

Monthly Newsletter of the *Kern County Mineral Society (KCMS)***President's Message
James May - KCMS
President 2022**

Well, we have come to the end of a very productive 2022 and with the success of our evolving Rock and Lapidary Workshop, exciting field trips, continued presence on social media sites, and the success of the Kern County Fair, we have seen a rise in KCMS membership. I almost hate to see the year come to an end, but we will finish on a high note with our Annual Christmas Potluck and BINGO Extravaganza. This has traditionally been one of best days of the year and I expect no difference this year.

Our Kern County Mineral Society Elections were conducted during the November General Meeting. The Officers going into 2023 include James May (President/Pseudomorph Editor), Connie Fleishauer (Vice President), Anita Andersen (Secretary), SB (Treasurer), and Bernie Bentsen (Field Scout/Federation Director). I would like to extend a special thanks to Dennis Huggins and Steve Fleishauer who really stepped up and were great Officers in 2022. Without the excellent contributions of all the Officers, the KCMS would not be the awesome Club that it is.

I would also like to thank Hector Zavala, a recent graduate from the California State University Bakersfield Geology Program, who gave an excellent presentation of his field camp that he took during the summer 2022. Hector really kept us entertained with some of the hurdles he encountered in trying to get through all his mapping and field exercises. He had some great stories and pictures to share with the group. The KCMS has always appreciated the presentations that former scholarship winners have given at KCMS functions.

Our last workshop prior to the holidays was finishing up our rock painting including final touchups and gluing the felt on the bottoms of the rocks. We created some nice masterpieces for our rock gardens, and they turned out to exhibit a wide variety of color patterns and textures. Special thanks to Anita for handling purchasing all the supplies and spearheading the workshop, and as always special thanks to the Fleishauers for hosting the event at their home.

Bernie led us on an adventurous field trip on Saturday, November 19th to North Edwards for yellow jasper and to Kramer Junction for flame and butterscotch agate. The weather was perfect and many of our new members joined us on the adventure. Our next field trip is scheduled for January 21st to a location further north on Clay Mine Road that we call Ruby Ridge. There are some larger pieces of rock that can be collected for slabbing and potentially sphere making. Bernie plans on taking us to a few other locations as well.

Our December General Meeting is on the horizon. Start thumbing through your favorite recipe book for that award winning dish that will keep members talking for years to come. It is sure to be a good time by all!

Finally, I really want to thank everyone who has been a member of the Club this last year. We have made some great strides and we look forward to having a great 2023

---- James

Upcoming Christmas Potluck and BINGO Extravaganza

➤ Thursday, December 15th at 6:00 PM

East Bakersfield Veterans Hall

Address: 2101 Ridge Road, Bakersfield, CA



There will be no Rock and Lapidary Workshop or Field Trips held in December due to the New Year's Holiday Weekend



This won't stop Bernie from collecting though.....

