Every Rock has a Story

I am a rock hunter. That’s my story.
I dig for rocks beneath the ground.
I search for those rocks that hope to be found.
Some are soft and some are tough.
Some are diamonds in the rough.
Just like you and just like me,
and throughout our history,
every rock has a story.
And every time I hold a rock,
I whisper silently, I wonder how you came to be?
Did you roll in a riverbed?
Or were you an arrowhead?
Could you be a beach stone from the bottom of the sea?
Or a fossil of petrified wood from a tall fir tree?
Igneous
Metamorphic
Sedimentary
No matter what I quarry,
every rock has a story.

© Kiesha Shepard
Junior’s Report

The Christmas gift bag plan was a great success. Linda, Robin and I made up a total of 38 gift bags, each with seven specimens (including a lump of coal), so we were able to deliver Christmas gifts on behalf of the Club to every family with children on our membership list. The families I delivered to were all smiles!

- Rick Smith

In recognition of the wonder and intrigue of opal, Rock & Gem has launched a limited-edition series, *Illustrious Opals*. Each digital issue contains:

- Unique columns about people, places, and history related to opals.
- Feature articles focusing on the science, geology, and artistry of opal.
- Profiles showcasing some of the many business within the opal industry.

The four issues have been downloaded and saved on the club’s Google Drive. You can access these digital issues at the following link:

https://drive.google.com/drive/folders/1_aQHdOgb4ibaLl6V8zlw8TuMTwzayp?usp=sharing

TCG&M General Meeting for January

Wednesday, 1/27/21

Look for the ZOOM link in your e-mail a day or two before the meeting. Those unable to attend online can join us through a phone number that will be provided at that time as well.
Tulip City Gem and Mineral Club  
December 2, 2020, 7:00 PM Board Meeting Minutes

7:07 PM – Zoom Board Meeting

Michael Larson, president, called the meeting to order. He shared that the board slate ballots were sent out Monday. The newsletter sent out ballots as well. A reminder for members to vote will send out by e-mail.

Approval of minutes - Shari made a motion to approve the October 14th Board meeting minutes, seconded by Rhonda. All in favor. Linda made a motion, Seconded by Jon to approve the October 28th General meeting minutes, as corrected. All in favor. Julia Sherwood made a motion seconded by Bob Sinke to approve the November 4th Board Meeting Minutes, as corrected. All in favor. Linda Winkleman made a motion seconded by Bob Sinke to approve the November 18 General meeting minutes, as corrected. All in favor.

Vice President - Sharon Luttikhuizen noted there would be no December meeting. The library is still closed to public meetings.

Juniors - Linda Winkleman – The Hoskins donation were made into 26 holiday baggies that will be dropped off at the junior’s houses.

Treasurer - Kurt Brinks noted there were some mailings and website updates made up some small expenses this month. Still have an established money market account. We will have to budget carefully next year. Budget committee may include Shari, Sue and Deb Smith.

Field Trip - Jon Mull has had some communication with Jody. He is hoping for a spring break trip to North Carolina. Jon might do a virtual basement field trip. Bob Sinke volunteered to help next year to plan a trip or two.

Newsletter - The newsletter will be sent out in place of a General Meeting. Mike Larson welcomes all submissions; would like a nice long newsletter. Mike has sent out our newsletter to other clubs.

Social Coordinator Linda - No report

Historian Betty – No report

Liaison-Rhonda No report

Show Chair-Sue nothing so far to report. It is a little early to start planning the show. Will wait until after the holidays. Kurt puts in MWF where we have a show and the club meeting dates by the end of the month. The dates of the 2021 show will be Sept 18th to 20th.

Moran scholarship will have no kids at that age this year. We will consider Grand Valley scholarships at the January meeting. The April Banquet item rose sphere tickets purchased will be kept for next year. Last winter workshops were very popular. Will address possible workshops in January meeting.

Julia has the books, The River Runs North and Emma’s First Agate for donation in Chet’s memory going to Zeeland library tomorrow. Julia will put a paragraph in the newsletter regarding the donation.

Shari and Bob moved to adjourn the meeting. All in favor.

Adjourn meeting: by 8:13 PM

Respectfully submitted, Brenda Olson
By Jim Brace-Thompson

Do you have specimens like desert roses, quartz crystal clusters, or geode halves that sat for eons in the open before being collected? If so, those specimens probably have baked-in dirt, grime, desert varnish, or encrustations from moss and lichens. Scrub as much as you may with a toothbrush and pick away with a dental pick, yet grime remains lodged within cracks and crevices of mineral and crystal structures. What to do?

