

# Rock Writings

February, 2023

Newsletter of the Nevada County Gem & Mineral Society

Vol. 56, #2

## Going to Tucson 2023?

Most travel and crowd-related issues due to the pandemic have relaxed, and it might be a good time to make a run to Quartzite or Tucson. The previous couple years definitely had an effect with some shows cancelled, much-reduced crowds, and as a result, in some cases – super deals! There are 42 shows listed in Tucson 2023. But be aware, some are just wholesalers/wholesale only, permanent dealers, may not be going on at the same time, or are just rock shops. But that will still leave most of the biggest shows available around the second weekend of Feb with more than 30 shows to visit. And “cash is king”. With cash, even at some wholesalers, the same deal can be had with the public. And while some wholesalers may need a wholesale license, most only need a business card (and cash) to make the wholesale deal.

Logistics and planning can be a real hassle, especially in past years with lodging. What you are willing to put up with and where to stay are personal choices (hotel, Air BnB, access to private clubs or military bases, and camping). Wherever you go, security should be a consideration because with money and gems rolling around town, theft is an issue, prudent vehicle security is a must! When you get this newsletter, Quartzite events will have largely ended, but it still a good “halfway” point with lots of desert camping around town, and more shopping at some permanent establishments.

Other good advice is to bring a cart or collapsible hand truck (rocks are heavy), packing tape (to seal flats and strap to the cart), a sharpie (to note prices paid since action can be hot and you may not remember later), a backpack with water/sunscreen/more soft packing for delicate items, and small gems/jewelry. And wear REAL COMFORTABLE shoes!

Listed below are links to shows and calendars for Tucson 2023. XPO press has a link to the EZ-Guide which will be published online and distributed free around town on January 20<sup>th</sup>, it is literally everywhere. It has a nifty calendar with a bar chart and you can see which shows are occurring the same time to maximize your trip impact – it also has maps and addresses for the shows.

<https://xpopress.com/showcase/profile/1/tucson-gem-mineral-fossil-showcase#>

<https://tucsongemshow101.com/schedule-2023>

<https://www.tgms.org/show>

<https://jogsshow.com/tucson-gem-show-schedule/>



The 2023 EZ-Guide/Tucson (above), and just one of the 42 shows (left). T Grass Valley show would fit in less than the smallest “La Plaza” tent!

## A Note from the Membership Chair

Please wear your name badge! As an older, returning member of the club I have to admit that I don't know very many of you on sight. As membership chair that is doubly embarrassing as I should know you, so I can give you the proper membership card and update your membership information correctly.

As I was struggling with this at the January meeting, another long-time member came up to me and asked why folks were not wearing name badges. Perhaps she noticed that I was one of the few in the room with a name badge on. She reminded me that in the past, when a new member joined an extra amount was added to the membership fee to help with the cost of the badges.

So, on behalf of the new members, and some of us older members who have not met you in person yet, I am asking all of us to wear name badges to the meetings and perhaps at the show.

The club asks \$8.50 currently for each badge. The badges cost \$15.00 and the club thus subsidizes this cost. If you do not have a badge I'd be happy to order one for you at the \$8.50 price.

Thank you! -Charles Lindquist, Membership Chair

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## The Best Comet of 2023 May Soon be Visible to the Naked Eye

The year is off to a great start for comet hunters, as what could be the best comet of 2023 is now set to take center stage in January and February. Comet C/2022 E3 (ZTF) will make its closest approach to the Sun on Thursday, Jan. 12. Then, after zipping around the Sun, it will make its closest approach to Earth on Wednesday, Feb. 1.

Here's everything you need to know to view Comet C/2022 E3 (ZTF) as it treks through the sky.

Where did Comet C/2022 E3 (ZTF) come from? Comet C/2022 E3 (ZTF) was first discovered in March 2022 by the Zwicky Transient Facility (ZTF), which scans the entire Northern Hemisphere sky once every two days from Palomar Observatory in California. You may have noticed many other comets have the acronym ZTF in their names, too. That's because they were discovered by the same facility.

C/2022 E3 began its long journey in the far outer reaches of the solar system, within the Oort Cloud. The comet will make its closest approach to the Sun, or reach perihelion, on Jan. 12, when it comes within 1.1 astronomical unit of our star. (One astronomical unit, or AU, is the average Earth-Sun distance.)



*Comet C/2022 E3 (ZTF) glows green and shows off a stubby tail against the dark background sky in this shot, which totals 44 minutes of exposure time with a William Optics Redcat 51 and ASI2600MC.*