UPCOMING FIELD TRIP

Journey to Ruby Ridge

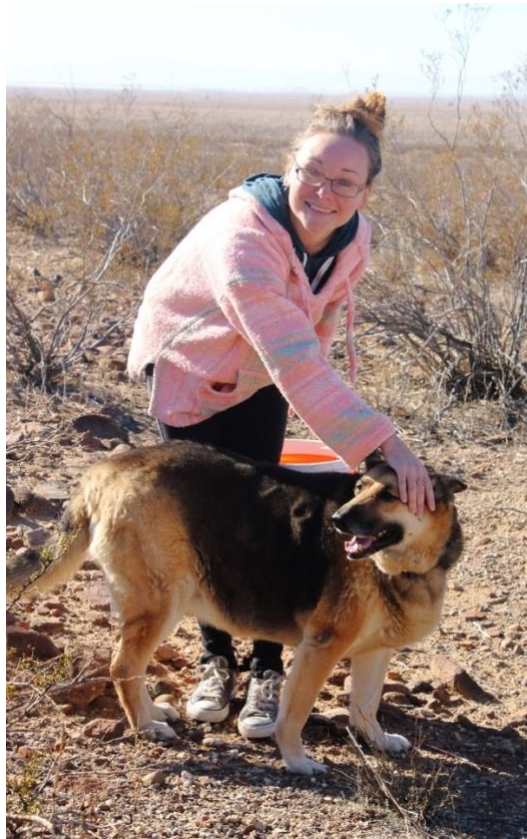
Saturday, January 21st

Meet Bernie at 7:30 AM at Harbor Freight



North Edwards and Kramer Junction Field Trip
Saturday, November 19th, 2022







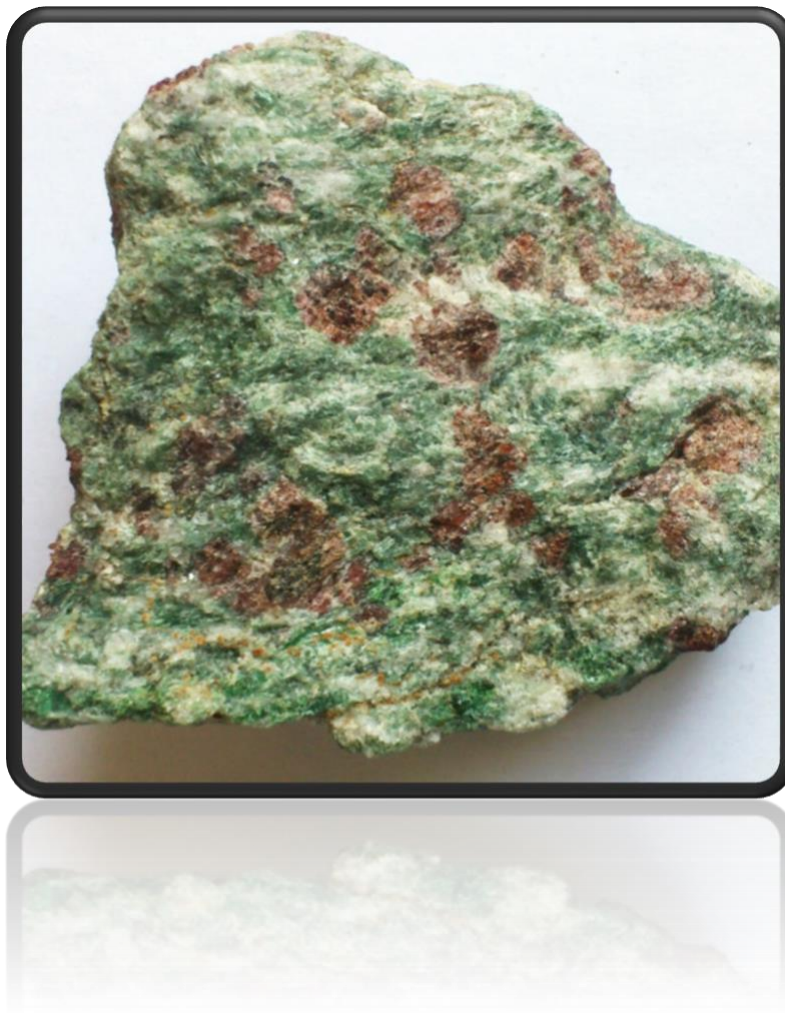




Footnote....all the wonderful pictures were taken by Lynette S. Thanks a bunch for taking the pictures Lynette.

The Story of Eclogite

"The Christmas Tree Rock"

