

WASHINGTON COUNTY ROCKHOUNDS COMMUNIQUE



About the Washington County Gem and Mineral Society (WCGMS)

WCGMS is the home of the Washington County Rockhounds. The goal of WCGMS is to provide information and education about earth science and the rockhounding hobby. WCGMS meets the third Saturday of every month except February and March. The meeting begins at 10:30 AM. WCGMS is a 501(c)(3) and a Member of the Eastern Federation of Mineralogical & Lapidary Societies, Inc. To find out more about WCGMS please visit its Facebook page, Washington County Gem and Mineral Society – Maine.

2020 WCGMS Officers

President – Theresa Peek

Vice President – Nancy Tintle

Secretary – Jean Lombardo

Treasurer – Chris Peek

WCGMS Contact Information

WashingtonCountyGMS@gmail.com

207-417-0524

Rockhound Communiqué Monthly Features

President's Message

Although I don't make new year's resolutions, I do set goals for the new year. One of my goals this year is to communicate with WCGMS members more regularly. That goal quickly fell apart. I started this newsletter in mid-January and now in April it is finally going out.

2020 started off very "rocky" for me and Chris. We left in mid-January to do gem and mineral shows in Fredericksburg TX, Merritt Island FL, Melbourne FL, Sarasota FL, Pasadena TX, Robstown TX, San Antonio TX, Arden NC, Hickory NC, and Raleigh NC. We were pretty excited since the Florida and North Carolina shows were new for us. We made it through the San Antonio show before the rest of the shows were canceled due to Covid-19. We returned to Maine on March 21st, healthy and happy to be back home. Talk about a "rocky" start to 2020!

Here's my promise to you...more communication! Newsletters, emails, and Facebook posts

As mentioned in our last newsletter, for our club to continue and grow, we need your help! Please take a moment to read following sections: **Treasurer's Report**, **Club News and Information**, and **Upcoming Meetings** so you know what's going on with the club.

Theresa Peek

Treasurer's Report

Since the club started, we have raised \$548 in membership fees. We have also raised \$952 in fundraising (see ***Club News and Information*** for more information). We have paid out almost \$993 in fees to the IRS, the state of Maine, the EFMLS, and Way Too Cool (UV flashlight fundraiser).

We are now officially incorporated in Maine and have a bank account at The First in Eastport. The account has just over \$470 in it. WCGMS no longer owes us any money.

Chris Peek

Club News and Information

- 2020 Membership – We currently have 23 members – 14 are 2019 members who renewed for 2020 (all adult), 8 are new adult members, and 1 is a new youth member. 25 members have not renewed (18 adult and 3 youth).
- Membership Renewals – If you were a member in 2019 and haven't renewed, you can still renew. If you don't renew by June 1st you will fall into the non-member category. If there is no change to your membership (no additions or deletions of people, change in contact information, etc.), all we need is your payment. If there are changes, please submit a new form so we can update our records. You can pay by check or money order, made out to Washington County Gem and Mineral Society. Please mail any payments and forms to WCGMS, PO Box 65, Eastport, ME 04631.
- Members versus Non-members – Please note the two main differences between members and non-members. Members can attend club field trips, non-members cannot. Members receive monthly emails, non-members do not.
- 2020 Meeting Schedule – By unanimous vote (12 ballots were submitted – paper or SurveyMonkey), meetings will now be on the third Saturday of the month, and we will be skipping meetings in February and March.

Date	Location	Speaker
5/16?	Machias?	TBD
6/20	Pembroke	TBD
7/18	Calais	TBD
8/15	Members ONLY field trip	
9/19	Pembroke	TBD
10/17	Calais	TBD
11/21	Machias	TBD
12/19	Pembroke	Holiday Event

- 2020 Officers – By unanimous vote, your 2019 officers will continue to serve in 2020.
- Fundraising Update – The WCGMS raffle was won by Sue Riddle; the raffle raised \$97. The donations of Maine and Canadian specimens have raised \$170. The pins donated by

Ralph Kovach in New Jersey has raised \$64. The Way Too Cool UV flashlights have raised just over \$70. In 2020, Seaside Stones will sponsor another raffle; more details in a future newsletter. Remaining specimens, pins, and flashlights will be available at Seaside Stones when the store reopens in May. WCGMS has been applying for grants to help us begin our education outreach. We were notified by The First that we are being awarded a \$1500 scholarship. As we receive more information about this donation, we will pass it on.