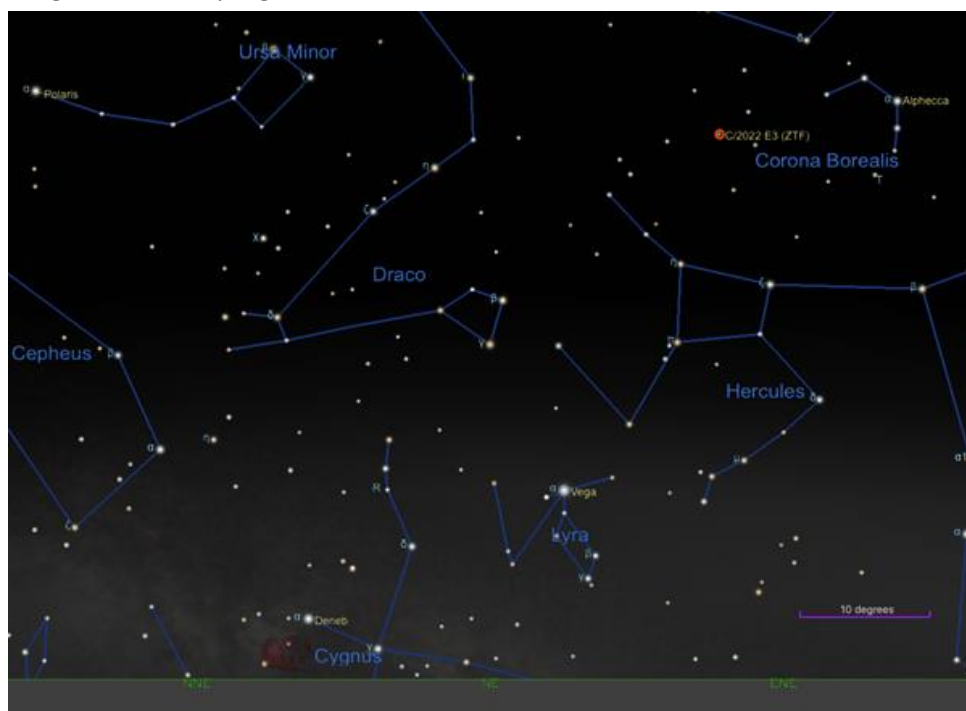
Although being closer to the Sun can make some comets intrinsically brighter, at perihelion, C/2022 E3 will still sit 0.71 AU from Earth, meaning it likely won't reach naked-eye visibility at this time.

After rounding the Sun, C/2022 E3 will continue to grow brighter through the end of the month. The comet's brightness is predicted to peak around Feb 1, when it makes its closest approach to Earth by passing within about 0.28 AU of our planet. At this point, many observers and astrophotographers hope C/2022 E3 will reach naked-eye magnitudes as it skims through a particularly rich region of the sky near the northern pole, setting the scene for some gorgeous photos.

Even at its brightest, however, Comet C/2022 E3 (ZTF) is not expected to form a bright, long tail that's visible without a telescope. Still, even without a tail, the comet will be a memorable sight. Plus, comets can always surprise us with unexpected outbursts, so it's worth following C/2022 E3's progress to see what it will do!

Currently visible to observers in the Northern Hemisphere, the best time to view C/2022 E3 is in the early morning just a few hours before dawn. The comet's brightness now stands at about magnitude 7, making it easily visible through binoculars or any small telescope. And if the comet brightens to magnitude 6 or better, C/2022 E3 will be visible to the naked eye under good conditions.

As the comet approaches the Sun this week, a waning gibbous Moon dominates the early-morning sky, cutting down on visibility. Nonetheless, it's worth trying your luck tracking it down with binoculars or a telescope.



*Comet C/2022 E3 (ZTF) reaches perihelion on Jan. 12. Around 4 A.M., you can find it high in the northeast, floating in the constellation Corona Borealis.*

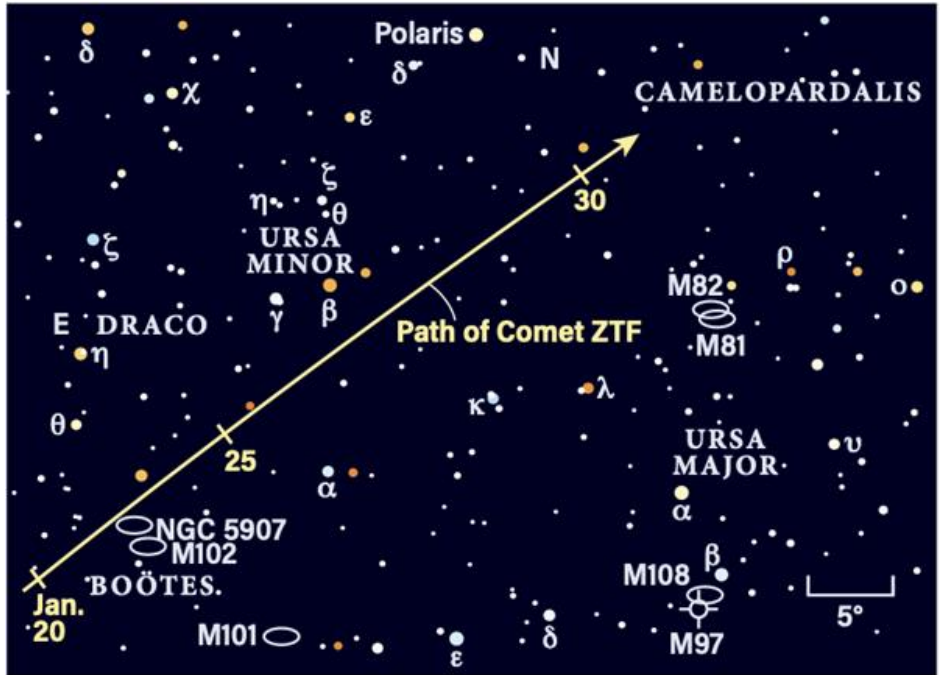
Try zooming in on the green-hued fuzball as it springs from its current residence in Corona Borealis up through Boötes and Draco, passing through Ursa Minor near the cup of the Little Dipper at the end of the month. As C/2022 E3 swings through the inner solar system and passes Earth, it will appear to cover large swaths of the sky each day, tracking close to the North Star, Polaris. By the time C/2022 E3 passes near Earth in February, the comet will lie in Camelopardalis.

