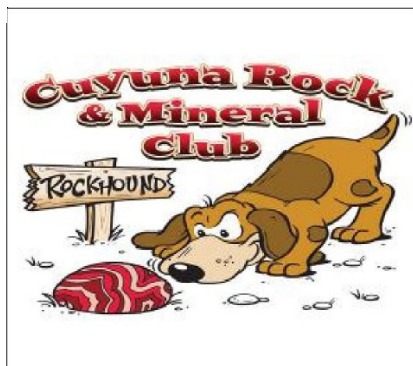


The Agate Explorer

January 2023



Your dues are due!

\$20 per household for January-December.

You may paid online at www.cuyunarockclub.org (fill out completely), in person at a meeting (PLEASE put cash in an envelope with your name), or by mailing to:
Cuyuna Rock, Gem, and Mineral Society,
1001 Kingwood St., Suite B-40, Brainerd MN 56401.

January Meeting

Come use the machines, and learn how to use any you aren't familiar with. Starts at 10 a.m. The general meeting will be at 2:00 p.m. Member Erich Ess will demonstrate how a rolling mill works. (The Club owns one you can use.) Will also have spinning wheel rocks to sort.

Bring any rocks you want to work on, and/or purchase something in the rock room.

Here are the machines available for use:

Rolling Mill—for compacting and embossing metal
Slab Saw—rocks up to 5" diameter
Trim Saw—rocks up to 2" in diameter
Genie—for polishing
CabKing—for polishing
Geode Cracker



Rock Wrappers

Open gathering for wire wrappers starting at 10 a.m. on meeting

Saturdays. Hang out with other wrappers, and work on your projects. (Bring all supplies needed.) Learn tricks to make wrapping easier, a new design, or perhaps a new place to find supplies. All skill levels welcome!

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.

If you are interested in any of the above trips, please contact Ed Opatz at 320-250-1363 or opatz1@att.net.

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 Opatz at 320-250-1363.



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 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 Calendar

January 14—Meeting date; Clubhouse open at 10: a.m. for machine use; Board meeting at noon; general meeting at 2:00 p.m. with Erich Ess speaking on the use of a rolling mill.

February 11—Meeting date

March 11—Meeting date

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

June 10—Pebble Pup agate pick; meeting date



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.

Board Members for 2023

Ed Opatz—
President
Term ends 1/1/24



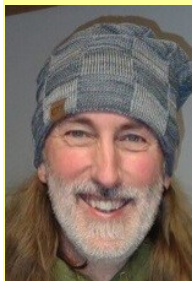
Lori DuBois—
Vice-President
Term ends 1/1/25



Joanie Hanson—
Secretary
Term ends 1/1/24



Kevin Martini—
Treasurer
Term ends 1/1/25



Vern Iverson—
Director
Term ends 1/1/24



Judi Laurence—
Director
Term ends 1/1/24



Jo Schwalboski—
Director
Term ends 1/1/24



Cuyuna Rock, Gem & Mineral Society Meeting Minutes Saturday November 12, 2022

Board Meeting

Call to Order- Meeting was called to order at 12:06 pm. by President Ed Opatz. Present were- Treasurer Kevin Martini, Vice-President Sharon Smith (via phone), Secretary Joanie Hanson, and Board Members-at-Large- Vern Iverson, Judi Lawrence, and Lori DuBois.

Review minutes- There was no meeting in October.

Treasurer's Report- Kevin Martini. A motion was passed to ok the treasurer's report. It will be posted at the rock club. The annual audit was completed.

Website-forms- we are working on getting the vendor forms ready for the show. Rock show vendors- how many should we allow? Reviewed parameters for jurying the show. Reviewed surveys.

Rock Show updates- Spinning wheel rock needs to be organized, Need to make bags for sluicing, Ed will look into doing a larger Rock & Gem Magazine Ad. Bill Board on 371? Joanie posted the rock show notice in Rock & Gem.

The Midwest Federation wants to use our facility at Franklin for their meeting during our rock show. Motion passed to allow this. Judi will be in charge of a welcome table for this. There will be free passes to the show, a welcome bag, etc. for the members attending the meeting.

We will set up committees for different jobs for the show to help delegate responsibilities. I.e.- Advertising, Grounds layout, Security, Sign setups, volunteer coordinator, etc.

Placed dedication plaque on the big rock saw. Placed new locks on the cabinet in the dining room.

