Hatrockhound Gazette 2021

PO Box 1122, Hermiston, Oregon 97838



Meetings at 6:30 on the 2nd Tuesday of each month First Christian Church of Hermiston: 775 West Highland (Go to back of church) Officers: President – Doug Gill V. Pres. – Mike Filarski Secretary – Trista Meek Treasurer – Mel Lambert Member at Large – Laura Tiffany

Newsletter/Website – Judi Allison, 1701 NW 11th St, Hermiston, OR 97838 541-720-4950



Hatrockhounds Gem and Mineral Society is Affiliated with:

The Northwest Federation of Mineralogical Societies And The American Federation of Mineralogical Societies



AFMS Rockhounds "Code of Ethics"

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use. I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials

on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Hatrockhound Gazette – August 2021 Issue

PICNIC: SATURDAY, AUGUST 21st, 10-2

MCKENZIE PARK GAZEBO

Club will furnish chicken, water and utensils. Please bring a pot luck item to share. Use the list already created by some as a guideline for choices. SILENT AUCTION -PROCEEDS TO THE CLUB

NO REGULAR MEETING IN AUGUST. See you September 21st.

Picnic Potluck Food sign-up Trista & Warren – Fruit Salad Mel and Louise – Kale Salad Karli – Broccoli Salad Chris L – Baked Beans Anita & Don – Sodas and Cookies Jayson & Tara – BBQ Brisket Baked Beans Doug Gill – Dessert Gordon – Ice Cream



Hatrockhounds Gem and Mineral Society Meeting Minutes July 13, 2021

Thirteen members joined together for tonight's meeting. Since Trista was held up until later at that cursed endeavor called work (that allows us to go play) Judi took care of the minutes.

General Business President, Doug called the meeting to order and asked if the secretary had a report. Judi explained that the minutes from the last meeting weren't complete in the Gazette as Judi had written the first part and Trista was unable to get her section to the gazette before publishing. The minutes have since been added to the first part. Judi said she could send out the complete account, but members felt that as long as they were a part of the permanent record, that wasn't needed. Mel had given Judi a copy of the treasury amount before the meeting, so she shared that information.

Mike let us know that Lakeside had reserved the same date as Hatrockhounds for the 2022 show. After a bit of hesitancy on her part, Judi shared the idea of perhaps combining the venues and presenting the NFMS Show jointly. After some discussion, it was tabled until Judi could check with Larry Hulstrom, Lakeside show chair about his thoughts on the matter. (After note: Larry is hesitant, as he will be NFMS President that year and felt that might be more that he would want to take on.) Mike was also going to check with EOTEC about the possibility of the last weekend in April for a date.

The annual picnic and silent auction will be on Saturday, August 21 from 10-2 at McKenzie Park. (Judi will send an invitation to the Lakeside Club,) The club will furnish the eating utensils, chicken and water. Members have signed up for a side dish or dessert, which will be listed in the Gazette. All proceeds from the auction will go to the club. If you would like to donate something, anything rock related is happily

accepted. Mel will get the chicken and water and Judi will purchase some table cloths. **THERE WILL NOT BE A REGULAR MEETING IN AUGUST.**

Show and Tell:

Chris wondered what the cufflinks from a friend's grandpa were made from. After some speculation, it was decided it was most likely tiger iron or ironstone.

Hope brought a rock she had found at Como Lake south of Hamilton, Montana when she had gone there for a wedding.

Mike chose a sample of Blue Forest petrified wood because of the field trip that had transpired there in June at the RFMS/AFMS show in Big Piney, Wyoming.

Judi then showed the small sampling she had managed to collect at the very field trip. She showed the layer of algae and spoke about why the wood is considered "blue".

Don dug through his treasures to bring garnets in schist from Marble Creek in Idaho. He spoke about finding such in various creeks in that area.

Door Prizes: Thanks to donations from Don and Anita, we had five door prizes. Judi forgot to write them down, but she thinks Mel, Louise, Judi Don and ? won.

Program: Two teams tried their hands as the scavenger hunt. Each team was given an initial clue, which in turn led to another clue: four total. Their final reward was a "Payday" candy and a polished rock. Thanks for playing, folks.