This week, C/2022 E3 rises in the northeast around midnight, climbing higher in the sky as dawn approaches. That makes it best for early-morning observers. However, if you're willing to stay up late next week, starting on Jan 16, you can try spotting the comet before the Moon rises around 2 A.M. local time. (Note that C/2022 E3 won't be very high in the sky at this point, so you'll want to get yourself to high ground and opt for a viewing location with a clear view of the northeastern horizon.

By Jan. 18, without the Moon to interfere, C/2022 E3 will rule the early-morning sky. It will then be traveling through northeastern Boötes headed for Draco. Along the way, on Jan. 23, the comet will pass northeast of the galaxies M102 and NGC 5907. One day later, any broad tail the comet might sport will quickly narrow (within about a day) as the orbital planes of the comet and Earth cross. Just as quickly, however, the tail will appear to spread back out after the crossing.

On the last day of January, C/2022 E3 is just 11.5° from Polaris and moving at a speedy clip. The comet will cover about 12" per minute, forcing astroimagers to opt for shorter exposures if they seek to capture any sharp details.

Shortly after C/2022 E3 makes its closest approach to Earth, the comet will become visible in the Southern Hemisphere. The comet will then fade over time as it heads away from the Sun toward the outer solar system. And scientists aren't yet sure whether or not it will ever return.



*Comet ZTF covers vast swaths of sky each night later this month, passing near Polaris before heading into Camelopardalis.*

### What are Herkimer Diamonds? *(from Rock-N-Gem, December 2022)*

What are Herkimer diamonds? Nestled in the central New York Leatherstocking region made famous by 19th-century American writer James Fenimore Cooper in *The Last of the Mohicans* is an even older, natural claim to fame: its 500 million-year-old Herkimer diamonds.

Designated the official state mineral of New York in 2012, Herkimer diamonds are one of seven rare gems and minerals found in the Empire State, including almandine garnet, calcite, celestine, dravite, magnetite and sphalerite. "Herks," as they are called, are naturally faceted (18 facets) quartz and score a seven on the Mohs hardness scale measuring gemstone resistance to scratching. Only the topaz, ruby, sapphire and (carbon) diamonds are harder. The doubly-terminated points (natural faces) on these hexagonal quartz crystals have made them coveted for both their elegant luster and metaphysical status as an energy amplifier.



*"Barbell Heart" Quartz Variety: Herkimer diamond with hydrocarbon inclusions, complex growth. Photo courtesy of Deena Bak, Diamond Mountain, Little Falls, New York.*

The county where they are found is named for Mohawk Valley native son and Revolutionary War brigadier general Nicolas Herkimer. Like their namesake, the genesis of these gemstones begins in a geologic corner of Cambrian Earth

where dolostone and limestone rock, porous enough to allow a flow of mineral- and silicon-bearing fluids, intersected with North/South and East/West fault lines whose network of tectonic shifts and fissures added to that porosity and seepage.

## Seeing Double

Unlike quartz formations found in igneous rock, doubly terminated crystals flourish in sedimentary rock layers created by subterranean marine deposits. As free-floating pockets of liquid inside vugs (small to medium-sized cavities inside rock) slowly evaporated, tectonic shifts in heat and pressure encouraged crystals. These crystals were suspended in their embryonic karst with little to no contact with a host rock.

There they matured in size and shape, including rare barbells and scepters prized by collectors.

“It is worth noting these quartz crystals share an intimate relationship with the first peoples of the Mohawk Valley and have been part of human life here for centuries,” says Larry Michon, president of the Northern Berkshire Mineral Club (NBMC). Michon is also the owner of The Diamond House in Little Falls, the last large (60+ acres) undeveloped parcel of Herkimer diamond-bearing land remaining in Herkimer County. Now known as Diamond Mountain Mining Ltd., its soaring overlook along the Mohawk River is a favorite among seekers of rare black diamonds, scepter, skeletal or barbell formations and complex Herkimer clusters.

“The Mohawk people referred to themselves as Kanyenkehaka, which translates to ‘The People of the Crystals,’ Michon continues, “and the valley where they lived, Kayenkehaka, was The Place of Crystals.”