A friend suggested a sure-fire way to clean specimens such as chalcedony desert roses with baked-in grime: soak them in a solution of diluted muriatic acid. Muriatic acid is sold with swimming pool supplies in hardware stores. It is used by rockhounds who dilute it with three parts water to one part acid to dissolve calcium or organics encrustations such as lichens. However, acids are dangerous to work with and to dispose of and thus are not especially recommended. Again, what to do?

Another friend suggested a much safer and more earth-friendly method of cleaning chalcedony desert roses and minerals with sturdy crystal structures. Start by soaking your specimen overnight in water and detergent, such as dishwashing liquid. Then use a dental water flosser or oral irrigator. Almost instantly, baked-in dirt and grime will disappear. This suggestion is a messy process. It’s best done outdoors, and you may want to don a rain slicker and goggles, if not a snorkel! Water will splash all over, but it will get the job done. Only do this with rocks and crystals that are sturdy and won’t dissolve in water or be dislodged by the flosser’s shooting spray.

The result will be a clean and beautiful specimen.
Author: Jim Brace-Thompson

Jim began and oversees the AFMS Badge Program for kids, has been inducted into the National Rockhound & Lapidary Hall of Fame within their Education Category, and is the president-elect for the American Federation of Mineralogical Societies, www.amfed.org.

Contact him at jbraceth@roadrunner.com.

Editor Note: Also reference Mineral Cleaning for Amateurs

http://www.johnbetts-fineminerals.com/jhbnyc/articles/minclean.htm

**Dig Day at Graves Mountain**

www.rockngem.com/dig-day-at-graves-mountain/

By Antoinette Rahn
Managing Editor, Rock & Gem

Graves Mountain in Lincoln County, Georgia is a familiar name within rockhounding circles, as it is one of the most prolific sites in Georgia, with a multitude of minerals extracted from the site every year.

The timeless videos shown below from 2010, shot and produced by Richard and Sandy Jacquot, owners of American Rockhound (www.wncrocks.com), featured members of the Mountain Area Gem & Mineral Association (www.wncrocks.com/magma/magma.html) enjoying a dig day at Graves Mountain.

The locality is divided into the upper pit (2 sections) and the lower pit, and as Richard explains, the formation of the area dates back 310 to 280 million years ago. Historically, Graves Mountain was a primary producer of kyanite in the U.S. Yet, it is also famous for rutile, lazulite, striking iridescent hematite, as well as pyrophyllite, illemnite, fuchsite, and cacoxen-ite, among others.

The sights and sounds of rockhounds on the hunt at Graves Mountain are music to the senses, as you learn more about this site, which Smithsonian Magazine includes on its list “Five of the Best Places to Go Gem Hunting.”

Caretaker of the mine, Clarence Norman, Jr (706-359-1544), does offer public digging at the site by appointment. In addition, in April and October, he and his wife, Melissa, host Rock Swap & Dig events. The site is owned by Asea Brown Boveri, a Swiss-Swedish multinational conglomerate based in Zurich.

More videos by American Rockhounds on their YouTube channel: www.youtube.com/user/wncrocks

American Rockhounds: Graves Mountain: Part One: www.youtube.com/watch?v=n57-JR4hKvg
American Rockhounds: Graves Mountain: Part Two: www.youtube.com/watch?v=A0n1ZZFval8
Tulip City Club’s First “Keokuk” Geode Collecting Trip: St. Francisville, Missouri

While recent club programs and proposed field trips have centered around geodes and geode cracking by members, our early interest in geodes was spurred by a trip to St. Francisville, Missouri. It was an April, 1972 weekend, the first of many extended weekend trips for the club in the years to follow. Joe & Dottie Moran, Chet & Bette Smith and family, Frank & Vivian Bolhuis, Gord & Jeanette Boone, Norm & Helen Gibson and myself travelled to Keokuk separately on a Friday. We met our host Steve Sinotte Saturday morning in Keokuk. He then guided us to his mine—an outcropping and high wall of the lower Warsaw Formation on the east bank of a creek, a tributary of the Des Moines River, just west of St. Francisville. Steve had done extensive work with a bulldozer clearing the area of trees and making the outcropping more accessible.