Executive meeting: Monday, July 26, 7:00 at Judi's. Everyone is welcome (It was Cancelled) NO AUGUST MEETING:

PICNIC: SATURDAY, AUGUST 21, 10-2 MCKENZIE PARK

WEBSITE: jall23.wixsite.com/hatrockhounds

Judi Allison, Acting Secretary

A New and Unusual "Quasicrystal" Described



A specimen of trinite. Shaddack, CC BY 3.0, via Wikimedia Commons

By Jim Brace-Thompson

A newly discovered crystal has been dated at 76 years old. I'd wager it's pretty unusual for a geologist to say with supreme confidence how old a crystal is to the day, minute, and second. But then, this is no usual crystal. It's a quasicrystal! And it was born at 05:29:21 am MWT (Mountain War Time) on July 16, 1945. The mother of that crystal? America's first test of an atomic bomb in a top-secret detonation code-named "Trinity." Earth scientists and aficionados of exotic minerals have long known of trinitite. (I have a tiny, tiny piece in my own collection.) That radioactive green glass was spread around the vicinity of the atomic explosion in New Mexico when it was created by silica-rich desert sands that melted and fused under 18.6 kilotons of power and temperatures equivalent to the surface of the sun.

Now, it turns out; there's a new mineral in town to accompany trinitite. While most trinitite is green, geophysicist Terry Wallace (Los Alamos National Laboratory) took an interest in a rare red variety. The red comes from all that remains of copper transmission lines strung around the steel-framed test tower, which swung a little atomic bomb nicknamed Gadget.

Wallace teamed up with Luca Bindi (University of Florence) and four other scientists to poke around in red trinitite. They were poking for what are called quasicrystals. Most crystals have a predictably uniform and periodic structure. A quasicrystal (or quasiperiodic crystal) shows a structure that is ordered but not periodic and thus lacks so-called translational symmetry.

Quasicrystals have been found in rocks with a peculiar combination: some sort of metal content and exposure to a violent shock of extreme pressure and temperature. Thus, for example, they have been found within meteorites.

The combination of violent shock and a little bit of metal is what led Bindi's team to poke into red trinitite. And sure enough. A poke here, a poke there, and out popped "a heretofore unknown icosahedral quasicrystal" some 10 micrometers wide. (For us nonscientists, that's 0.00039 of an inch.) Composed of silicon, copper, calcium, and iron, it is a perfect match for Gadget's test tower with its transmission lines (copper) and steel frame (iron) sunk into concrete (calcium) amid desert sands (silicon). In the words of one somber scientist, "cool!"

https://www.rockngem.com/a-new-and-unusual-quasicrystal-described/

On the following pages you will find websites that will help you be a successful mineral collector. They are full of good information and helpful resources that you can use as you build your mineral collection. Check them out!!

Mindat.org www.mindat.org

Mindat.org is an online database with more information about minerals than you will be able to find in any other single website on the internet. It is used by mineral collectors and professional mineralogists and geologists all over the world. It has a very large catalogue of mineral species and varieties which includes the physical and historical information about the minerals. It also has well over 600,000 mineral pictures. You will also find information about mineral localities, museums, collections, articles... It is a onestop website for accurate mineral information. Bookmark this site and visit it often. It will help you be a very successful mineral collector.

Virtual Museum of the History of Mineralogy www.mineralogy.eu

"The purpose of the Virtual Museum of the History of Mineralogy is to bring together photographs and descriptions of representative historical objects and information related to the early mineralogical and crystallographic sciences." The Virtual Museum is organized into 5 major categories of objects covering the history of mineralogy and crystallography in the pre x-ray diffraction era. The collections include: Mineralogy and crystallography books; crystallographic goniometers; crystal models; instruments used in mineralogy (optical and non-optical). This is a fun site with a lot of free information about different things connected to minerals, mineral collecting and the science of mineralogy.

The-Vug.com

http://the-vug.com/educate-andinform/fakes-and-forgeries/

Mineral collecting is so popular that there are a lot of dealers who create specimens.

Sometimes they are dyed with different colors. Sometimes individual crystals are glued together to make a bigger specimen. There are a lot of ways to fake a mineral specimen. The link above will take you to a great website about mineral fakes. In other words, be smart about the mineral specimens you are buying: they may not be natural.

Smithsonian

https://www.si.edu/spotlight/geogallery

https://geogallery.si.edu/gems-minerals-meteorites-rocks

The Smithsonian in Washington, D.C. is the museum of the United States of America. One of the branches of this wonderful museum is the Gem and Mineral gallery. It contains some of the very best mineral specimens found anywhere in the world. It also has many very large, very high-quality specimens. You must visit this site and just look at the wonderful gem and mineral specimens shown here. And then, when your family is ready to go somewhere special for vacation, go to Washington, D.C. and see these amazing gem and mineral specimens in person.

The Arkenstone

https://www.irocks.com/rock-and-mineral-collecting-for-beginners

This is a very nice website created by Dr. Robert Lavinsky, mineral dealer and specimen mineralogist. Yes, there are high-quality specimens you can buy from Rob. But for our Mini Miners, the more important piece is that Dr. Lavinsky has a lot of articles and information for collectors. One of the articles is "Rock and Mineral Collecting for Beginners." Check it out. It will help you build a really nice mineral collection. Mini Miners Monthly Vol. 13 No.7 July 2021