*Herkimer diamonds: Good energy from the “Land of Crystals.”  
Photo courtesy of Deena Bak,  
Diamond Mountain, Little Falls, New York.*

Michael R. Walter’s *Collector’s Guide to Herkimer Diamonds*, released in 2014 by Schiffer Publishing, recounts how the Mohawk people and early settlers found crystals in stream sediments and plowed fields, and “immediately held them in high esteem.” They were used as amulets, to make tools and traded with other tribes until the early 1600s, when European-made glass beads usurped native crystals in popularity. Doubly terminated quartz crystals have been found in Arizona, Afghanistan, China, Norway and Ukraine, but cannot rightfully be called Herkimers. Amethyst versions have been found in Mexico and Tanzania.

Herkimer diamonds share many physical properties attributed to quartz. They are almost always transparent and range from colorless (“water clear”) to smoky/ black. For those keen for more ancient souvenirs, Herkimer diamonds often have inclusions (material trapped in a mineral during formation). Solid hydrocarbon materials add a dark, sooty color; liquid inclusions of saltwater or petroleum, gaseous inclusions of carbon dioxide, or even other minerals, like dolomite or tinier Herks, can also be found within.

## Love at First Vug

“The key to finding Herkimer diamonds is the knowledge that they occur in cavities (vugs) within the Little Falls Dolostone,” writes Hobart M. King, Ph.D., and publisher of *Geology.com*. “These cavities can be smaller than a pea or

several feet across, and the easiest way to prospect is to find pieces of vuggy rock and break them open with a heavy hammer.

“If you are lucky,” he continues, “the rock will break to reveal one or several Herkimer diamonds in a cavity. Dolostone is a tough rock, so expect to work hard.”

Is it worth it? Ask Fred Weisser whose family business, Weisser’s Jewelers, just celebrated its 40th anniversary on North Main Street in Herkimer. He jokes how he’s been “grinding away” at the family bench since he was a teenager, but for over a decade, the master jeweler has made it his mission to make Herkimer diamonds “legitimate.”

“I love Herkimer diamonds. I want to see them as readily available as peridot,” he says. Peridot, found in volcanic basalts, is a yellow-green gem variety of iron-rich (Mg,Fe) $_{2}$ SiO $_4$  olivine (comparatively, the chemical formula of a Herk is SiO $_2$ ).

“I want to also give a shout-out to the diggers. I’ve tried it, using a sledgehammer,” he adds, “and I tell you, I’ve had an easier time breaking cement blocks!”

### **The Ultimate “Pick Your Own”**

If digging for crystals together is relationship building 101, put a ring on it mining for your engagement or wedding stone to set in a custom piece of jewelry to wear (like any diamond) forever. These resources will help you fall in love with Herks.

But once you strike a pocket, the rewards can be infinite.

To a jeweler like Weisser, who works with local miners to incorporate Herkimer diamonds into his retail catalog, that geologic equivalent of the farm-to-table relationship will reward him with material for new engagement rings, faceted from raw crystal, ready to look and shimmer like those (ahem) Other Diamonds.

“There’s no shortage of demand. I made three rings over a weekend,” he says. “I like natural stones. They have a clear, bright look all their own. Water-clear is perfect. Adding facets... makes them into something else. The real uniqueness is in their own crystal structure and composition.”

Weisser has also worked one-on-one with many a nervous boyfriend or couple hoping to turn a raw Herk they mined themselves into a ring or wedding band:

“I love when a couple comes in my store with a stone. because if you’ve spent a day digging for diamonds without killing each other, then as far as I’m concerned,” he laughs, “you’ve got what it takes to stay together.”

### **Lets get Metaphysical**

To those on the metaphysical side of quartz crystals, unearthing a pocket of doubly terminated Herkimer diamonds might just set the chakras aflutter.

Green Gem, a Herkimer diamond and green fluorite gemstone company ecologically mining its own properties in New York and New Hampshire, says doubly terminated points absorb, amplify and emit energy from both ends at the same time. This makes a Herkimer diamond a great stone for cleansing and balancing. Highly regarded as an exceptional healing crystal and the most powerful of quartz crystals, they receive and magnify the influence and energy of other stones, making their healing and protection effect even more significant.

“It is one of the Stones of the New Consciousness,” says Rachel Dropp, the designer behind California-based Raw Elements Jewelry, referring to a 2009 Robert Simmons book identifying certain stones as helping accelerate and enhance human evolution.



*Herkimer necklaces  
make lovely,  
powerful souvenirs.  
Photo courtesy of  
Weisser’s Jewelers.*



Dropp hand-fabricates jewelry, using ancient and modern techniques, and materials including Herkimer diamonds.

“The main attraction is its metaphysical properties and unique shape. They raise telepathic and clairvoyant communication, and with its powerful amplification, I like pairing it with other transformational stones. They’re not as easy to set as some gemstones. Because they have two termination points and their facets are so unique, one side may be harder to match or get a prong around.”

“Since it is such a high vibration stone and picks up the feelings of the last person touching it,” Dropp says, “If it’s an engagement ring I’ll put it in the sunlight to recharge and cleanse it first, before returning it to a client.”

### Priceless not Pricey

Yogi, educator and director of programs at Diamond Mountain Mining Ltd., Deena Bak, feels a bond to the region and its crystals, and a responsibility to keep sharing its good energy. Much of the mountain is open for public mining.

“Doubly terminated points,” she says, “remind us of the need to give and take.”