The meeting adjourned at 1:14 pm.

General Meeting

The meeting was called to order by President Ed Opatz at 2:00pm. 31 members were present.

Elections for 2023/Silent Auction was today. Elected were: Treasurer Kevin Martini (2 year term), Vice President Lori DuBois (2 year term), 3 Board Members-at-Large (1 year term)- Vern Iverson, Judi Lawrence, and Jo Schwalboski. Congratulations to all.

Treasurer's report- will be posted at the rock club.

Field trips for next year- Possible destinations- South Dakota in April, Canada for amethyst at the end of June, Billings, Montana 1st weekend in August.

Pebble Pups Day Camp 2023- It will be June 9 & 10, 2023. We are looking for volunteers to help with this.

Several members reported on the museum trip and said it was well worth the trip.

Show and tell- several people brought rocks for show and tell.

Talked about alternative times for activities besides meetings on Saturday.

Classes- What do members want. I.e.- lapidary classes, wire wrapping, drilling holes in glass and stone, bails, etc.

Door Prizes- Odessa Sandhoff, Dalton Etzler, Judy Frampton. Dalton won the bucket of rocks.

Meeting adjourned 3:30pm.

Respectfully submitted,
Joanie Hanson, Secretary

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.

In Memorandum For Club Members

Bill Dehn died December 2nd. His wife, Sandi, is a member.



Judy Frampton died December 14. Judy often came to meetings with Bryce Eggert.



The Grand Canyon Is A Window Into The Deep Geologic History Of Earth

Two billion years ago, the Earth was a very different place. It was the Paleoproterozoic era, and life was a lot simpler (the first multi-cellular life was only just beginning to take shape). Days were even around four hours shorter, and the atmosphere lacked a large amount of oxygen. The world's first supercontinent, called Columbia or Nuna, was in the process of being formed.

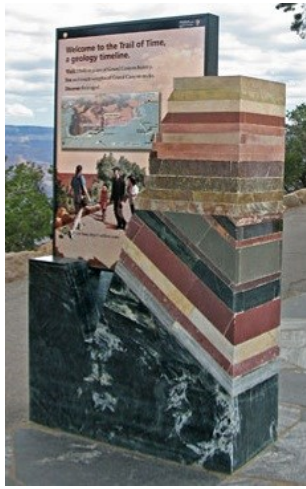
Age of Grand Canyon:
5-6 Million Years

Age of Grand Canyon Rock:
Up To 2 Billion Years

As the Colorado Plateau has been uplifted, the Colorado River has cut down through the eons of time.

Discover the rich geological history of the Grand Canyon with the Trail of Time. As one looks into the Grand Canyon, one is gazing through the eons, deep into the history of the Earth (long before the dinosaurs).

The Trail of Time is lined with a series of rocks and exhibits that delve into how the



Grand Canyon was formed - and its bedrock long before the canyon itself. It is the world's largest geoscience exhibition in full view of one of the world's greatest geologic marvels (the Grand Canyon).

The Trail of Time is intended to be a geologic timeline, with

every meter walked along the timeline trail signifying a million years of geologic history. The interpretive walking trail encourages visitors to explore, understand, and ponder the magnitude of geologic time.

Walk backward in time and see the Grand Canyon's entire geologic history. Trail of Time starts with the "Million Year Trail" and see how it transitions from human time scales to geologic time scales. After the Million Year Trail follows the main Trail of Time - it is along this trail that every meter is one

million years of geologic history.

The depth of the geologic history of Earth will make mankind's existence on Earth seem fleeting.

The Trail of Time is located at the Yavapai Geology Museum. The Yavapai Geology Museum is only a half-hour walk from Mather Point and the Canyon View Visitor Center. The Trail of Time leads past the Grand Canyon Village. Visitors can choose to stop in the Village, take a break and get a coffee or a bite to eat or keep on walking straight all the way towards Hermits Rest.

The trail is paved, 2.83 miles long, and is relatively flat.

The trail is fully accessible. The Grand Canyon welcomes around six million visitors, and most of them are unable to hike down into the Grand Canyon. The Trail of Time is designed for everyone and offers breathtaking views of the Grand Canyon.

<https://www.thetravel.com/why-hike-the-trail-of-time-on-the-grand-canyon/>

5 Largest Gold Nuggets Ever Found...Ever!

1. The Welcome Stranger Gold Nugget

Between 1851 and 1861 Australia is reported to have exported at least 850 metric tons of gold, which is equivalent to more than one third of the total amount of gold produced in the world.



