

February 2024



OCMS SHALE MAIL



**Welcome to an in-person meeting
Friday Feb 9th, 2024 at 6:30 pm!**

See you at: 81 Laroe Rd Chester, NY (Town of Chester Recreation Senior Center), (From KINGS HWY, Turn on Laroe Rd by the UPS office building)

[CLICK FOR MAP](#)

2024 CALENDAR

09-February-Derek Yoost Gemstones of Ancient Egypt
08-March-Ken Daubert Wurtsboro & Rt 209 Mines
12-April-Steve Okulewicz Collecting and Identifying Common Minerals
10-May-Charles Merguerian Fault Zone Minerals of the Queens Water Tunnel, NYC
14-June-OCMS Show-no meeting
12-July-TBA
9 August-TBA
13 September-TBA
11 October-TBA
8 November-TBA
13 December-OCMS Holiday Celebration

WHAT'S INSIDE?

Feb 9th Lecture	2
January 12th Minutes	2
List of Rocks, Minerals & Gemstones of New York!	3
Orange County Mineral Society, Inc. Officers:	7



Mailing Address:

254 Rt. 17K, Suite 204, Newburgh, NY 12550-8300

“THE GEMSTONES OF ANCIENT EGYPT!”



My passion for fossil collecting started when I was 8 years old and has never stopped since. Starting at the age of 14, I worked in a rock shop (Jim's Gems) in Wayne NJ and gleaned a vast knowledge for the collecting and lapidary hobby. For the past 44 years, my collection has grown to include fossil amber, fish, reptiles, and mammals that are unique to New Jersey, New York, Pennsylvania, and Maryland. I also collect local minerals from New Jersey, shells, bones, meteorites and other natural history items and artifacts. This hobby has brought me to many interesting localities and fascinating people. I also maintain a web site on my favorite fossil collecting site, Big Brook at njfossils.net. To date, I would guess that my favorite fossil that I found is the insect (a blood sucking Midge that may have feed on dinosaurs) that I found in Cretaceous formations in Sayreville NJ. It was new to science and was eventually named after me (Culicoides yoosti).

The Egyptian civilization lasted for approximately 3000 years, and at its height, covered most of the known world. It was a hub of trading from all corners of the kingdom. Above it all the Egyptians valued Gold, but there were other stones that the Egyptian craftsmen used to craft their wares and grave goods. In tonight's lecture, we will explore these pretty stones and where they were either mined or collected from various localities, including the Heavens.

Minutes

OCMSNY January 12th, 2024 Meeting Minutes

January 12th Minutes

By: Ken Daubert

OSMSNY attendance sheets were completed. Name tags issued. Wonderful refreshments available.

There were 18 enthusiastic members in attendance.

The December minutes and Treasurers' report were approved. In addition, the membership voted and approved a \$1,000. Donation to Museum Village to help them with their plumbing costs for repair of the bathrooms. Also approved was an annual stipend of \$500. For club tax preparation to our accountant. There was discussion of possibly providing a donation for Senior Center meetings refreshment fund. To be revisited at our next meeting.

The evenings speaker, Scott Braley, did an amazing presentation via Zoom on Herkimer Diamonds. His discussion on opening a pocket of Herkimer diamonds at the Ace of Diamonds Campground was enlightening. One could pay \$2400. For a guaranteed pocket of dozens of Herkimers or a "take your chance" \$15. Dig fee... Hmmm? Scott went on to describe the fascinating inclusions found in Herkimer diamonds. Pyrite, Anthraxolite, Water, Brine, Air bubbles to name a few. We were shown many fascinating pictures of negative crystals within the specimens. Scott suggested reading "A Guide to Herkimer Diamonds" by Michael Walter for more information. His group also collected at the Crystal Grove Campground where they found many good specimens of Calcites and Herkimers. Thank you Scott for an excellent presentation.

Our meeting went on after a short break with discussion about the Wild Acres Event in North Carolina this fall sponsored by the Southeast EMFLS.

All members were reminded about volunteering for our June 1st and 2nd, 2024 Mineral Show at Museum Village. The meeting concluded with the always anticipated mineral raffle conducted by our outstanding Club President, Michael T. See you all at our next meeting on Friday, Feb. 9th at 6:30pm in the Chester Senior Center.