Giving a Herkimer diamond takes a smaller bite out of a budget, too, especially for a young couple just starting out. An engagement ring, with a half-carat brilliant-cut Herk, can retail for well under \$500.

But don’t call them cheap. In 2018, Meghan Markle (the Duchess of Sussex) wore a Herkimer diamond jewelry collection to Princess Eugenie’s royal wedding at St. George’s Chapel (where she and Prince Harry had married five months earlier).



Renée Scialdo-Shevat, owner of Herkimer Diamond Mines, called the Kensington Palace order “extraordinary,” and was glad to see the Duchess promote “a product like that, it’s a different kind of style that is price-sensitive.”

Shevat said three things attracted the Duchess to Herkimer diamonds: Their aesthetics, the organic value of the gemstones and “how purposeful these diamonds are in the international marketplace.”

Making a strong argument for American-made and mined, Green Gem’s Bob Borofsky and Jennifer Photenas conclude, “Herkimer diamonds are a wonderful, inexpensive, naturally occurring, conflict-free alternative to traditional diamonds.”



*“Barbell Heart” Quartz, Variety: Herkimer diamond with hydrocarbon inclusions, complex growth. Photo courtesy of Deena Bak, Diamond Mountain, Little Falls, New York.*

Wear it or share it, with a conscience as clear as the stone itself!



**2023 CFMS Shows**

<p><b>February 18-19, 2023 – Antioch, CA 94509</b>                  Antioch Lapidary Club                  Contra Costa County Fairgrounds, 1201 West 10th St. Antioch, CA 94509                  Hours: 10 AM to 5 PM Saturday and Sunday                  Jewelry, Gems, Findings, Supplies, Auction, Grab Bags, Exhibits and hands on projects for kids                  Contact: (925) 301-6957, edysnyder@gmail.com                  Website: <a href="http://www.antiochlapidaryclub.com">http://www.antiochlapidaryclub.com</a></p>	<p><b>February 25-26, 2023 – Vallejo, CA</b>                  Vallejo Gem and Mineral Society                  Solano County Fairgrounds, McCormack Hall, 900 Fairgrounds Drive, Vallejo, CA 94589                  Hours: 10 AM-5 PM                  Gems, geodes, fossils, beads and minerals from around the globe. Discover lapidary and stone crafts from vendors and live demonstrations. Something for everyone! Silent auction, geode cuttings, and games of chance and discovery for kids!                  Contact: (415) 254-1506, ddahonvgms@gmail.com                  Website: <a href="http://vjgems.co/">http://vjgems.co/</a></p>
<p><b>March 4-5, 2023 – Ventura, CA</b>                  Ventura Gem &amp; Mineral Society                  Ventura County Fairgrounds, 10 W. Harbor Blvd., Ventura, CA 93001                  Hours: Saturday 10 AM-5 PM, Sun 10 AM – 4 PM                  50 exhibits of gems, minerals, fossils and lapidary arts; ongoing demos of lapidary and jewelry making; raffle prizes &amp; silent auctions; a Second-Hand Treasures Store &amp; plant sale; 15 dealers; children’s activities and free resources for teachers. A SoCal tradition for 6 decades and counting!                  Contact: (805) 312-8467, info@vgms.org                  Website: <a href="http://www.vgms.org">http://www.vgms.org</a></p>	<p>March 3, 4 &amp; 5, 2023, Newark, CA                  Mineral and Gem Society of Castro Valley                  Newark Pavilion, 6430 Thornton Ave., Newark, CA                  Times: Friday and Saturday, 10 AM – 6 PM, Sunday 10 AM – 5 PM                  MGSCV Annual Show. 40+ dealers, display cases, demonstrations, door prizes. Saturday auction at 2 PM of donated items from society members. Fluorescent displays and dealers. Free parking.                  Contact: <a href="mailto:Showchair@mgscv.org">Showchair@mgscv.org</a>                  Website: <a href="http://MGSCV.org">http://MGSCV.org</a></p>
<p><b>March 11-12,2023 -Turlock, CA</b>                  Mother Lode Mineral Society                  Stanislaus County Fairgrounds, 900 N. Broadway, Turlock, CA                  Saturday 10 AM – 5 PM, Sunday 10 AM – 5 PM                  Admission: Adults \$8, 12 &amp; under free w/ adult                  Parking: Free                  Activities: Jewelry, Beads, Tools, Educational Exhibits, Demonstrations, Fossil Exhibit, Sharks, Fluorescent room, Speakers, Geode Cutting, Dinosaur Walk-about, Gold Panning, Gem &amp; Mineral Identification. Chat with Paleontologist Neal Larson, Large Fluorescent Room, Kids Activities, Rock Sale – old collections, Earth Science Tables, Food Court, Gemstone &amp; Fossil Dig bags, Raffle, 45 Dealers                  Website: <a href="http://www.turlockgemshow.com">http://www.turlockgemshow.com</a> or <a href="http://www.motherlodemineralsociety.com">http://www.motherlodemineralsociety.com</a></p>	<p><b>March 10-12, 2023 – Stoddard Wells</b>                  Victor Valley Gem and Mineral Club                  47th Annual Stoddard Wells Rockhound Tailgate                  Time: Friday, Saturday &amp; Sunday – 9 AM – 5 PM                  Come visit us and our vendors for Handcrafted and Faceted Jewelry, Slabs and Cabs, Findings, and Equipment, Minerals and Fossils. TONS of Rough Material and More                  Contact: (909) 657-7200, marklantz53@gmail.com                  Club Address: 15056B Seventh St., Victorville, CA 92395                  Phone: (760) 243-2330 and leave a message. Email: <a href="mailto:president@vvgmc.org">president@vvgmc.org</a>                  Website: <a href="http://vvgmc.org">http://vvgmc.org</a>                  Tailgate-2023-Info.jpg</p>