- 2020 Field Trips – We have a field trip planned in lieu of the August meeting; more information will be provided to members as the date nears. We are still working on other field trips. If you would like to be involved in the planning of the field trips, please email washingtoncountygms@gmail.com.
- We need your help! – We are looking for donations of specimens and help with ongoing club activities. (We'll take monetary donations as well 😊) If you are interested in donating, writing an article for this newsletter, helping us finding speakers, being a speaker (we even have presentations from the Federation that you can use), etc., please email washingtoncountygms@gmail.com.

Upcoming Meetings

TBD due to Covid-19

Meeting Minutes

Date: December 7, 2019

Location: Machias Bay Chamber of Commerce

Presenter: N/A

Topic: Holiday Event

New Business: No formal business meeting or presentation.

Rock, Fossil, and Mineral Learning Stations, geared towards children was the focus of the holiday event as well as a gift exchange for adults.

We had 4 children participate in the Learning Stations. The learning stations included: Identifying rock types, learning the difference between rocks and minerals, building a trilobite fossil model, and looking at fluorescent rocks. Some of the learning stations involved the Rock Kits donated by The Houston Gem and Mineral Society. There were also rock giveaways for the children participants.

Six adults participated in our Rock Theme Yankee Swap (A.K.A White Elephant Gift Exchange)

Additionally, members present voted for the 2020 slate of offices and for change the dates of club meetings.

The meeting ended about 12:30 PM

Date: January 4, 2020

Location: Pembroke Library

Presenter: Chris Peek

Topic: Art in Rocks

Presentation: Chris and Theresa Peek discussed art found in rocks, including prehistoric rock carvings and cave paintings, modern rock sculptures, and natural rock that look like artwork. The Peeks brought some of their personal collection of Art in Rock examples.

In addition to the presentation there was a short business meeting and show and tell.

The door prize, a carved bumble bee jasper skull, was donated by the Peeks and was won by Henry Bell.

The meeting ended about 12:30 PM

Rockhound Communiqué Special Features

From the Maine Mineralogical and Geological Society

Rockin' Around

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December 2019

Are We Running Out Of Sand?

By Ed Clopton

What do you think is the world's second-most widely consumed natural resource? (Hint: water is #1.)

If you guessed *sand*, you win a prize of some sort. The worldwide demand for sand is exploding along with our need for concrete (roads and buildings), living area (expanding crowded coastal places like Singapore), natural gas (sand for "fracking"), glass (made mostly from sand), and electronics (silicon for semiconductors). Most sand is used just once—to build a road, to make a batch of glass, or pumped into the ground to extract natural gas—rather than being reused, so we need more and more all the time. Surprisingly, in many places there is not enough sand where it's needed, or of sufficient quality, to meet the demand.

Of course, sand isn't just sand. Contractors in Dubai—which sits at the edge of a huge sand desert—are importing construction sand by the shipload from Australia because the local material isn't up to spec. (*Yes, some people are indeed selling sand to*

Arabs.) Most sand is composed primarily of tiny grains of quartz, but the level of impurities and even the size and shape of the individual grains is important. Wind-blown desert sand grains are too smoothly rounded to lock together to make strong concrete; sand with too many grains of other minerals won't work for making glass windows or silicon semiconductor chips; and sand that's too far away from where it's needed doesn't help satisfy the demand.

So how bad is it? China is believed to have used as much sand since 2010 as the United States used in the entire 20th century. Sand is being mined from the Mekong Delta of Viet Nam at such a rate that half of the delta could be removed by the end of the century. Forest and valuable farmland in Wisconsin are being dug up to mine trainloads of high-purity frac sand for the natural gas industry. In parts of Africa, India, and

elsewhere, organized crime has moved into illegal sand mining to supply the demand, leading to violent clashes with law enforcement, journalists, and environmental activists. In India alone, "sand mafias" are responsible for hundreds of injuries and dozens of murders.

The environmental cost of all this sand mining—especially when unregulated or illegal—is substantial. Sediment stirred up by dredging from rivers or the

seabed can suffocate fish and bury underwater vegetation far from where the dredging took place; some local fishing economies in southeast Asia have been decimated by sand mining. Riverbed sand mining has been largely phased out in many Western countries, but undermining of riverbanks to mine sand continues to cause serious damage to farmland and structures in Africa and southeast Asia.

The collateral damage caused by importing sand from neighboring countries to add some 50 square miles to Singapore's land area in the last 40 years has been so great that Indonesia, Malaysia, Viet Nam, and Cambodia now refuse to export sand to Singapore.