List of Rocks, Minerals & Gemstones of New York!

by [JEREMY HALL](#)

[August 29, 2022, 5:29 pm](#)

“Derek is going to give a lecture on the Gemstones of Ancient Egypt so I thought you may all enjoy this article I found on specimens right here at home”.

There’s more to New York than its name-sake city. In addition to plenty of beautiful countryside, New York also has an outstanding array of minerals and gemstones that can be found. From the famous Herkimer Diamonds to lesser known minerals like diopside... all of them can be found in this state.

So, let’s get down to it and I’ll show you a list of some of the rocks, minerals, and gems in the state of New York.



1. Quartz (Herkimer Diamonds)

We all know quartz, for many of us it was the first stone to catch our interest. It’s a macrocrystallized form of silica, creating hexagonal crystals of varying lengths with pyramidal termination. The form is well known enough that most crystals in media are just quartz drawn with different colors.

There are many famous varieties of quartz, but when it comes to clear quartz there’s one real prize: Herkimer Diamonds. These are simple [quartz crystals](#) that are terminated on both ends, an extreme rarity compared to the more common single-terminated crystals that are found across the world.

Herkimer Diamonds are one of the most famous [quartz varieties](#), known for their clarity and well-formed pyramids. Their formation in dolomite was exceptionally slow, which is why the crystals are so exceptionally well formed.

These “diamonds” are found in very few places in the world, and those formed in the **dolomite outcroppings near Herkimer** are widely considered the best. They’re primarily found on paid digs, which are readily available.



2. Garnet

The gem of New York state is the humble garnet. These gemstones are usually known to be red in color, and those coming from New York fit the bill there. While much garnet is heavily included, gem-grade material can be found and faceted to create beautiful stones with a deep hue.

The garnet family includes many different stones. These range from the yellow-to-orange spessartite garnets to the more exotic bright green tsavorites. There are even blue varieties that show up in vanishingly small quantities across the planet. These blue garnets are almost priceless, commanding prices that rival or exceed the classic precious gemstones like sapphire and emerald.

The garnets found in New York are of the almandine and pyrope families. Almandine is the most common garnet and much of the material ends up being used as an abrasive for industrial applications. Coloration in the state is usually of the red variety, but purple, green, and yellow stones also show up on occasion.

There are several paid dig sites available for those looking for garnet, as well as mine tours available. Perhaps the most famous of these is the [Barton Garnet Mine](#), which is also the world’s oldest functioning industrial garnet mine.

3. Calcite



Calcite is a very common mineral, showing up as a crystallized form of calcium carbonate. Calcite crystals are beautiful, if fragile, and are a frequent site in collections of rock collectors. In other cases, calcite is carefully removed from other specimens like quartz since

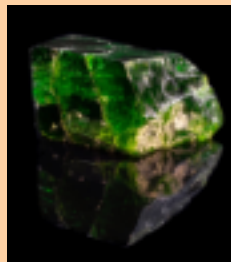
List of Rocks, Minerals & Gemstones of New York! Cont

it can also present as a thin white film of crystals on other minerals.

Calcite is just one form of the mineral calcium carbonate. Calcium carbonate makes up many things in nature and it's one of the few minerals that also has a biological origin on occasion. The shells of many mollusks are made of calcite, with a few being the polymorph aragonite. Calcite forms more quickly than most minerals, and its growth can be measured in stalactites in some caves.

Calcite, as a pure mineral, appears as a white prismatic crystal. Quite often, however, it's seen in a massive form of interconnected crystalline growth. On many occasions, it will also have impurities that grant color to the crystal. Those found in this state tend to be of the "honey" variety, which is deep amber to light yellow color. Blue specimens, often massive, can also be found in a few locations.

Calcite can be found at many locations in the state, **most of them concentrated east of Lake Ontario and along the border with Canada.** There is also a strong concentration in the southeast of the state along the **Hudson River.**



4. Diopside

Diopside is a mineral that contains magnesium and calcium, creating monoclinic crystals. It's most often white, but there are two varieties used as gemstones. These are chrome diopside, a personal favorite, and black star diopside. This mineral is a bit soft, at 5.5, which restricts gemstone use to pendants and earrings to avoid damage to the stone.