<p><b>March 18-19, 2023 – Lemoore, CA</b></p> <p>Lemoore Gem &amp; Mineral Club Trinity Hall, 470 Champion St., Lemoore, CA Hours: Saturday 10 AM – 6 PM, Sun 10 AM – 4 PM Featuring gems and minerals from around the world! Fossils, Jewelry, Beads, Stone Carvings, Lapidary Rough, Geode Cutting, and Artesian Jewelry. Website: <a href="https://facebook.com/AndLemoore">https://facebook.com/AndLemoore</a></p>	<p><b>March 24, 25 &amp; 26, 2023 – Clovis, CA</b></p> <p>Fresno Gem and Mineral Society The Clovis Rodeo Grounds, 748 Rodeo Dr., Clovis, CA 93612 Hours: Friday &amp; Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM 3rd Annual Central Valley Gem and Mineral Show sponsored by the Fresno Gem &amp; Mineral Society. We present a great show for viewing, learning about and purchasing minerals, fossils, gems, beautiful handmade jewelry &amp; much more! Educational and fun for all ages! Come out and tickle your inner rockhound! Free Parking and Free Admission Contact: <a href="mailto:danielblom096@gmail.com">danielblom096@gmail.com</a> Website: <a href="https://www.fgms.online">https://www.fgms.online</a></p>
<p><b>March 25-26, 2023 – Angeles Camp, CA</b></p> <p>Calaveras Gem and Mineral Show Calaveras County Fairgrounds, 2465 Gun Club Road, Angeles Camp, CA 95222 Contact: <a href="mailto:clairemathison1@gmail.com">clairemathison1@gmail.com</a> Website: <a href="https://calaverasgemandmineral.net/">https://calaverasgemandmineral.net/</a></p>	<p><b>March 18-19, 2023 – San Jose, CA</b></p> <p>Santa Clara Valley Gem &amp; Mineral Society Santa Clara County Fairgrounds, 344 Tully Rd, San Jose, CA 95111 Hours: Saturday &amp; Sunday 10 AM-5 PM Fun for children of all ages. Free Parking. Active Duty, Retired Military, Their Dependents &amp; First Responders &amp; Military Free w/Valid ID</p>
<p><b>April 1-2, 2023 – Vista, CA</b></p> <p>Vista Gem and Mineral Society Antique Gas and Steam Engine Museum, 2040 N. Santa Fe Ave., Vista, CA 92083 Hours: Saturday 10 AM -5 PM, Sunday 10 AM – 4 PM Cabs, Slabs and Rough, Jewelry Website: <a href="https://vistarocks.org">https://vistarocks.org</a></p>	<p><b>April 8-9, 2023 – Mariposa, CA</b></p> <p>Mariposa Gem and Mineral Show Mariposa County Fairgrounds, 5007 Fairgrounds Rd., Mariposa, CA Hours: Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM Contact: <a href="mailto:mgmc@sti.net">mgmc@sti.net</a> Website: <a href="http://mariposagemclub.org">http://mariposagemclub.org</a></p>
<p><b>April 15-16, 2023 – Placerville, CA</b></p> <p>El Dorado County Mineral and Gem Society El Dorado County Fairgrounds, 100 Placerville Dr., Placerville, CA Hours: Saturday and Sunday 10 AM – 4 PM Treasures in the Rough Contact: <a href="mailto:office@edcmgs">office@edcmgs</a> Website: <a href="http://edcmgs.org">http://edcmgs.org</a></p>	<p><b>April 29-30, 2023 – Anaheim, CA</b></p> <p>Anaheim Searchers Gem &amp; Mineral Society Brookhurst Community Center, 2271 W. Crescent Ave., Anaheim CA Contact: <a href="mailto:Nancybird68@gmail.com">Nancybird68@gmail.com</a> Website: <a href="https://www.searchersrocks.org/">https://www.searchersrocks.org/</a></p>
<p><b>May 6-7, 2023 – Lancaster, CA</b></p> <p>Antelope Valley Gem and Mineral Club Antelope Valley Fairgrounds, 2551 West Ave. H, Lancaster, CA 93536 Hours: Saturday &amp; Sunday 10 AM – 5 PM Admission and Parking are free. Please note that dogs are only allowed if they are Service Animals. Contact: <a href="mailto:marylandoriele@gmail.com">marylandoriele@gmail.com</a> Website: <a href="http://avgem.weebly.com">http://avgem.weebly.com</a> flyer: antelopeshow</p>	<p><b>June 10-11, 2023 – Escondido, CA</b></p> <p>Palomar Gem and Mineral Club The Convention Center at the California Center for the Arts – 340 North Escondido Blvd, Escondido CA Hours: Saturday 10 AM – 5 PM, 10 AM – 4 PM 9000 sq ft selling handmade silver, gold, beaded and fabricated jewelry, vintage jewelry, commercial quality gold &amp; silver faceted stone jewelry, specialty cabochons, mineral specimens, gem trees. Contact: <a href="mailto:tonifloyd41615@gmail.com">tonifloyd41615@gmail.com</a> Website: <a href="http://palomargem.org">http://palomargem.org</a></p>