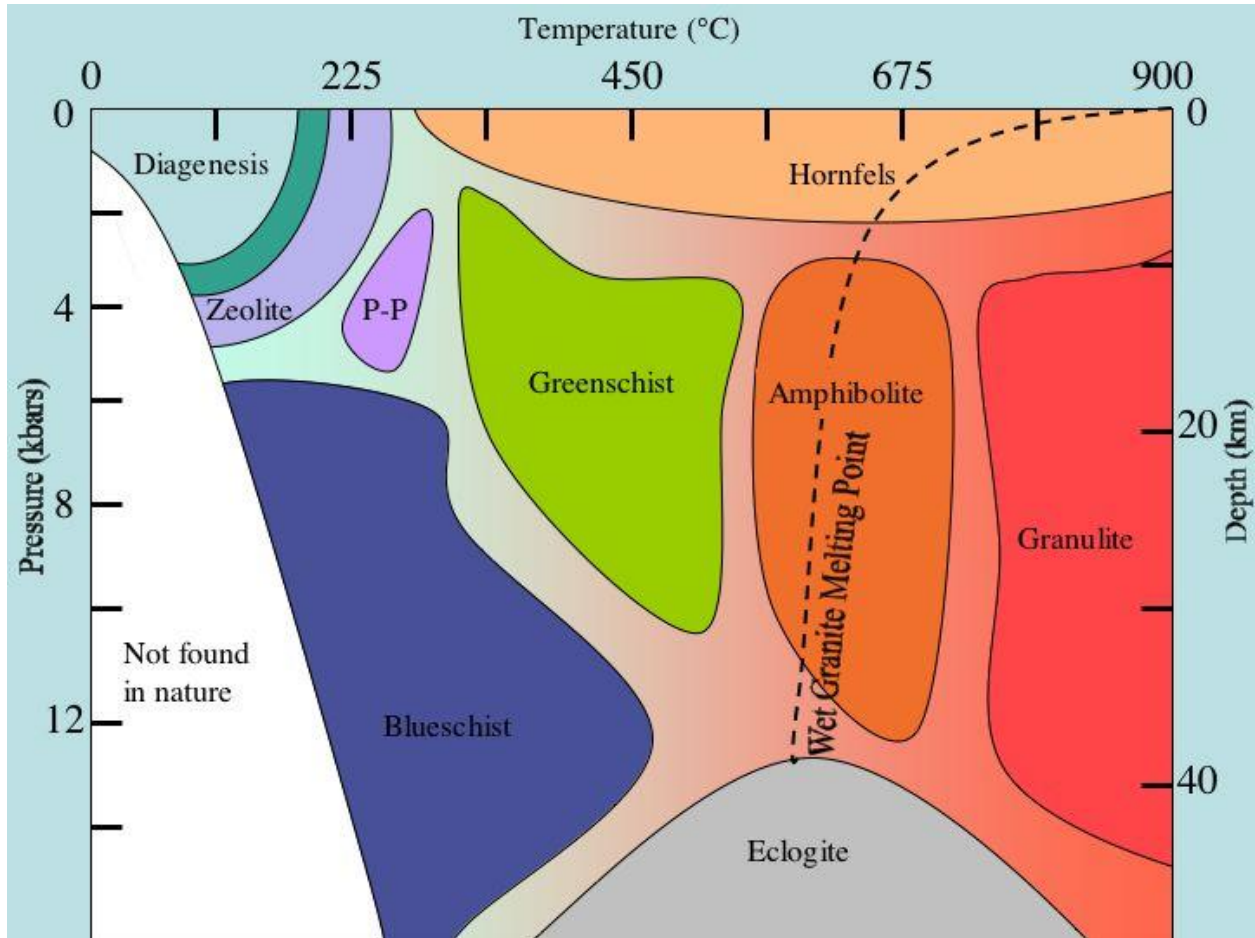


Impressed by the beauty of the metamorphic rock from Saualpe, Austria, René-Just Haüy (the father of modern crystallography) created the name "eclogite" (to mean the chosen rock), which he derived from the Greek word εκλογη (choice). The name, eclogite, was used for the first time in 1822 in the second edition of Haüy's famous book, "Traité de mineralogie." The first "scientific" description, however, dates back to the second half of the 18th century, when Horace-Bénédict de Saussure indicated a "beautiful rock that is not described yet" from the Rhone valley in his "Voyages dans les Alpes".

With the Christmas holiday approaching fast, and the need to populate those Christmas stockings with last minute gifts, no need to look further than the *Christmas Tree Rock* for that perfect stocking stuffer. With its blast of red pyrope garnets and the equally impressive, green-colored omphacite, this rock truly embodies the Christmas Spirit. Who wouldn't want to receive such a precious gift made from Earth on Christmas Day?

