, including polymer fillings intended to stabilize highly fractured, low-grade material for cutting.
Canada, Sri Lanka, and Tanzania are major sources of gem-quality hessonites.

Other notable producers include Afghanistan; Australia; Brazil; China (Altay Mountain Range); India; Italy; Madagascar; Myanmar; Pakistan; Russia; United States (San Diego County, California; Washington).
https://www.gemsociety.org/article/hessonite/
width of 53.8 meters. This includes: A massive 36 -meter-width zone of $6.84 \mathrm{~g} / \mathrm{t}$ gold, $0.88 \%$ copper, and $21.8 \mathrm{~g} / \mathrm{t}$ silver, along with $13.97 \mathrm{~g} / \mathrm{t}$ gold, $50.25 \mathrm{~g} / \mathrm{t}$ silver and $1.11 \%$ copper over 9.8 meters, starting at 460.5 4 meters down. At 460 meters they even found $53.5 \mathrm{~g} / \mathrm{t}$ of gold, $1.2 \%$ copper and $53.5 \mathrm{~g} / \mathrm{t}$ of silver over 1 meter. Just to offer some perspective on the scale of this discovery, 36 meters is the size of a ten story building. That well exceeds, by as much as $71 \%$, the upper limit the World Gold Council sets to define an open pit mine as World Class.

This will not be an open pit but it shows how rich the mineralization is.

Additional extension drilling to the east of the existing mine garnered very high grades of silver and gold:
$47 \mathrm{~g} / \mathrm{t}$ silver over 3.9 meters
$30 \mathrm{~g} / \mathrm{t}$ silver over 5.85 meters
$23 \mathrm{~g} / \mathrm{t}$ silver over 3.10 meters
$34 \mathrm{~g} / \mathrm{t}$ gold over 17.9 meters
What makes this so unique is the high copper and silver contentt with the gold. Time and more exploration will reveal the size of this deposit, but there's a sense among experts in the mining community that Dios Padre project could be a historic find.

## https://markettactic.com/bonanza-grade-

 silver-property-identified-in-the-sierra-madre -2/5534942/Cuyuna Rock, Gem, \& Mineral Society on the Web
www.cuyunarockclub.org

## Volunteer Needed

The Club is looking for someone to be a field trip coordinator. This person would look for locations to rockhound and organize the trip. It would not be necessary to go on every trip, but have contact information available. Assistance given by Board members. Call/text Ed Opatzat 320-250-1363.

## Agates From Around The World Sheep Bridge Agates

 Also "Purple Sagenite Agates" Sheep Bridge (over Verde River, north of Horseshoe Dam \& Carefree), Yavapai Co., Arizona

The Sheep Bridge refers to the bridge built in the 1920s with scrap materials over the Horseshoe River for shepherds to herd sheep over the river to the north. Near the parking is the well known agate site.
After driving 40 miles on rough road from the known location, one has to walk along the muddy, narrow floodplain of Verde River, navigate large red granite boulders, follow the trail through very tall bamboo, hop from one side to other of the small creek, and lastly, ascent the ravine made of tan ash-like conglomerate before finally reaching the topmost agate-bearing basalt beds.
At first glance, the agates are white as a result of so many years of bleaching by sunlight. Within the agates are red, orange, yellow, lavender and especially characteristic purple. The agates are generally hollow with calcite inclusions which tend to be weathered away leaving behind incomplete specimens.
Most interesting is the agates are completely sagenite; It is rare to find solid agates especially with regular banded agate centers.
Since that area appeared to be virgin, it wouldn't be surprising to find I more higher quality agates waiting.
http://www.sailorenergy.net/Agates/ AgatesArizonaSheepBridge01PurpleSagenite.html

# Nevada Paleontologist Discovers New Dinosaur Species 

A Nevada paleontologist is credited with finding the first dinosaur unique to the state of Nevada.
"It's the Nevadadromeus schmitti," said Joshua Bonde, director of the Nevada State Museum. "So Nevada part is pretty obvious, but dromeus means runner. So it's the Nevada Runner."

The schmitti is in reference to Jim Schmitt, a professor of geology at Montana State University, who first pointed them to look for fossils in Valley of Fire State Park.
"I was on a turtle project in southern Nevada, and with the recent storms we started finding not just turtles, but we found dinosaur teeth, dinosaur bones, fish, crocodiles, ferns and other plants. So it turned into a whole, bigger project," explained Bonde.

In 2008, Bonde first found the "Nevada Runner", which was likely prey to the bigger dinosaurs of the era.
"Nevadadromeus was a little two-legged dinosaur from a group called the Thesalasaurs," continued Bonde. "They were built to run; they ran on two legs. Their mouth would have had a little beak at the front and then cheek-teeth, so they're definitely plant-eaters. It would have been about the size of a turkey or a little bit bigger. And with the long tail, probably would be about six feet long."