Scientists and engineers are working on substitutes for sand as aggregate for concrete and on developing concrete that requires less sand aggregate. Others are exploring ways of regrinding concrete to reuse the aggregate. But until those new technologies come into production, sand will remain a hot commodity on the world market.

For further reading: Beiser, Vince. Why the world is running out of sand. BBC Future, accessed 11/20/2019 at

<https://www.bbc.com/future/article/20191108-why-the-world-is-running-out-of-sand>



Sand mining on the Red River, Yunnan, China. Photo: Wikipedia, by Vmenkov, used under Creative Commons Share-Alike license.

From the Maine Mineralogical and Geological Society's Rockin' Around – April 2020



From the EFMLS News – January 2020

LINKS TO EXPLORE

The following are links that contain information relating to the hobby. If you have a favorite go-to link for information, please send it to efmlsnews.editor@gmail.com and you may see it here.

American Federation of Mineralogical Societies (AFMS) – www.amfed.org

American Lands Access Association (ALAA) – www.amlands.org

American Geological Institute (AGI) – www.americangeosciences.org

Gemological Institute of America (GIA) – www.gia.edu

Mineralogical Society of America – www.minsocam.org

National Speleological Society – www.caves.org

Smithsonian Magazine Online version (daily) – www.smithsonianmag.com/smartnews

Society of American Silversmiths (the care of silver, glossary of silversmithing terms and tools) – www.silversmithing.com

US Geological Survey ((USGS) provides information on “current conditions and earth observations” – earthquakes, water, volcanoes, landslides, etc.) – www.usgs.gov

Web Sightings from 2019 (from Maryland Geological Society, “A wealth of articles and news reports...appears on the web every day. As a service to our membership and others interested in paleontology and geology, links to some of these articles and news report appearing in 2019 are gathered here...Links are arranged by publication date (latest to oldest)) – www.ecphora.net/mgs/new_interesting_articles.html

From the EFMLS News – February 2020

DID YOU KNOW...

-- A team from Oklahoma State University Center for Health Sciences examined teenage T. Rex dinosaurs from Montana and could determine their age by the rings in their leg bones. They also determined that T. Rex grew as fast as today’s animals and birds. www.sciencedaily.com/releases/2020/01/200101144031.htm, Science Daily, January 1, 2020.

--A meteorite that crashed on earth in September 1969 near Victoria, Australia, contains material that is about 7 billion years old—7,000,000,000—making it the oldest solid material known to exist on Earth and older than our Sun. www.sciencedaily.com/releases/2020/01/200113153306.htm, Science Daily, January 13, 2020 and www.smithsonianmag.com/science-nature/meteorite-grains-are-oldest-known-solid-material-on-earth, Smithsonian Magazine (on line version).

--“...death of dinosaurs, it was all about the asteroid—not volcanoes.” A Yale University assistant professor of geology and geophysics put forth the theory that it was strictly an asteroid that sent the dinosaurs to extinction that the volcanic eruptions in India, around the same time as the dinosaurs went extinct, was not the cause of their demise. www.sciencedaily.com/releases/2020/01/200116141708.htm, Yale University, Science Daily, January 16, 2020.

From HGMS Events for the Week of 4/6

Welcome to Mindat

For those of you who don’t know, Mindat has been the world’s leading authority on minerals and their localities, deposits, and mines worldwide for almost 20 years. The mission of Mindat is to advance the world’s understanding of minerals by collecting, organizing, and sharing mineral information that is then used daily throughout education, academia, and industry.

As of today (April 5), the database includes 5,593 minerals, 2,895 rock names, 306,504 worldwide localities, almost 1.3 million unique localities, and over one million photos of mineral specimens and localities. In addition, Mindat has over 63,000 members from around the world.

Jolyon Ralph (founder) operates the site with a dedicated Management Team of about 50 individuals from around the world that ensure accuracy of submitted content and oversee the editorial policies of the site. In fact, two members of the Mindat Management Team are also members of HGMS!

So, how do you use Mindat? First, go to the website (Mindat.org) and if you are not already a member, please do so by registering and having your account activated just as HGMS did (yes, we have a homepage on Mindat!) From there, you can access mineral/rock names, photos, and localities by using the search function on top of the homepage. While you do not have to be a member to simply visit the site, becoming a member will open up many areas of Mindat that are not accessible to the casual visitor. Once you become a regular contributor (Level 1), you can then submit content to Mindat.

In addition, Mindat has a very active message board where members can submit questions to experts about minerals, rocks, geology, localities, field collecting, mineral photography, etc. Have a specimen you need identified? Mindat can help! Needing advice on where to dig while on vacation, just ask.