Most diopside isn't of gem quality. Instead, it's often found intermixed with mafic (low silica) stones in small quantities. Much of the material doesn't even emerge as fully formed crystals, instead being part of the granular structure of

other stones. Diopside was primarily used as a precursor to the chrysotile fibers known as asbestos, but this requires heavy alteration and diopside doesn't contain it when it's removed from the ground.

Diopside has some serious potential in technology that is being investigated. In various forms, it's been used as a way to strengthen glass and glass-ceramic materials. It's even being investigated as a way to help out with nuclear waste disposal.

If you want to acquire a sample of New York's diopside the following areas are your best options:

Near Amity

Near Ossining

Lawrence County

These areas are known to have higher quality crystals, but the majority of the material in the state is industrial in quality.

5. Tremolite



Tremolite is a strange, fibrous crystal. It's actually one of the forms of asbestos, although it lacks the danger of chrysotile asbestos. While it's

fibrous, it still grows in long crystals with some clarity, creating very unique-looking mineral samples. The material is mainly of interest to collectors these days since asbestos has been replaced with safer materials.

Tremolite is actually an indicator of metamorphic geological activity. It converts to diopside with high enough pressure and heat. Nephrite jade is actually a form of tremolite as well, making this an even more important mineral for those who study the earth. It appears that the mineral becomes more green as the iron content increases.

Tremolite crystals can be found in New York. The material is only mined commercially in India

List of Rocks, Minerals & Gemstones of New York! Cont

these days and is considered a contaminant in the majority of mines where it's found. As such, there are still large deposits of it that haven't been exploited. It's an easy score in a few locations in the state.

I'd recommend taking a look at Saint Lawrence County, where there are a few known locations that host great examples of the mineral.



6. Tourmaline

Tourmaline is a crystal of many faces. Or, more specifically, of many colors. Tourmaline can be found in a bewildering array of colors, from the unique two-tone watermelon tourmaline to the deep red of rubellite. The stone makes a splash wherever it goes. Even the most common, simple variety of black tourmaline (called schorl) is a beauty of nature.

Tourmaline is a common find in pegmatites. Pegmatites are extremely coarse-grained stones that have large crystals of different minerals making them up. They often contain many different kinds of crystals and tourmaline is among the most commonly found. The vast majority of these will be schorl, with other finds being dependent on the region.

The main variety of colored tourmaline found in New York is [a green variety](#) known as uvite. This forms into dark, green-colored crystals with a unique structure not seen in most samples of the material. This unique material is highly sought after by tourmaline connoisseurs.

Tourmaline can be found in pegmatites across the state, the best sites are along the Hudson River.



7. Labradorite/Rainbow Moonstone

Labradorite is a feldspar mineral with a unique optical effect. When cut properly the internals of the stone appear

to glow with a variety of colors, usually with a dominant blue or gold tone. [Rainbow moonstone](#) is simply transparent labradorite, it's not actually a form of moonstone and displays an inner fire instead of the softer effect of normal moonstone.

Labradorite is a popular mineral these days, with large deposits in Madagascar and Canada producing great material regularly. It's one of the least expensive stones with an optical effect since it occurs in large masses, most of the beauty comes down to the lapidary handling the material. Properly cutting labradorite is not the easiest task.

It's also found in New York as both varieties, although the dominant variety is dark-colored labradorite. The region consistently produces impressive specimens, often without the need for any cutting at all. This makes New York one of the few regions in the US that contain proper labradorite.

The best material comes from **Adirondack State Park and the surrounding areas**. Make sure you're legal to collect, but once that's taken care of you'll be able to look for your own impressive, fiery specimen.



8. Sphalerite

Sphalerite is the primary ore of zinc, usually associated with the lead ore galena and other sulfide minerals. Sphalerite can be found intermixed with igneous stone or as crystals on its own. These crystals range from pale yellow to deep red to black depending on the impurities contained within. More transparent specimens are usually more prized, since solid black sphalerite is much more common.

Zinc is an important metal, although it's not one we think about much. It's in our money, it's used to coat steel and resist corrosion, and it's the second component of brass. While a secondary metal to things like iron it's still something prized

List of Rocks, Minerals & Gemstones of New York! Cont

for industrial uses. It's used in dozens of industries across the globe.

New York tends to produce some of the better examples of this mineral. It tends to have a light yellow color and good clarity, making it distinct from the sphalerite of many other nearby regions. It's still mined and processed in New York to this day, making it a vital part of the economy of the state.