It was soon after this main gold rush, in 1869, that the

Welcome Stranger nugget was discovered by Cornish miner John Deason and his partner Richard Oates near Moliagul Victoria, Australia.

Although many of the historical reports of the Welcome Stranger's weight vary somewhat, it's believed that after being smelted, the nugget yielded about 156 pounds of pure gold and is believed to be one of, if not the largest, gold nugget ever found in the world.

You would think that a gold nugget as large and as valuable as the Welcome Stranger nugget would have been found deep within a gold mine or located after significant excavation. But that's not the case. The Welcome Stranger nugget was simply found by digging around the roots of a stringybark tree. It was lying just over an inch below the surface!

2. The Welcome Nugget



Not to be confused with the other large gold nugget found in Australia that

shares a similar name, the Welcome nugget is the second largest gold nugget to ever be found weighing in at 152 pounds.

It was discovered by a group of twenty-two Cornish miners in 1858 at the Red Hill Mining Company site at Bakery Hill in Ballarat, Victoria, Australia. And much like you would expect from a discovery like this, the Welcome gold nugget was located deep underground in the roof of a tunnel.

3. Pepita Canaã Gold Nugget

The Pepita Canaã is the third largest gold nugget ever to be found in the world, however, it does currently take the top spot of being the largest gold nugget known to be in existence today. And this monster nugget weighs in at 134 pounds.



This massive gold nugget was found in 1983 by miner Júlio de Deus Filho in the Serra

Pelada gold mining region of Brazilian state of Pará and is currently on display in the "Gold Room" of the central bank's money museum in Brazil's federal capital Brasilia.

4. Sierra Buttes Monumental Claim Gold Nugget

In 1869, a group of miners were on their way to work when they saw a small portion of this 109 pound gold nugget sticking out of the ground. The recent rains had washed away enough of the dirt that was covering it so it could be seen by the workers. As you can imagine, they quickly began digging it out of the ground. No one was expecting how big it was.



You can see a replica of the actual gold in the Kentucky Mine Museum near Sierra City.

5. Lady Hotham Gold Nugget

Named in honor of the wife of Sir Charles Hotham, the Lady Hotham Nugget was discovered by a group of nine miners at the Canadian Gully in Ballarat in September 1854 during the Australian gold rush. It weighed in at 98 pounds and was located deep within a mining tunnel at 133 feet.

<https://www.rockseeker.com/largest-gold-nuggets-ever-found/>

Megalodon Ancestor Found in Indian Ocean

Australian scientists have discovered a deep-ocean sharks' graveyard containing the fossilized teeth of the ancient ancestor of the megalodon shark. They have also found a new species of shark.

The discoveries were made across two expeditions on the research vessel (RV) Investigator, which is operated by Australia's national science agency, the Commonwealth Scientific and Industrial Research Organization, or the CSIRO.

It has explored Australia's newest marine sanctuaries; the Cocos (Keeling) Islands Marine Park in the remote Indian Ocean, and the Gascoyne Marine Park off the coast of Western Australia.

At depths of more than 5 kilometers, researchers have recovered remnants of ancient and modern sharks, including the teeth of a 12-meter-long shark that was the closest known relative to the mighty megalodon. It's considered to have been one of the most

powerful predators ever, but it died out about 3.5 million years ago.

The voyage's chief scientist, John Keesing, told VOA that significant discoveries have been made.



“From the greatest depths, so this is around 5,000 meters, we have trawled up recent and fossil sharks' teeth,” he said. “So, the ones we have found on this trip are from great white sharks and mako sharks. Out of the Cocos (Keeling) Islands they found similar to that but in addition, fossil teeth from a relative of

one of the largest-ever sharks, the megalodon. So, that is the ancestor of modern sharks.” The search areas in the Indian Ocean are known to have some of the world's most diverse marine life, but researchers believe much of what lies beneath the waves is a mystery.

A new type of small striped shark was also discovered in the Gascoyne Marine Park. Scientists have said it is “unique to Australia.” They have yet to formally describe it or give it a name. The CSIRO has said that about a third of the species of marine life collected on biodiversity survey voyages could well be new to science.

The RV Investigator has a crew of 54, 35 of whom are scientists. The research vessel is operational 24 hours a day.