Eclogite is a metamorphic rock, and all metamorphic rocks can act as paleo-barometers and paleo-thermometers and that is where their true beauty lies. If you know the identity of a metamorphic rock, you can get some idea of the pressure and temperature constraints of its formation. The concept of placing these rocks onto a diagram to loosely classify them is referred to as a *facies diagram*. The axes of the facies diagram include pressure and temperature.

We have a few different locations on the facies diagram for the more typical rocks such as hornfels, greenschist, and beautiful blueschists. The more exotic facies types have extremely high pressures and temperatures of formation including the eclogite. Eclogite, by definition, is an extremely high pressure and high temperature metamorphic rock with a predominant (greater than 75 percent) pyrope garnet and a clinopyroxene mineral called omphacite. Accessory minerals in the rock include quartz and rutile but never plagioclase as they are not stable at these extreme pressures.

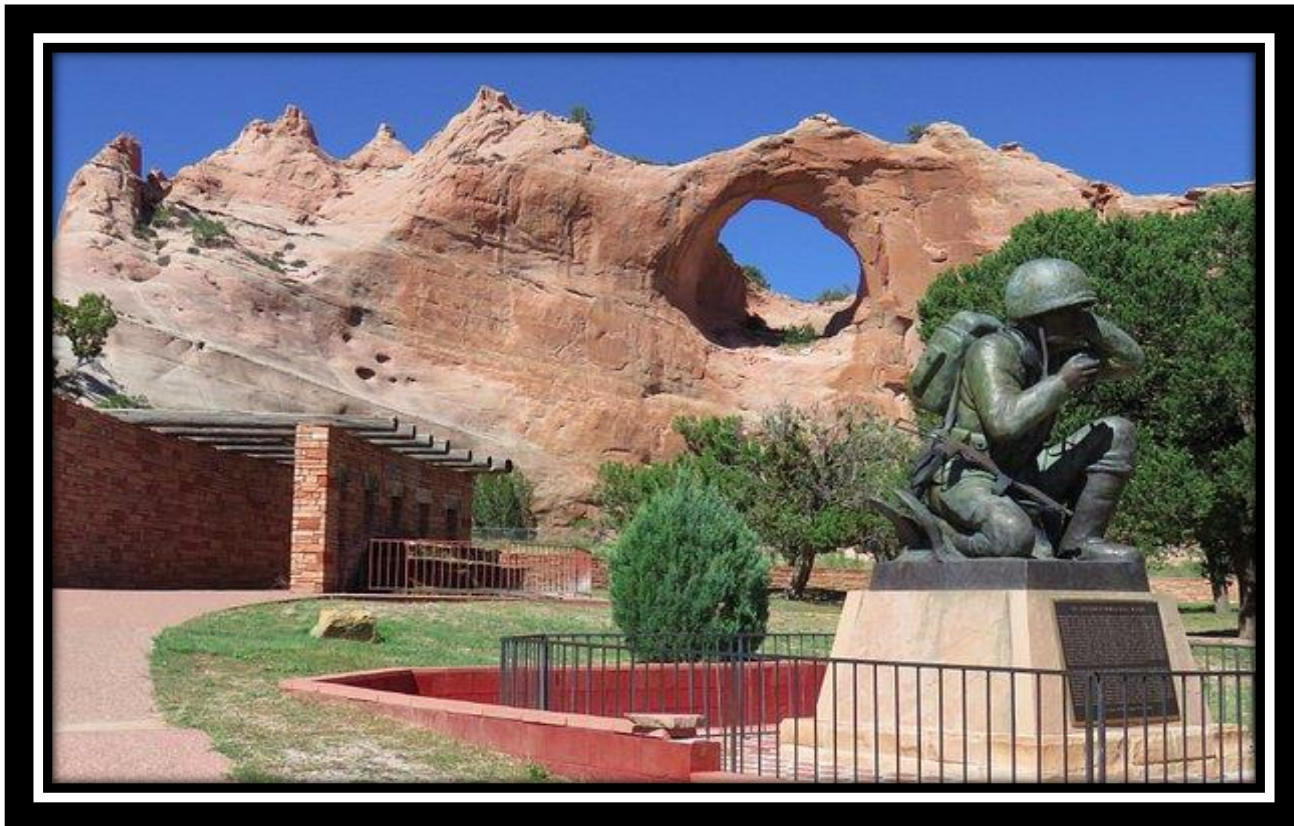