**August 26-27, 2023 – Arcadia, CA**  
 Pasadena Lapidary Society Arcadia Masonic  
 Lodge, 50 W. Duarte Rd., Arcadia CA  
 91007 Hours: Saturday 10 AM – 5 PM, Sunday 10  
 AM – 4 PM  
 Contact: (626) 260-7239  
 Website: <https://pasadenalapidary.org>

**October TBD – Grass Valley, CA -- OUR SHOW!!**  
  
 Details coming.

Check websites or call to ensure shows and field trips are still planned during the pandemic (cancelled shows have been removed or not listed here – also, watch the CFMS listings closely).  
  
 Also, “Google” the words “oregon gem and mineral society shows”: many shows (closer than the SoCal shows – and no state tax) show up. Nationally: [http://www.amfed.org/fed\\_shows.htm](http://www.amfed.org/fed_shows.htm)

**NCGMS 2023 Field Trips (please double check before the trip to ensure it is still planned):**



Trip	Host/contact info
2023 Trips are being planned mid Jan, will be updated for the March newsletter	Ideas for trips, call John Dolman!
CO-OP trip hosted by NCGMS – Yuba Blue, Rice Rocks, Suiseki, Gold and more. Yuba River, date TBD	John Dolman

**Interesting Material from Last Century!**

So I have always been somewhat mystified that an Ounce of Gold is not the same weight as an Ounce of Feathers! Gold is weighed using Troy Ounces. Feathers are weighed using Avoirdupois Ounces. This table shows how they compare to each other.

**COMPARATIVE WEIGHTS AND MEASURES**

	Grain	Gram	DWT troy	OZ Troy	LB Trpy	OZ AV	LB AV	Carat
Grain	1.0	0.06479	0.041667	0.0020833	0.00017	0.0022887	0.0001428	0.3240
Gram	15.4324	1.0	0.06479	0.03215	0.0027	0.03527	0.002205	5.0
DWT Troy	24.0	1.5517	1.0	0.05	0.00416	0.0548571	0.0034285	7.7755
Ounce Troy	480.0	31.10346	20.0	1.0	0.0833	1.09714	0.06857	155.51
Pound Troy	5780.0	373.241	240.0	12.0	1.0	13.1657	0.82286	1866.12
Ounce AV	437.5	28.3495	18.2297	0.9114883	0.07595	1.0	0.0625	141.75
Pound Av	7000.0	453.592	291.667	14.5833	1.21107	16.0	1.0	2267.96
Carat	3.168	0.20	0.03215	0.0064304	0.0077045	0.007055	0.000491	1.0

( AV=Avoirdupois, DWT = Pennyweight, LB = Pound, OZ = Ounce)

To find conversion values, find basic weight in left hand column and follow this line across until it intersects with the desired weight. Example: to determine how many 'ounces troy' there are in a 'pound troy' locate pound troy in left-hand column and follow it across until it intersects with 'OZ Troy' and you will find '12.0'. To know equivalent for 2.5 pounds Troy, multiply 12.0 x 2.5 and you find the correct figure of 30.0 ounces Troy.

\*NOTE: The kilogram is a standard & conventional weight for gold/ silver in commerce. It is equivalent to 32.15 ounces troy, and it is 1,000 grams. An ounce troy is (approx.) equal to 31.1 grams.

**GOLD COINS**

\$2.50 = .134387 oz. = 900 fine  
 \$5.00 = .268774 oz = " "  
 \$10.00 = .53754 oz = " "  
 \$20.00 = 1.074983 oz = " "

**SILVER COINS**

\$.10 = .080375 oz. = .900 fine  
 \$.25 = .200938 oz. = " "  
 \$.50 = .401875 oz. = " "  
 \$1.00 = .80375 oz = " "



Gold & Silver (coin formulas) = Current \$OZ x troy oz weight x finess = current value.  
 Gold Rings (Jewelry) = Current \$oz x troy oz. weight x finess (24 Carat) + jewelry (gem stones, etc.) equals current value.

## Membership Renewal time

Yes, its that time also! It is Time to Renew Your NCG&MS Membership for 2023.

Your membership dues pay for a number of things, including dues to the AMFS, the CFMS, Insurance for field trips and other club activities, rental for our meeting hall, and help to produce (and mail) the newsletter. We all get a lot for such a small amount!

Please fill out the form below, and along with a check please send to our Post Office Box:

Nevada County Gem and Mineral Society

Membership Chair

P.O Box 1686

Grass Valley, CA 95945-1686

Or give to Membership Chair (Charles) or Treasurer (Sheila) at a meeting.