<https://www.voanews.com/a/fossilized-teeth-of-megalodon-ancestor-found-in-indian-ocean/6870533.html>

Cuyuna Rock, Gem, & Mineral Society on the Web

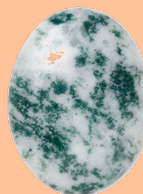
www.cuyunarockclub.org

Upcoming Shows January 2023

6-8—MESA, AZ: Flagg Mineral Foundation; Mesa Community College, daily 9-5; Free; Website: flaggmineralfoundation.org
13-15—GLOBE, AZ: Gila County Gem & Mineral Society Inc; Gila County Fairgrounds; Fri. & Sat. 9-5, Sun. 10-4; \$3 single adult, \$5 a couple and kids free; Website: gilagem.org
14-15—DELAND, FL: Tomoka Gem &

Mineral Society; Volusia County Fairgrounds; Sat. 10-6, Sun. 10-5; \$5 adults, kids 12 and under free; Website: tomokagms.org
18-22—LAUGHLIN, NV: Tropicana Hotel and Casino Pavilion, 2121 Casino Dr; daily 10-5; Website: www.showsofintegrity.com
21-22—FREDERICKSBURG, TX: Fredericksburg Rockhounds; Lady Bird Johnson Park, Pioneer Pavilion; Sat. 9-6, Sun. 10-4; Free; Website: fredericksburgrockhounds.org
27-29—TYLER, TX: East Texas Gem & Mineral Society; Tyler Rose Garden Center; Fri. 10-5, Sat. 10-6, Sun. 10-5; Adults \$5, students \$1; Website: www.etgms.org/

Agates From Around The World Tree Agate



This spectacular jasper is collected in southern Oregon in the Blue Mountains. You can recognize a specimen of Blue Mountain picture jasper by its dark, blue-black core often bordered by beige and green bands. However, its most noticeable feature is the inclusion of olive, tan and blue orbs that float throughout. This variety is a favorite of lapidarists and is often cut into cabochons for jewelry.

Jasper is a term that can be applied to an opaque variety of chalcedony (light does not pass through it). The opaqueness is due to a higher concentration of impurities mixed with silica/quartz. Like agate it may form in a wide variety of colors. In most cases, jasper will occur when silica-rich fluids permeate throughout a soft sediment or volcanic debris deposit. The fluids then crystallize around the particles/impurities, resulting in a cementation process. Most often, the impurities present determine the coloration.

<https://www.fossilera.com/minerals/4-8-polished-section-of-blue-mountain-jasper-oregon>

Tree agate is also known as dendritic agate. Dendrites are crystal inclusions that develop in foliage or tree branch-like patterns. In tree agate, these dendrites create a beautiful green dappling effect on a white base. This beautiful green and white stone has long been seen as having a deep connection to nature and was therefore viewed as the stone of plenty by many civilizations. The ancient Greeks associated tree agate with dryads and the stone was sometimes buried in agricultural fields to promote a plentiful harvest.

The distinctive inclusions that resemble

vegetation in dendritic agate are a result of the presence of manganese and iron oxides finding their way into cracks of white quartz as it forms.

Tree agate has a hardness of 6-1/2 to 7 with a specific gravity of 2.59 to 2.67. This type of agate is frequently mistaken for moss agate, but these stones have different mineral traces creating the unique green branch-like patterns.

Tree agate is most commonly found in Brazil, China, India, Australia, Kazakhstan, Madagascar, Mexico, Mongolia, Namibia, Uruguay and the United States (Oregon).

<https://www.firemountaingems.com/resources/encyclopedia/gem-notes/gmstnprprtstrgt?term=gemstonemeaning&hub=gemstonemeaning>



Kids' Corner

Fluorite

Fluorite is really interesting! When you find it in a rock, all the little crystals will usually be in the shape of cubes. This is the way that the mineral naturally grows!

Fluorite is a soft rock which can be scratched with a common nail (ask your

parents for help with this). Some people even like to carve it into sculptures. Fluorite can be found in many different colors.

But the coolest thing about fluorite is that it is fluorescent! What does this mean? It means that if you have an ultra-violet light/ a black light (the lights that they use in glow in the dark mini-putt that look purple) and you shine it on the rock then it will glow!!! Fluorite from two different places might glow two different colors under the same light.