A facies diagram taken from Wikipedia showing the different facies. Temperatures are measured in degrees Celsius, and pressures and depths are directly related. One kilobar (kbar) of pressure is approximately 3.5 km in depth. Note, eclogite forms under relatively high temperatures and very high pressures. At these elevated temperatures and pressures this rock is truly the *chosen one* as referenced by René-Just Haüy.

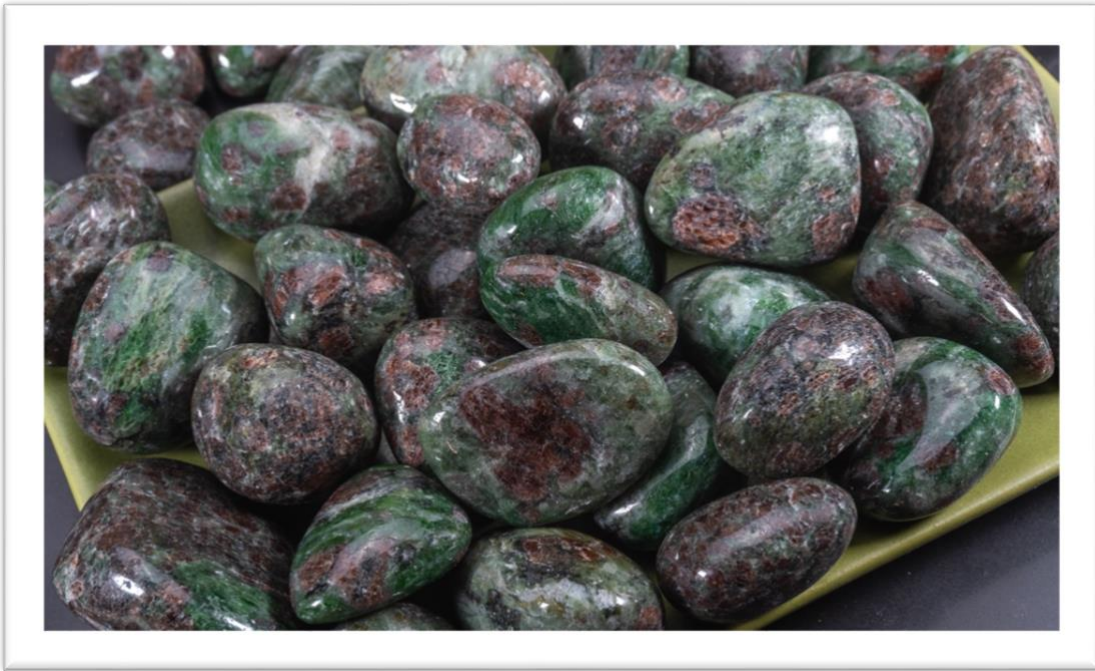
Eclogite is found near the blueschist facies which indicates a strong correlation with subduction of tectonic plates into the mantle. The high density and high melting points of the rock propose it sinking into the mantle rather than assimilation and therefore an important driver in the entire plate tectonic cycle on Earth. It is the *chosen rock* because it is an integral part of the cyclic nature of Earth and every mountain range projecting high into the sky owes its existence to this rock.

Eclogite is a relatively rare rock that certainly is a wonderful edition to one's rock collection. As you discover more about its genesis you begin to appreciate the rock more.

