#### View this email in your browser



### **Message from the President**

Hello everyone. I hope you are all well and getting ready for warmer months ahead. I recently took a trip to the Harding mine in New Mexico with a group of students. We also stopped in the Rio Grande canyon on the way back to search for garnet and staurolite. You would think that after looking at rocks for so many years it would be commonplace for me, but nature always provides new treasures to explore. Below is a fold in metamorphosed sandstone and shale. This beautiful geologic structure tells a fascinating story of earth history that involved the contortion and squashing of the rocks. In the second photo below, my son Alex is holding a plate of metamorphosed shale or siltstone with 4-5 crystals of staurolite showing cruciform penetration twins known as "fairy twins". What is interesting about the occurrence of staurolite in these rocks is that it only forms in layers with the right chemical "ingredients" and that were cooked at the right temperature and pressure by Nature. Just fun rocks!!







#### 2023 Gem and Mineral Show!

Cindy Pugsley is organizing the 2023 Gem Show. If you can contribute to the organization and planning for the Show, please contact Cindy at <a href="mailto:cindypugsley@sbcglobal.net">cindypugsley@sbcglobal.net</a>. Also, we are always accepting donations for the Silent Auction. So, if you want to donate a useable piece of lapidary equipment, an art piece, rocks and minerals or something else, please contact Cindy.

Cindy has placed a sign-up board in the Shop offering a list of volunteer positions for the Gem Show. The same list will be posted **online** next month to allow volunteer sign up for different tasks throughout the Gem Show including to recruit class assistants for gem show classes.

#### **Gem Show Classes**

The Club is pleased to announce an exciting lineup of classes at the Gem Show from July 6 to 9. This is a great opportunity to learn a wide range of lapidary and metalsmith skills. Classes are small, and with both a skilled instructor and an assistant, you can expect plenty of personal attention. The classes cost less because our instructors agree to volunteer their time as a fundraiser for the Gem Club, and we wish to make these classes especially affordable for regional residents. Some classes will sell out quickly so register early at <a href="https://www.durangorocks.org/gemshowclasses">www.durangorocks.org/gemshowclasses</a>.

#### **Donations Needed for Gem Show**

This year we are looking for donations to help support our Gem Show Classes, a Club fundraiser, and our Silent Auction. Donations can be dropped off at the Club during business hours posted at <a href="https://www.durangorocks.org/location--hours.html">www.https://www.durangorocks.org/location--hours.html</a>. Specifically, we need the following:

- approximately 18 tear-drop shaped cabochons for wire wrapping
- approximately 9 small cabochons (1/2"-3/4") for bracelets with stones
- approximately 9 medium sized cabochons (1"-1.5") for tab settings
- natural stone or wood beads for three beading classes

• other donations of rocks, tools, and books for our silent auction

### **Scholarship Assistance Program for Gem Club Classes**

Scholarships funds are still generously available, thanks to the City of Durango Lodger's Tax Fund. A scholarship pays 2/3 the cost of tuition, both for weekend classes offered during the year or for classes at the Gem Show. If your cost of living is high but wages are low, these funds can help you learn new, valuable skills and make beautiful objects. Scholarship applications are available at www.durangorocks.org/classscholarship.

## **Upcoming Classes in May**

There are a number of interesting classes being offered in May: simple earrings, lost wax casting and silver bracelets with a stone (this one taught on Mother's Day, hint, hint!).

You can check on upcoming events at the <u>Four Corners Gem and Mineral Club Events</u> <u>Calendar - Four Corners Gem & Mineral Club (durangorocks.org)</u>.

### **Field Trips in the Works**

Karen Hubley is in the process of organizing a field trip to the Last Chance mine on Sunday, June 25. The is a great place to collect banded quartz which is known as "Sowbelly" agate. Then on Monday, June 26 she is planning a visit to the

Underground Mining Museum at Creede followed by a trip to the Bulldog mine. A sign up for these trips will be posted soon. Karen is also working on a trip to the dump at the Bulldog mine in Creede (stay tuned). Some good samples of barite and silver sulfides can be found at the Bulldog. Take a BIG rock hammer to break up the big rocks. The details of these trips are being worked out so check the website in the coming weeks for information on registration and the trip itinerary.



# **Open Shop Hours**

Tuesday 1-4 pm

Tuesday 6:30-9 pm

Wednesday 9am-noon

Wednesday 1-4 pm

Thursday 1-4 pm

Thursday 6:30-9 pm

First & Third Saturdays 10am-2pm

See <u>calendar</u>

# **Open Shop Punch Card**

If you like using open shop, remember we have a punch card for multiple use. Prepurchase 10 visits for \$45 - a \$5 savings - and don't worry about having your "shop fee" when you come in!