Used in:

Toothpaste: Fluoride is one of the main elements in fluorite. It helps prevent and

sometimes reverse the early stages of tooth decay.

Drinking water: Fluoride is also found in drinking water! Don't worry, it's good for your teeth and won't hurt you in small doses.



<https://uwaterloo.ca/earth-sciences-museum/resources/just-kids/minerals-kids>

January Birthstone—Garnet

Although garnet is commonly associated with the color red, these gemstones can be found in almost any color and are popular choices for jewelry of all types. That's excellent news if you're in the market for the January birthstone. The garnet family is one of the most complex in the gem world. It's not a single species but rather consists of several species and varieties.

Some believe that garnets are a protective stone, shielding the wearer from injury. This made them particularly popular amongst warriors and royalty. Occasionally associated with life-giving blood, red-variety garnets are also connected to vitality, love, and light.

Depending on the type of garnet, you can choose from red, purplish, green, yellow, and orange options. It is not uncommon to find large garnet crystals with vibrant hues and clear transparency.



<https://www.gemsociety.org/article/birthstone-chart/#jan>

Sunshine Requests

If you know someone who could use a little sunshine—birth, illness, surgery, family death—please contact Joanie Hanson at 218-831-2665.



When God closes a door, he opens agate.

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 | Septarian Nodules—Utah |
| Chalcedony | Desert Rose | 79 Bed Geodes—Oregon |
| Plume Agate | Yellow Jasper | Moroccan White Agate |
| Bruno Jasper | Owyhee Picture Jasper | Mexican Luna Lace Agate |
| Brazilian Agates | Amethyst | Staurolites (Cross Rocks) |
| Obsidian | Mineral specimens | Small Botswana Agate |
| Dinosaur bone | Condor Agate | Smokey Quartz crystals - Colorado |
| Hauser Bed Agate | Thundereggs | Snowflake Obsidian |
| Mexican Geodes | | Utah Petrified Wood |
| Montana Petrified Wood | | New! African Blue Lace Agate |
| Montana Moss | | New! Carnelian Agate |
| Tee Pee Canyon Agate | | New! Tiger Eye—red and blue |
| Slabs of all sizes and types | | |

Minnesota Rock Shops

- Agate City** 721 7th Ave., Two Harbors 218-834-2304
- AM Rock Shop** 710 E River Rd, Anoka 763-421-2807
- Beaver Bay Agate Shop** 1003 Main St., Beaver Bay 218-226-4847
- Christy's Crystals** 407 N Riverfront Dr, Mankato 507-720-1061
- Designed In Stone** 841 Forest Ave E Suite 110, Mora 651-248-8768
- Dream in Jasper Crystal Shop** 107 N Meridian St, Belle Plaine 763-301-1058
- Enchanted Rock Garden** 1228 E 66th St, Richfield 612-866-1140
- Jon's Gem Emporium** 184 North Hwy 10, Motley 218-640-1047
- Magic Mushrooms in the Crystal Garden** 171 Lake St N, Big Lake 612-805-7111
- MN Lapidary Chick** 15615 46th Ave N, Plymouth 763-913-9269
- MO'R Designs** 2100 Snelling Ave N Suite 13, St Paul 651-294-3069
- Naturally Unique** 137 Western Ave N, Park Rapids 701-429-0409
- Rocks and Things** 201 N Rum River Dr, Princeton 763-389-0979
- Rocks & Tools Seashells by Shelly Rock and Crystal Shop** 2625 County Rd 37 NE, Monticello 763-295-2440
- Sacred Sage and Crystals** 118 Broadway E, Little Falls 320-360-3611
- Sample's Agates Gem and Mineral Shop** 18581 MN-371, Brainerd 218-821-6623
- Superior Mineral Co.** 4843 124th St, Savage 952-894-0323
- Twin Pines Trading Post** 31049 Front St, Pequot Lakes 218-839-0829
- West Central RockHounds** 1605 1st Street S, Suite D10, Willmar 320-262-3451
- ZRS Fossils and Gifts** 3018 Lyndale Ave S, Minneapolis 612-824-1068



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

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

Gem Encyclopedia

Jet



Historically a popular black gem, jet has declined in popularity in modern times. Although jet jewelry has been long associated with mourning, this organic gem can be made into large,

eye-catching beads, carvings, and even faceted pieces.

The use of jet jewelry dates back to Neolithic times in Ancient Britain. The Ancient Romans later adopted and popularized this gem material not only for ornamental use but for its purported magical properties.