Much of the rock is garnet. One thing we can glean from this is garnet is actually a group designation made up of two specific groups. The *Pyrospite group* which are the aluminum-rich garnets including pyrope, almandine, and spessartine. The *Ugrandite group* are the calcium-rich garnets including grossular, andradite, and uvarovite. Pyrope occurs in the first group and has a deep red color, and the name is derived from the Greek word *firelike*. It is composed both of magnesium and aluminum. It is found in abundance form along Fort Defiance, close to the New Mexico and Arizona border. Below are some of the specimens that can be collected at location with a patient and discerning eye.



The clinopyroxene portion of the rock is omphacite. This gives rock the brilliant green color. Pyroxenes are single-chained silicates that are very commonly accessory minerals found in mafic-rich rocks. Mafic rocks have a much higher melting point because of their high percentages of iron and magnesium. Omphacites, overall, are rich in the element's sodium, calcium, aluminum, and magnesium.



Eclogite can be shown off in a number of ways. Above are the tumbled *chakra stones* and below is a beautiful sphere that always conveys a unique story.



Eclogite is a rock that possess a number of unique healing properties. These include physical healing, emotionally healing, and spiritual healing. If you are going through a healing period yourself, this unique and rare gemstone may be the magic elixir for you. Eclogite is there to protect and strengthen the heart, improve circulation, and especially beneficial for the liver and kidneys. Eclogite brings out the positivity in many people and reduces anger, hatred, and sorrow. Finally, the beauty of the stone establishes a connection with Gaia or the Greek goddess of Mother Earth and help you attain a scared level of self-growth. This stone is a must have if *chakra* is your thing. Below a beautiful eclogite pendent and a thin section made from a blueschist, omphacitic bearing rock.



**UPCOMING ROCK, MINERAL, AND GEM SHOWS****UPCOMING ROCK AND MINERAL SHOWS – WINTER 2023****January 21-22, 2023 – Exeter, CA**

Tule Gem and Mineral Society

Exeter Memorial Building, 324 North Kaweah Ave., Exeter, CA 93221

Hours: Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM

Tule Gem and Mineral Society Gemboree

Contact: (559) 799-6034, margaretbu03@gmail.com

Website: <http://www.tulegem.com>**February 18-19, 2023 – Antioch, CA 94509**

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: <http://www.antiochlapidaryclub.com>**February 25-26, 2023 – Vallejo, CA**

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: <http://vjgems.co/>**March 4-5, 2023 – Ventura, CA**

Ventura Gem & Mineral Society

Ventura County Fairgrounds, 10 W. Harbor Blvd., Ventura, CA 93001

Hours: Saturday 10 AM-5 PM, Sunday 10 AM – 4 PM

50 exhibits of gems, minerals, fossils and lapidary arts; ongoing demos of lapidary and jewelry making; raffle prizes & silent auctions; a Second-Hand Treasures Store & plants

Contact: (805) 312-8467, info@vgms.org

Website: <http://www.vgms.org>

KCMS CLASSIFIEDS

KCMS is proud to announce the addition of a Classified Ads Section to the Pseudomorph Newsletter!!

Calling on all members who have any items that they want to sell or those looking to buy.

Rocks, Minerals, Rock Saws, but that's not all!! We will also accept Lawn Equipment, Electronics, Homemade Crafts, etc.

The Pseudomorph Classifieds will not be limited to only rock & mineral related items, but to any items members are looking to sale.

When making a classified ad for the newsletter be sure to include:

- Description of Item
- Asking Price
- Contact Information
- Picture(s)

Pictures are not necessary but will be added if provided. Please send photographs in JPEG (.jpg) format if possible.

Classified Ads for the Pseudomorph are due to the editor no later than the first Thursday of each month, via Email or by U.S. Mail.

James May, Editor
Email geojim9@hotmail.com

If you have any ads, you want added to the next Pseudomorph, please email me the details and I will post.

Don't Forget the BREAKFAST CLUB

The first Wednesday of each month, year-round, KCMS Members and occasional guests meet at 8:30 AM at Lorene's Coffee shop at 23rd and Eye streets in downtown Bakersfield. Everybody is welcome to attend!