Rock On: Passion for geology and a cool historic train!

This month I have the pleasure of introducing Nicole Clary as a guest writer for the May essay. Nicole is a major in Geology at Fort Lewis College. She is also currently in my senior research class and is interning with Nevada Gold Mines this summer. I made an offer to all of the students to write an essay for the newsletter to get more practice and write about something fun and interesting. So, I hope you enjoy Nicole's contribution.

My name is Nicole Clary and I moved here to Durango, Colorado from Ball Ground, Georgia about a year ago. I am currently a senior at Fort Lewis College and am majoring in Geology. I became a geology major after an internship I had as a stockbroker for Morgan Stanley in Connecticut a few years ago. As I was sitting in the office day after day crunching numbers, I couldn't stop thinking about being outside. I immediately realized what my passion was, and I needed to be involved in it quickly. I returned home to Georgia and changed my major to geology.



Nicole Clary on an outcrop.

I always found myself picking up rocks or looking at geologic features and wondering, "how in the world did that come to be?" Geology has always been intriguing to me especially since it indeed is our home. Through my college journey I have learned so much about the planet we live on and could not think of anything else in the world I would dedicate myself to. And so, I spent a couple of years studying geology in Atlanta and had to endure college through Covid-19 times. There was not a day that went by that I did not think about geology or where it would take me in life. I can remember feeling very frustrated as I had to study rocks online and look at features only in power-points. All of that changed the day that I moved to Durango and began college in the Four Corners area.





Photographs I took from Molas Pass hike south of Silverton, Colorado on October 15<sup>th</sup>, 2022.

As soon as I arrived in Durango, I felt as if I was walking through all the textbook pictures I had been studying for the past couple of years. I always try to picture how the landscape before me came to be and oh boy, I got an eye and ear-full of geology on my first trip on the Durango and Silverton Narrow Gauge Railroad. The

Four Corners Geological Society organized a hike south of the town Silverton, Colorado through some of the most beautiful mountains I have ever seen. Once we hiked down through Molas Pass and learned all about the geology of the area, we arrived at the Durango and Silverton Narrow Gauge Railroad where our group had an entire train car waiting for us. As we began our journey through the San Juan Mountains back down to Durango, I could not believe my eyes as to where the train tracks were.

The Durango and Silverton Narrow Gauge Railroad was constructed by the Denver and Rio Grande Railway in 1881-82. The train was originally made to carry ore from mines high in the San Juan Mountains, but now it is like a time machine to relive the wild west. It is unique for its narrow-gauge rails which are only 36 inches apart where standard rails are 56.5 inches apart. Narrow gauge tracks are much more economical and easier to maneuver through rough mountain terrain. A shelf in the Animas Canyon high above the river had to be blasted by workers in order to build the railroad to Silverton from Durango. The narrow-gauge line climbs roughly 3,000 feet in only 45 miles.



Photograph of the Durango and Silverton Narrow Gauge Railroad train sourced from <a href="https://www.durangotrain.com/ride-us/important-information/">https://www.durangotrain.com/ride-us/important-information/</a>.

The San Juan Mountains are known historically for mining copper, gold and silver for well over 100 years. The Durango and Silverton Narrow-Gauge Railroad has transported over \$300 million in precious metals alone. The massive coal-powered locomotive uses nearly 6 tons of coal and 10.000 gallons of water to reach Silverton and back to Durango. Around the 1940s and 1950s, the train began to carry more tourists instead of hauling ore. In 1951, the train was officially designated a passenger train and not to be used for freight. The narrow-gauge railroad really began to attract people when Hollywood film studios began to use the train to film Western movies such as "Across the Wide Missouri" and "Butch Cassidy and the Sundance Kid." People come from all around the country to take a ride back in time on this magnificent train. The sheer beauty and power of this train as it charges through the geology of the San Juan Mountains is unlike anywhere else in the

world. It is safe to say I made the best choice possible to come to this region to study geology and to top it off, I get to see this awesome train every day!

#### References cited:

https://www.durangotrain.com/wp-content/uploads/2021/03/dsngrr-interesting-facts-2018.pdf

https://www.durangotrain.com/ride-us/important-information/

https://coloradoencyclopedia.org/article/durango-silverton-narrow-gauge-

railroad

https://www.durango.org/press/fact-sheets/durango-silverton-narrow-gauge-railroad-facts/

https://www.durango.org/listing/durango-%26-silverton-narrow-gauge-railroad/142/







Copyright © 2023 Four Corners Gem and Mineral Club, All rights reserved.

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.