During the later Victorian Era, jet jewelry became a popular choice for mourning wear, after the style of Queen Victoria herself.

Jet is a variety of lignite coal. It forms from fossilized wood. Since it has an organic origin, it's not a mineral. Nevertheless, it's

considered a gem, like amber and pearl. Although jet resembles anthracite coal, it's less brittle.

Jet takes a very good polish. Faceting can add some sparkle to the somber tones of jet jewelry. (Gemstones often have a flat bottom).

Not surprisingly, jet burns like coal. A hot point test will release an oily odor. (Plastic imitations will release an acrid smell). Keep in mind this destructive test should only be used as a last resort for gem identification. Choose an inconspicuous spot to test any finished gem or jewelry piece.

In addition to plastic, black glass can simulate jet gems. However, true jet is warmer to the touch than glass. "French Jet" was a popular glass imitation during jet's 19th century heyday. Natural gemstones that may be substituted or confused with jet include obsidian, black tourmaline, and chalcedony.

Whitby, England yields the finest jet in seams. Spain also produces a harder but more brittle variety. Most commercial material

comes from these locations.

Other notable sources include the following: United States: Colorado; New Mexico; Henry Mountains, Utah; Aude, France; Germany; India; Poland; Russia; Turkey.

Due to jet's relatively low density, gem cutters can fashion carvings, cabochons, and objects either decorative or utilitarian in almost any size desired.

Jet is brittle and has a relatively low hardness. Thus, jet jewelry such as rings or other pieces for frequent wear should have protective settings. Store jet separately from other harder materials to prevent contact scratches.

Avoid mechanical cleaning systems such as ultrasonic or steam. Use a soft brush, mild detergent, and warm water for cleaning. Consult our gemstone jewelry cleaning guide for more recommendations.

<https://www.gemsociety.org/article/jet-jewelry-gemstone-information/>

Best Places to Pan for Gold and Gemstones in America

Blue Crystal Mines, Utah

Nearest city: La Sal

What to look for: Azurite

Azurites are the main gemstone mined at Blue Crystal Mines. The commercial site allows individuals to do independent digs for this beautiful crystal. However, the fee is quite steep, at \$100 per person per hour.



Discounts are available for people who join a tour group with one of the companies listed on the mine's website. Even

so, expect to pay a bit more for digging than you would on most places that made our list. On the plus side, you do have the opportunity to walk away with a gorgeous blue crystal.

Mount Mica Mine, Maine

Nearest city: Paris

What to look for: Tourmaline, rose quartz

First opened in 1821, Mount Mica has been a place to

find gems like rose quartz for more than a century.



The site is for independent rock hounders who are enthusiastic about bringing their own tools and looking for precious stones on their own. We recommend it to people who have some experience with prospecting and can easily identify the gems from the regular rocks.

Alternatively, you can join a tour with a guide who will take you gem digging and help you through the process.

Ron Coleman Mine, Arkansas

Nearest city: Jessieville

What to look for: Quartz crystals

Located near Hot Springs National Park, Ron Coleman Mining allows visitors to spend an unlimited amount of time digging for crystals and quartz on premises. The staff will even



teach you digging methods and help you identify the crystals, and you can buy equipment on site if you don't have your own.

If you don't want to spend the whole day digging, the establishment also offers other fun activities like ziplining and a tour of the mine. They even allow dogs to accompany you on your dig.

Fairy Stone State Park, Virginia

Nearest city: Stuart

What to look for: Fairy stones

If mines seem too dreary for you, come to a beautiful state park instead. Virginia's Fairy Stone State Park is known for the staurolite

crystals (fairy stones) that give it its name.

You're allowed to search for these crystals anywhere in the park, but we recommend getting a map from the visitor's center that will help you find the areas where they are most in abundance. The only tools allowed for the activity are your hands, though the stones are not deep enough for this to be a problem.



Sunstone Public Collection Area, Oregon

Nearest city: Plush

What to look for: Sunstones

Sunstones are the official gemstone of Oregon. While they are not as valuable as other precious stones, they are undeniably pretty and make for nice customized jewelry or special keepsakes.

Oregon makes it easy to mine for sunstones at the Sunstone Public



Collection Area. There are no tours available, but rather, you'll have to come independently and bring your own tools. Anything you find, you're allowed to keep. That said, remember you are not allowed any electric equipment or tools, and there are also private mines near the public area where you can't trespass.

