

HATROCKHOUND GAZETTE

JUNE 2016

Tuesday, June 14, 2016, 6:30 pm
Fossils, Fossils, Fossils

If you are at all curious about the fossil world, you don't want to miss this one!!! Evelyn Cataldo from the Lakeside Club who has been collecting, displaying and learning about fossils for many years will give us a presentation. I have watched Evelyn in action before and she always gives an informative, entertaining and enjoyable presentation. So mark your calendars and come to the meeting!!!

April Lopez and Marilyn Ringering are in charge of treats.
Maybe you have a fossil for show and tell???

Hatrockhounds Gem and Mineral Society

Meeting Minutes

May 10, 2016

General Business:

This was the night to finalize all the details of our show. Judi gave an overview of the show setup timeline. Sign-up sheets for working at the various areas were passed around. Judi checked to verify that all who had planned to put a display in a case would still be able to do so.

Janet reported the signs had the dates redone and were put out. After the storm last weekend, many had to be redone. She said the radio program went very well. She took samples which were received with much enthusiasm and excitement.

Mike reported that there are thirteen dealers inside and four outside. The show is basically ready. This Thursday 2x2 display ads will run in the Nickel and Giant Nickel. Mike also talked with Heather Cannell who now works for the EOTEC (Eastern Oregon Trade and Event Center). The grand opening for the new building is this weekend. Perhaps it would be a viable option for a show in the future. . .it will probably depend on cost and the fate of the Conference Center.

Violet Hall's daughter donated a number of boxes of old Gazettes and a large collection of old Lapidary Journals. The membership decided the magazines would be put out at the show for those who were interested to take for free.

There is an estate rock sale on May 20-21. Information was made available.

American Federation Endowment Fund Raffle Tickets are available. Cost is \$5 each or 5 for \$20. The money is used to fund the Junior Badge Program and the Video lending library among other things.

There will be a field trip led by the Lakeside Club to the Bruneau Woodpile in Idaho on May 20-21.

Treasurer's Report Margaret gave the amount in our treasury and stated the bills to this point are all paid.

Junior Presentations: Zane and Dylan received patches and Ty was presented with a Lapidary Badge.

Congratulations, boys! We love to see our Junior members active and thriving. There will be four displays in the show done by the Junior members.

Door Prizes Gordon gave his to guest Shalon Angel. Other recipients tonight were Larry Braden, Diego Lopez, Kayla Sandlan and Tonya Abbott.

Show and Tell:

Janet said six people attended the field trip to Glass Buttes. She brought a number of samples of different varieties of obsidian she collected from the trip. She also had a sample of spider web rhyolite.

Ty said he found the rock he showed off next to the parking lot outside. Good eyesight!

Dylan displayed some white and bumpy polka dot agate as well as some additional pieces. When questioned about some of the items his responses included "This one I think is polished". "You put it in the light and it will glow through it". "I got it from the store."

Sue brought a collection of rocks from Arizona including azurite and malachite, mica, pyrite and white quartz.

Mike's piece was petrified wood including a half inch thick slab cut and an end cut. He found it in Meadow Creek between Ukiah and Granite along highway 52.

Kayla had items from the Lincoln City area and Beverly Beach. She had fossils and rocks and her first piece of petrified wood collected from the ocean.

Margaret brought rocks to go with the "green theme". She had one she felt looked like a lightening streak through the rock and a green and purple rock Randy found.

Bob's trip to China was not without bringing home a collection he had purchased while there. The names given the rocks in China did not necessarily match what we know the rock as being. The name "moonstone" was given to labradorite. Bloodstone was most probably a basalt with some sort of red inclusion. Other rocks he had included jade, yellow jade, amber, agates and "bacon rock" (maybe onyx).

Lisa found a black and white rock in the creek while the family was geocaching. Perhaps country rock.

Larry displayed a couple of rocks: one from the Milwaukie area around Portland that was perhaps wood and one that appeared to be rhyolite.

Tonya brought along a collection from the field trip: rhyolite and obsidians including aurora borealis, midnight lace and silver sheen. She also had coast agate, shells and coral from Short Beach and opal from that locale.

Program None because of last minute show biz. Everyone enjoyed visiting and treats.

Executive meeting: Monday, to be determined at Judi's (Remember, all are welcome) (None this month)

June Meeting, Tuesday the 14th.

Program: Fossils

WEBSITE: jall23.wix.com/hatrockhounds

Secretary, Judi Allison



Some demonstrating volunteers who helped make our show a success.