The best part of joining Mindat; it's free! However, to keep the site operating and continue making improvements, donations are gladly accepted. In fact, as a member, you can sponsor a mineral or a locality for one year.

So the next time you are sitting at home in front of the computer, give Mindat a visit.

Outback Opal Hunters (Season 2) on Discovery Channel (Thanks to Randy)

Set your DVRs for the remaining episodes. If you have DirectTV on Demand, you can binge watch all of season 2 - 12 episodes.

<https://go.discovery.com/tv-shows/outback-opal-hunters/>

Gemology Links and More (Thanks to Debbie)

All about Gem Inclusions: <https://www.gems-inclusions.com/>

Gem Interest (in French) Geminterest.com : [base de données gemmologique et minéralogique : minéraux, pierres, gemmes, imitations et synthèses](http://base.de.donnees.gemmologique.et.mineralogique.mineraux.pierres.gemmes.imitations.et.syntheses)

Gemology Online Forum: GemologyOnline.com • [View forum - General Gemology](#)

Enamel Art Museum (Italy) CKI Italy - About

Etching Steel for Texture Plates (YouTube): [How to Etch Steel Texture Plates for the Durston Agile Rolling Mills - YouTube](#)

Quick Mineral Identification (YouTube)

<https://www.youtube.com/watch?v=YyyJz6zeUsg>

Geology Various (Thanks to Paul)

American Geological Institute Webinars

<https://www.americangeosciences.org/webinars>

Australian Institute of Geoscientists

https://www.youtube.com/channel/UCLqmTfmB-kxPhgIYx_T27KA

Benjamin Burger

<https://www.youtube.com/channel/UC6IxWv14YRWhd07XOMdraRA>

Central Washington University

https://www.youtube.com/user/CentralWashU/videos?view=0&sort=p&shelf_id=2

https://www.youtube.com/playlist?list=PLwNJg2mCrcQSWMxs2jvgp_lvpeffAUd6e

CSPG - Canada's Energy Geoscientists

<https://www.youtube.com/channel/UCo47bljmfuQpbkFCQBFVAeA>

CSUFullerton_GeologyDept. - YouTube

<https://www.youtube.com/channel/UCLeTpwLkLpbDLVClI3O10fQ>

European Geosciences Union

https://www.youtube.com/channel/UCS_7GuTIk_PEBto2w-nXgg

Engineering Geology And Geotechnics

<https://www.youtube.com/watch?v=fvoYHzAhvVM>

Geologists of Jackson Hole

<https://www.youtube.com/channel/UCIqF4IIv75GZMROmG3myEA/videos>

Geological Society of London

https://www.youtube.com/channel/UCzhX_LOB1xUwIDmckTrPOqw

https://www.youtube.com/playlist?list=PLNksJlpAKcLiMM7OmC_J3r8Ku84SznPNE

Houston Geological Society

<https://www.youtube.com/user/HGSGeoEducation/videos>

<https://www.youtube.com/channel/UC4E1jMy025zyFJ2ZxPEv0Ug>

<https://www.youtube.com/watch?v=A1zGgOktFQ8>

<https://www.youtube.com/playlist?list=PLs6d6cNggaUbA2dCgH1cvRqkT1m5xOiG>

NASA Astrobiology

<https://www.youtube.com/channel/UC14eJIZ7EWssOo9sBGp4d7Q>

<https://www.youtube.com/user/NAIVideoResources/channels>

SETI Institute

<https://www.youtube.com/user/setiinstitute/playlists>

Solid Earth group (PGP)

<https://www.youtube.com/channel/UCfb00B9oo3ffXjJcO4HwLtw>

<https://www.youtube.com/watch?v=d5QIs4mu6Wg>

<https://www.youtube.com/watch?v=NWpWr3--9DQ>

WASHINGTON COUNTY GEM AND MINERAL SOCIETY, INC.

Membership Application for 2020

Please select one:

Individual membership (must be 18 or older) - \$12 _____

Two-person membership (one person must be 18 or older) - \$20 _____

Family membership (up to four people - one person must be 18 or older) - \$24 _____

additional people may be added for an extra \$6 per person _____

Number of additional people _____

Household Information:

Mailing Address _____

Town or City, State _____

Postal Code _____

Telephone No. _____

Member Information:

<i>First Name</i>	<i>Last Name</i>	<i>Email Address</i>	<i>Age (if under 18)</i>
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Make checks payable to: Washington County Gem and Mineral Society (WCGMS)

Mail application and dues to: WCGMS, PO Box 65, Eastport, ME 04631