<https://www.farandwide.com/s/best-places-pan-gold-gemstones-095e3175eb2946b9>

Fire and Ice Crocheted Necklace

Materials:

- 1 28 Gauge Round Silver Plated Silver Copper Craft Wire - 120 ft
- 2 Sterling Silver S Hook Clasp 17mm
- 3 Beads and Pearls
- 4 Silver end cones
- 5 Sterling Silver Jump Ring Open (.035) 19ga. 8mm

Tools:

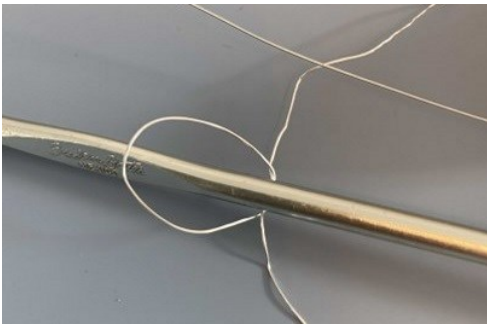
- 1 Chain Nose Wire Plier
- 2 C.H.P Milano Italian Flush Cutter, 5 1/2 Inches
- 3 Round Nose Wire Pliers

Directions:

1 Pre-string the first strand of beads onto the wire, working directly on the spool of wire. Use 21 inches per strand.



2 Create a loop on the wire, after the strung beads, about 4 inches from the end.



3 Crochet one chain stitch plain, with no bead, then one with the first bead, capturing it in the stitch.



4 Continue this pattern until you have all the beads on this strand crocheted. Leave a 4" tail and cut the wire from the spool.



5 Repeat steps 1-4 until you have the desired number of strands. Go with an odd number, usually 5, but sometimes 3 or 7.



6 Gather your strands together twisting all the tails the end of each strand.



7 Make a loop with the bundled wire and wrap the tails securely.



8 Cut two 2 inch pieces of 20 gauge wire and loop it through the bundled wires. Slide on a cone and make a wrapped loop. Repeat on the other side.



9 Attach the loops to an extension chain or directly to a clasp.



https://www.wirejewelry.com/jewelry_making_patterns_tutorials/Fire-and-Ice-Crocheted-Necklace_619.html

ROX BOX

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



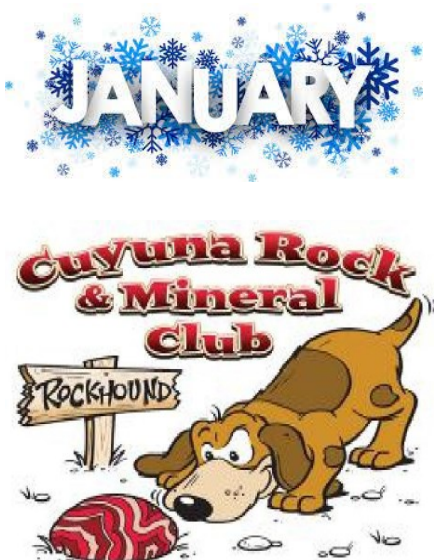
The Cuyuna Rock, Gem, and Mineral Society accepts no responsibility for any dissatisfaction that may occur by either party, sell or buyer. The Society does not profit in any way by sales transactions.

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



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FIRST CLASS MAIL



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Notes from the President

I am getting ready for another winter of rocking—rockhounding, rock mining, and rock shopping. This year my claim partner and I decided that we would try camping at the site so we wouldn't have to walk 3 miles each way every day. I have been trying to figure out what I really need, and what the lightest options are. There are also critters to consider, so what can I store food and tools in so that they don't chew stuff. (In past years I left tools, but once I left them exposed and the critters chewed on the handles.)

Marcia and I have a shopping list for ourselves and others. If you would like us to put something on our list for the rock room or for yourself, please let me know. If it's for you personally we would probably take a photo and text it to you for your approval. I'm sure the RV will come home in the spring full and heavy!

If any of you have plans to come south, to Quartzsite, Tucson, or Deming at the same time we will be there, we would love to meet up with you. We could meet for a meal, check out some of the rock vendors, or do some rockhounding together.

What is on your New Year's resolution list? Get in shape? (You can do that rockhounding.) Volunteer? (The Club is always looking for help, year round or at the show.) I think both of those things are on my list.



Ed Opatz