Dues are due by March 1, 2023.

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Nevada County Gem and Mineral Society (NCGMS) 2023 Membership Renewal Form

Please provide Name, and the following information if anything has changed:

Name(s): \_\_\_\_\_

Address (Street, City, ZIP): \_\_\_\_\_

Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

(Note: Email Address will be part of the club roster unless omission is requested).

Type of Membership (check one):

Adult 18 Years or Older: \$25.00 per year.

Family (one address): \$30.00 per year.

If you wish to receive newsletter by Email only, deduct \$5.00 from normal membership dues.

I wish to receive my newsletter by email and have entered an Email address.

Nevada County Gem and Mineral Society (NCGMS) is a not-for-profit corporation under the statutes of the State of California and is recognized as tax-exempt under Section 501(c)(4) of the Internal Revenue Code and Section 23701f of the California Revenue and Taxation Code. Contributions made to NCGMS are NOT deductible for tax purposes.

# Nevada County Gem & Mineral Society

P.O. Box 1686, Grass Valley, CA 95945-1686

## 2023 Officers

<b>PRESIDENT</b>	Dennis Geare
<b>VICE PRESIDENT</b>	Eric Trygg
<b>SECRETARY</b>	Edwina M. Swenson
<b>TREASURER</b>	Sheila Baker
<b>DIRECTORS</b>	Christie Harris Polly Marie Blaze Baker

## 2023 Committee Chairpersons

<b>CLUB PICNIC</b>	Lori Woodhall
<b>FEDERATION DIRECTOR</b>	Frank Van Hecke
<b>HISTORIAN</b>	Beverly Glenn
<b>HOSPITALITY</b>	Christie Harris
<b>JUNIOR PROGRAM</b>	Julie DeHollander Cheryl Hendrickson
<b>LIBRARIAN</b>	Beverly Glenn
<b>MEMBERSHIP</b>	Charles Lindquist
<b>NEWSLETTER EDITOR</b>	Blaze Baker
<b>NEWSLETTER PUBLISHER</b>	Charles Lindquist
<b>REFRESHMENTS</b>	Monthly Birthday Honorees
<b>SCHOLARSHIP</b>	Joyce Emerson
<b>SHOW ORGANIZER</b>	You?
<b>SUNSHINE</b>	Lori Woodhall
<b>TREK LEADER (Field Trips)</b>	John Dolman
<b>WEBMASTER</b>	Charles Lindquist

## **Nevada County Gem & Mineral Society Meetings**

The Nevada County Gem and Mineral Society meets monthly with few exceptions. Membership is informed of exceptions on the website, at meetings and through Rock Writings. You are welcome to attend any meeting.

**General Membership Meeting: First Tuesday of the month, 7:00 p.m.**

**Executive Committee Meeting: First Tuesday of the month, 6:00 p.m.**

**Golden Empire Grange Building, 11363 Grange Ct., Grass Valley, CA**

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**NCG&MS is a non-profit organization with the following objectives:**

### **Membership Information**

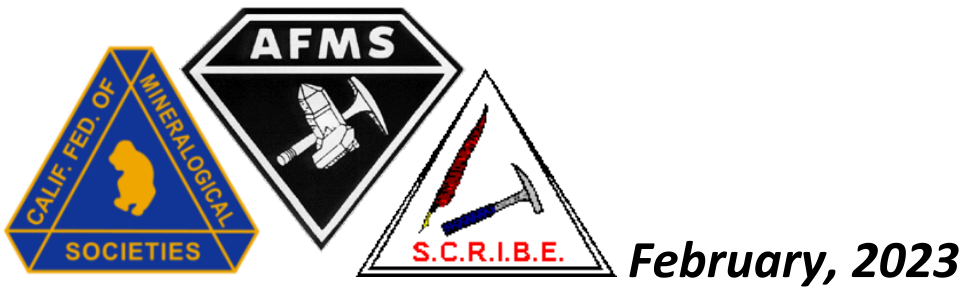
- To promote the study of mineralogy, geology & fossils
- To encourage the collection of minerals and gems
- To foster the study and practice of the lapidary arts
- To provide field trips to mineral localities
- To promote good fellowship, education and recreation

Yearly membership dues for NCG&MS are \$25.00 for singles and \$30.00 for families. \*Deduct \$5.00 if you receive your newsletter via email\* For information or an application, email our Membership Chairperson Charlie Lindquist at [gvranner99@yahoo.com](mailto:gvranner99@yahoo.com)

**Check out our website at: <https://www.ncgms.org>**



First Class Mail



Feb 2023 Meeting Tuesday, Feb 7, 7:00 PM (board meeting 6:00)

Program: **Not announced yet.**

First Tuesdays Monthly at 7:00 p.m.

(no meeting in July - Picnic)

Golden Empire Grange Guild

11363 Grange Ct., Grass Valley

 Bring a Friend! 

**2023 Membership dues**

Yearly membership dues for NCG&MS are \$25.00 for singles and \$30.00 for families. Deduct \$5.00 if you receive your newsletter via email. Dues are annual and payable in January.