Sphalerite can be found anywhere there's a zinc mine nearby. The bulk of these mines are in **Lawrence County** and **Wayne County**. All you need now is a legal place to access the minerals and you'll be good to go!



9. Halite

Halite is the mineral form of sodium chloride. It's best known as rock salt, the bulk kind which you buy for uses other than cooking. It's also broken down into smaller crystals and used as table salt frequently, which is what you get when you're not buying sea salt for your cooking needs. It's an important, and strange, mineral.

Halite appears as a clear-to-white cubic crystal. These crystals can be quite large in some formations and are often colored by impurities. If you've ever had Himalayan Pink Salt, for instance, you've had halite with a bit of strontium, molybdenum, and strontium. Local salts are often known for their inclusions, although some like green halite colored with malachite, shouldn't be used at the table.

Halite is mined for salt purposes in New York. It's on the more boring end of the halite spectrum, the majority of the material is simply clear or white and in simple formations. On occasion light pink or other colors show up but these are quite rare with samples from this state.

Halite is found throughout the state in

many locations. The better samples will come from near the **salt mines near the Finger Lakes**. Finding a good sample may take some time, but if you've been looking to own a big chunk of rock salt then that's where you'll find it!

Wow! I don't know about you but this article is really giving spring fever! With spring just around the corner it's a good time to start researching some of the areas in this article or perhaps other areas that interest you. Start planning rock hounding trips now.

Another thing that could be mentioned here is something that we go over every year but is so important when we go out on these trips that we all live for. Keeping yourself safe. Lets all remember to take along and wear the proper personal protective equipment. Wear the steel boots, a hard hat, gloves, glasses and suitable clothing for the area you will be working. Make plans in the area for lunch. Either bring it with you or eat out but most importantly is water. Keep plenty of water with you. The warmer it is the more you will need. It's so much fun to go on a hounding trip, it makes a great day so make sure your evening is just as great by going home the same way you went to the site in the morning just a little more tired.

Whether you go rock hounding on your own, with a group or with the club articles are always welcome. Please just send them to pacut-garnet@gmail.com to be added to your monthly Shale Mail. Please if you send me an article include at least 2-4 Pictures.

Speaking of articles, I would like to challenge all our members to write at least one if not more articles for our newsletter. Topics are infinite. They include anything to do with earth sciences, geology, rocks, minerals, crystals, collecting sites, rock hounding trips and so on, and so on, and so on. You get the idea lol.

Let's all have an awesome 2024!

OCMS members are covered by Society-sponsored insurance.

OCMS Disclaimer

The editor and the OCMS are not responsible for the accuracy or authenticity of information in the articles accepted for publication, nor are the opinions expressed therein necessarily those of the officers of the OCMS or the editor.



Clickable Interactive Directory

[OCMS Sponsored Mindat Page](#)

[OCMS sponsored Town Page](#)

[Duke Labs](#)

[Wildacres](#)

[OCMS Facebook](#)

[OCMS Website](#)

[Making Minerals](#)

Orange County Mineral Society, Inc. Officers:

President:	Mike Tedford	(845) 542-6441	<u>Click to email Mike</u>
VP/Programs:	Gary Kerstanski	(845) 978-4141	<u>Click to email Gary</u>
2 nd VP:	Alex Kerstanski		<u>Click to email Alex</u>
3 rd VP:	Ryan Richardson	(845) 629-5120	<u>Click to email Ryan</u>
VP Emeritus/Historian:	Frank Clyne	(845) 361-4710	<u>Click to email Frank</u>
Treasurer:	Ron Nelson	(914) 850-2486	<u>Click to email Ron</u>
Show Chairman:	Gavin Hannah		<u>Click to email Gavin</u>
Membership Com Chair	Brigitte Nesteroke	(845) 386-4119	<u>Click to email Brigitte</u>
Secretary:	Ken Daubert	(845) 551-4882	<u>Click to email Ken</u>
Shale Mail Editor:	Alison Pacut	(845) 902-8562	<u>Click to email Alison</u>
Webmaster:	Ron Nelson	(914) 850-2486	<u>Click to email Ron</u>
Field Trip Leader	Frank Vigilante	(570) 618-2770	<u>Click to email Frank</u>