I recall it being a very hot day, especially for April. We were working on a west-facing wall with the sun boring down. It took serious rock hammer and chisel work to extract geodes from the Mississippian-age dolomitic formation—a rock unit approximately 250-300 million years old. By mid afternoon it became pretty brutal working in the direct sun. Taking a break, I cooled off in the shallow creek and noting a number of large, partially submerged geodes, smashed several on top of one another attempting to open. When one finally split it turned out to be an enhydro and released ancient water, exposing a pink calcite rhomb on smoky quartz crystals! 13” in diameter and weighing 52 lbs., it is a favorite of mine along with another smaller one that has two barrel calcites on a quartz interior. Yes, I do wish I had brought several others home to check out later.

Reminiscing recently with Bob Zigler, he remembers working for a long time to chisel out an especially large geode from the base of the wall and then longer yet to manually chisel it open. He didn’t want to take it home whole then find it was solid quartz. When finally split, it turned out to be an enhydro and exposed a beautiful quartz crystal interior. This was before any of us had pipe cutters or were even aware of this kind of application.

After a tiring but fulfilling day of work, we returned to Keokuk where most were staying at the Holiday Inn. Still in our dirty, work clothes, we filed into the dining room where our orders were taken. Bob Z. remembers specifically that the orders were mixed up, but everyone was so hungry we just ate what was put in front of us. I remember being presented with a entire catfish, head and all, on a wood plank, caught from the nearby Mississippi River.

We met Steve again Sunday morning when he took us to other area geode sites. A memorable one was when suddenly a deputy sheriff showed up with the property owner and
while our leader was not issued a ticket, we were summarily told to leave. Steve had obviously not cleared it with the owner. That afternoon we drove around Hamilton—the town just east across the Mississippi River from Keokuk, to explore the neighborhoods. One home perched on a hill had geodes lining the walkway and surrounding the house. I talked the owner into parting with a pair containing a botryoidal lining, one half with whisker-like marcasite crystals on the surface.

The following year, 1973, I became aware of Steve’s book, “The Fabulous Keokuk Geodes,” published in 1969, in which he mentions that most hollow geodes from his site contain secondary periods of calcite growth, some pink. Others contain iridescent brown calcite linings, barite, filiform (hair-like) pyrite crystals, crystals of goethite, hematite, selenite and kaolinite. Barrel and rhombohedral calcite crystals are quite common. Subsequently, the club purchased a copy which was donated to Herrick Library, making it available to the public as well as club members. It provides useful information about the occurrence and the origin of Keokuk geodes as well as photographs and site information. Borrowed many times as evidenced by the date due stamps, it is a rare book, now years out of print but still available for your use from Herrick. Not even a used copy can be found through Amazon so hopefully the library copy will continue to be well cared for. Just recently, Jon Mull mentioned he had the good fortune to obtain a used copy.

In more recent years, Shefflers Geode Mine in Alexandria, Missouri and Jacob’s Geodes in Hamilton, Illinois has been a favorite, visited by the Tulip City Club where the geodes are equally as impressive. It is my belief that the best geodes noted for their quality of hollow, quartz-lining, and often with secondary mineral growths, are those found in the in Iowa-Missouri-Illinois Warsaw Formation and are more interesting than those from Indiana.

Submitted by Bob Sherwood

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**On the Calendar:**

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<tr>
<th>Date</th>
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<tr>
<td>1/27/21</td>
<td>TCG&amp;MC General Meeting</td>
<td>Virtual / ZOOM</td>
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<tr>
<td>2/10/21</td>
<td>TCG&amp;MC Board Meeting</td>
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<tr>
<td>2/24/21</td>
<td>TCG&amp;MC General Meeting</td>
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<td>3/17/21</td>
<td>TCG&amp;MC Board Meeting</td>
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Our club is a non-profit organization sponsored by the Holland Recreation Department. It is a member of the Midwest Federation and the American Federation of Mineralogical Societies.

The general purpose of this club is to develop interest in and increased knowledge of minerals, rocks, gems, fossils, and the lapidary arts. The objectives of this club shall be promoted whenever possible, through family participation.

Meetings are held monthly on the last Wednesday of the month at the Howard Miller Community Center, 14 S. Church Street, Zeeland, MI at 7pm, unless announced otherwise in the Tulip City Conglomerate.

Junior Club welcomes young rockhounds and meets separately during the meeting.

To become a member, complete the form and meet separately during the meeting.

Advertising rates for club members are: $5 for business card size, $10 for ½ page, $15 for ¾ page, $30 for full page.

Non-member rates are double. Make check payable to: TCG&M with ad copy to Editor.

Tulip City Conglomerate
c/o Tulip City Gem & Mineral Club
P.O. Box 2082
Holland, MI 49424