-- Dalia Hernandez



KCMS Monthly Meeting

Please join the KCMS at 7:00 p.m. on Thursday, December 15th at the East Bakersfield Veterans Hall located at 2101 Ridge Road in Northeast Bakersfield. We hope you can attend, and visitors are always welcome.



Kern County Mineral Society

is a Charter Member of the **California Federation of Mineralogical Societies**

and is affiliated with the **American Federation of Mineralogical Societies**



The Kern County Mineral Society, Inc. was organized in 1935 to promote the study of mineralogy and allied earth sciences, to collect and study minerals and rocks, to study and practice the techniques of jewelry making, to promote good fellowship and good citizenship and to promote education in the earth sciences. Membership dues are; \$20 for singles, \$25 for couples.

KCMS WEBSITE: <http://www.kerncountymineralsociety.org/>

Pseudomorph Subscriptions

The Pseudomorph is published 10 times a year (September through June) by Kern County Mineral Society, P.O. Box 12305, Bakersfield, CA, 93389-2305. Subscription included with Membership. Non-members \$5.50 per year, Jan. thru Dec., not prorated.

KCMS will email a free .pdf subscription to any high school, college, or university student who wishes to receive it. Just email a request to geojim9@hotmail.com

Articles for *The Pseudomorph* are due to the Editor no later than the first Thursday of each month, via Email, via Facebook, or by US Mail. Please send photographs in JPEG (.jpg) format if possible, and text as Notepad, Word, or other simple text for me to paste and edit.

James May, Editor
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Facebook: Kern County Mineral Society

Articles in this publication may be reprinted if attribution is given to the author and to *The Pseudomorph, Monthly Newsletter of the Kern County Mineral Society*



KCMS Officers 2023

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Connie Fleishauer

Secretary

Anita Andersen

Treasurer

SB

Pseudomorph Editor

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Federation Director

Bernie Bentsen

Field Scout

Bernie Bentsen

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Kitchen

Sue Kimbriel

Scholarship

David Schaad

Door Hostess

Kay Hevle

Facebook Editor

Anita Andersen

Curator

Steve Fleishauer



FUN, GAMES, & FIELD EXCURSIONS



THIS MONTH'S MYSTERY SLAB



Here is this month's mystery slab. Please submit your answer to geojim9@hotmail.com. Each month's winner will be placed in a drawing at the end of the year for a special prize. Last month's winner was John Baz-Dresch who correctly identified the slab as stromatolite. Nice work John.



Libby's Pumpkin Pie



Libby's pumpkin pie is synonymous with the holiday season. The famous recipe, which the iconic brand made famous almost 100 years ago, is a tradition in homes around the country — once you try it, you'll understand why Libby's pumpkin pie recipe is so beloved.

Libby's Pumpkin Pie Ingredients

These are the ingredients you'll need to this famous pumpkin pie recipe:

- **Pie crust:** Use a store-bought pastry crust or use our top-rated butter flaky pie crust recipe.
- **Sugar:** A little less than one cup of white sugar adds the perfect amount of sweetness.
- **Spices:** This Libby's pumpkin pie recipe is perfectly spiced with cinnamon, ginger, and cloves.
- **Salt:** Salt enhances the flavors of the other ingredients, adding complexity. Don't skip this step!
- **Eggs:** Two eggs add moisture and act as a binding agent, which means they help hold the pumpkin pie filling together.
- **Pumpkin:** Of course, you'll need a can of Libby's pure pumpkin.
- **Evaporated milk:** A can of evaporated milk lends richness and helps thicken the pie filling.

How to Make Libby's Pumpkin Pie

You'll find the full, step-by-step recipe below — but here's a brief overview of what you can expect when you make Libby's pumpkin pie:

1. Mix the spices in a small bowl.
2. Beat the eggs in a large bowl. Stir in the pumpkin and spices, then pour the filling into the unbaked pie crust.
3. Bake the pie for about 15 minutes in the preheated oven, then reduce the heat and bake until a knife comes out clean.

A MOSS AGATE FOR CHRISTMAS
I HOPE EVERYONE HAS A WONDERFUL CHRISTMAS
WITH FRIENDS AND FAMILY