It was finally described, named and accepted as a new species just last year. And has now led to other incredible finds here in the state. "Nobody's really looked, so when you go places you're finding bone everywhere because it's not picked over," added Bonde.


Including another duck-billed dinosaur discovered by his wife, Becky Hall, who is also a paleontologist. The process is now underway to get it certified as another new species found here in Nevada.
"There's like an average of 40 new dinosaur species discovered and described every year," said Bonde. "So for as long as there's paleontologists climbing around the hills, there's going to be new discoveries."

The couple has also unearthed another site about an hour south of Eureka, which is one of the biggest digs in the entire state.
"All of the research we do is with permission from Nevada State Parks or the Bureau of Land Management. So you need a research permit to collect fossils," explained Bonde. "If you're out hiking, and often times people out hunting or hiking find really cool fossils, the best thing you can do is take a picture of it and a GPS."

Then you're asked to report it to your local BLM office.
"If you discover it, we keep you in the loop," promised Bonde. "So you can come out, help us dig it up, and if it's something new to science, maybe you can get it named after you."
https://www.kolotv.com/2023/01/27/local-paleontologist-discovers-new-dinosaurspecies/

> It's About Rocks, Minerals, Fossils, Handmade \& Olden Crafts from around the world \& So much More!

Show Set up-Friday p.m.

| Vern Iverson Bev Williams |
| :--- |
| Lilly Peterson |
| Joanie Hanson |
| Jo Schwalboski |
| Set up Display Cases Fri p.m. |
| Security Back Gate |
| Saturday, 6-9 |

Saturday, 9-12

Saturday, 12-3

Sunday, 8-12
Sunday, 12-4

Vendor Survey/Forms
Count Saturday Admission \#s

## Door Admissions

Saturday, 9-12
Vern Iverson
Keith Lorensen

Saturday, 12-3
Becky Sovde

Saturday, 3-5
Alan Busacker
Sunday, 10-1
Vern Iverson

Sunday, 1-4
Alan Busacker

Club Table
Saturday, 9-1
Lilly Peterson
Joanie Hanson
Sherry Busse
Saturday, 1-5

|  |
| :--- |
| Sunday, 10-1 <br> Alan Busacker <br>  <br> Sunday, 1-4 <br> Lilly Peterson <br> Security Exit Gate <br> Saturday, 9-12 <br> Saturday, 12-3 <br> Saturday, 3-5 |

Sunday, 10-1

Sunday, 1-4

Security-Walk Around
Saturday, 9-12
Dan Hamond

Saturday, 12-3
$\qquad$

Saturday, 3-5
$\square$

Sunday, 10-1
Dan Hammond

Sunday, 1-4

|  |  |  |
| :--- | :--- | :--- |
| Rock Saw/Geode Cracker |  | Sunday, 10-1 <br> Saturday, 9-12 <br> John Krebs <br> Daryl Tasler |
|  |  | Mike Stanwood <br> Mike |
| Saturday, 12-3 <br> Daryl Tasler |  | Sunday, 1-4 |



Two fossils are hanging out and eating at a bar Fossil one: Man this is the best pizza I've ever had.
Fossil two: It looks so amazing! How good is it? Fossil one: Here, just Trilobyte!

For Sale:
New 15 lb. barrel tumbler \$300. Call John Krebs 320-260-7349.


FOR SALE: Canopy top 10 foot New; I bought it and it does not fit. My tent has too much of a peak on top. $\$ 25.00$ Ed Opatz 320-250-1363 or opatz1@att.net


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## FIRST CLASS MAIL



## The Agate Explorer

April 2023
Official Publication of the Cuyuna Rock, Gem \& Mineral Society

Members of AFMS \& MWF

## Notes from the President

If you haven't been to a meeting to sign up to volunteer for the show (or summer spinning wheel events), or are new to the Club, PLEASE consider volunteering! There are a lot of easy jobs, and most shifts are 2-3 hours. The people who work numerous shifts because we don't get enough help are exhausted by the end of the weekend and barely get to enjoy the show them-
 selves. If everyone signs up we can make this a great show.

In the past as a reward to volunteers at the show we have had a meal at a Brainerd area restaurant. It seems to be really hard to find somewhere that can accommodate a group and have food served quickly. There don't seem to be very many buffets in the area. Do you have any suggestions?

Hopefully the snow will be gone soon and we can think about agate picking again. Have you found anywhere that we can pick as a Club? It is best if it is within an hour of Brainerd, and the landowner is willing to have $20-30$ people walking their field(s). We do pay a stipend of $\$ 100$ to the owner to allow us on their property. You can also tell the owner that we have insurance in case something happens, like one of us forgets to close the gate and the cows get out. This insurance DOES NOT cover members or injuries to members while agate hunting.

## Club Officers \& Board of Directors cuyunarockgemclub@gmail.com

President: Ed Opatz opatz1@att.net 320-250-1363

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