Thanks to everyone who participated in setup, running the show and clean up!!! Everything went so smoothly because everyone pitched in and helped. In fact, Mike said on Thursday evening, "I'm a little worried, everything is coming together so well and so fast." It was because we had so many great volunteers this year. Thanks again!!!

Glossary of Rockhound Terms (via Rock Licker 1/13)

AGATE: An opening/door in a fence. **CORAL:** A place where one keeps his seahorses.

ARCHAEOLOGIST: A person whose career is in ruins. **CABOCHON:** A small French taxi.

BARIUM: What you do with clothes after an encounter with a skunk.

FACETING: A complex way to ruin a great specimen crystal.

GENTLEMEN: Any rockhound who opens the door for his wife who's carrying heavy rocks.

WHAT ARE FULGURITES? (From Rock Licker 2/14)

Fulgurites are natural tubes or crusts of glass formed by the fusion of silica (quartz) sand or rock from a lightning strike. Their shape mimics the path of the lightning bolt as it disperses into the ground. Since it takes a temperature of 1800 degrees Celsius to melt sand and lightning strikes have temperatures around 2500 degrees Celsius, all lightning strikes that hit the ground are capable of forming fulgurites. Lightning occurs worldwide as do fulgurites, but they are relatively rare. The conditions have to be just right.

Two types of fulgurites have been recognized: sand and rock fulgurites. Sand fulgurites are the most common and are generally found in beach or desert regions containing clean (free of fine-grained silt or clay), dry sand. They resemble roots or branching tube-like structures that have a rough surface, covered with partially melted sand grains. The size and length of a fulgurite depends on the strength of the lightning strike and the thickness of the sand bed. Many sand fulgurites average one or two inches in diameter and can be up to thirty inches long. Sand fulgurites have been found in Utah's deserts and on top of some of the higher summits of the Wasatch Range.

Rock fulgurites are coatings or crusts of glass formed on rocks from a lightning strike. They appear as veins of branching channels on a rock surface or lining preexisting fractures within the host rock. Rock fulgurites are primarily found on or near mountain summits.

How Do Fossils Form?

By Joseph Castro, Live Science Contributor | September 21, 2015 08:50am ET

When animals, plants and other organisms die, they typically decay completely. But sometimes, when the conditions are just right, they're preserved as fossils.

Several different physical and chemical processes create fossils, according to the New York State Geological Survey. Freezing, drying and encasement, such as in tar or resin, can create whole-body fossils that preserve bodily tissues. These fossils represent the organisms as they were when living, but these types of fossils are very rare.

Most organisms become fossils when they're changed through various other means.

The heat and pressure from being buried in sediment can sometimes cause the tissues of organisms — including plant leaves and the soft body parts of fish, reptiles and marine invertebrates — to release hydrogen and oxygen, leaving behind a residue of carbon.

This process — which is called carbonization, or distillation — yields a detailed carbon impression of the dead organism in sedimentary rock.

The most common method of fossilization is called permineralization, or petrification. After an organism's soft tissues decay in sediment, the hard parts — particularly the bones — are left behind.

Water seeps into the remains, and minerals dissolved in the water seep into the spaces within the remains, where they form crystals. These crystallized minerals cause the remains to harden along with the encasing sedimentary rock.

In another fossilization process, called replacement, the minerals in groundwater replace the minerals that make up the bodily remains after the water completely dissolves the original hard parts of the organism.

Fossils also form from molds and casts. If an organism completely dissolves in sedimentary rock, it can leave an impression of its exterior in the rock, called an external mold. If that mold gets filled with other minerals, it becomes a cast.

An internal mold forms when sediments or minerals fill the internal cavity, such as a shell or skull, of an organism, and the remains dissolve.

Organic remnants

In recent years, researchers have discovered that some fossils aren't just made of minerals. Fossil analyses have shown, for instance, that some retain organic material dated to the Cretaceous, a period that lasted from 65.5 million to 145.5 million years ago, and the Jurassic period, which lasted from 145.5 million to 199.6 million years ago

Tests suggest that these organic materials belong to dinosaurs because they match certain proteins from birds, which evolved from dinosaurs.

"It used to be that no one thought it was possible for any endogenous material — material that comes from the animal — could be left behind after the fossilization process," said Ken Lacovara, the dean of the School of Earth and Environment at Rowan University in New Jersey. "[But] that's not really the case." . . .

Additional reporting by Staff Writer Laura Geggel.

- See more at: <http://www.livescience.com/37781-how-do-fossils-form-rocks.html#sthash.NSB0tpHv.dpuf>