

A monthly publication of the Clear Lake Gem & Mineral Society

VOLUME 43

SEPTEMBER 2017

NUMBER 9



NEXT MEETING:
TIME:
LOCATION:

September 18, 2017
7:30 p.m.
 Clear Lake Park
 Building
 5001 Nasa Parkway
 Seabrook, Texas

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September Meeting Monthly Meeting Minutes	1-2	<p><u>SEPTEMBER MONTHLY MEETING</u></p> <p>Safety when polishing chains with small parts</p> <p>The Clear Lake Gem & Mineral Society will hold their monthly meeting on Monday, September 17, at 7:30 p.m. at the Clear Lake Park Building located at 5001 Nasa Parkway, Seabrook. The program will be presented by John Caldyne. It will be a short video showing how to professionally polish chains with small parts and will focus on safety. The program will conclude with question and answer. Visitors are always welcomed. http://www.clgms.org/</p>
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MINUTES OF THE AUGUST 21, 2017 MONTHLY MEETING



Meeting began at 7:35pm. We were treated to a program on micro-mounting mineral specimens by our own member Nick Roe. He presented a nice slide show and had a microscope set up for members to view some of his mineral collection. Pretty amazing Nick. Thank you so much!

During our break we had some awesome door prizes. Eddie, Charlie, Michael, Vince, Pierce, Carson, Lee, and Cindy were all lucky winners. Victoria had our new logo items on display, and everyone went home with a pen.

Show news: Vince has secured four NASA artifacts. Eddie has offered his trailer to transport the heaviest item. This year's advertising will most likely be radio ads, a paid Facebook ad and Trina already secured magnetic signs for our car doors.

Next month's program will be presented by John Caldyne.

Sara's husband will be conducting our November workshop on macro photography.

Vests and patches have been located so we hope to have a sewing day soon.

Next month's board meeting will not be on Labor Day the 4th. We will meet the following Monday September 11th. Meeting adjourned.

Respectfully submitted by Pam Dudley, Secretary

MINUTES OF THE SEPTEMBER 4, 2017, BOARD MEETING

The board meeting was canceled due to the Labor Day Holiday.

Word or Official State Minerals, Rocks, and Gemstones Word Search

Agate - State mineral of LA and TN, *Blue* - State gemstone of NE, *Fairburn* - State gemstone of SD, *Kentucky* - State rock of KY, *Lake Superior* - State gemstone of MN, *Montana* - State gemstone of MT, *Patuxent River Stone* - State gemstone of MD, *Prairie* - State rock of NE, *Thunderegg* - State rock of OR

Amethyst - State gemstone of SC

Aquamarine - State gemstone of CO

Babingtonite - State mineral of MA

Barite Rose - State rock of OK

Bauxite - State rock of AR

Benitoite - State gemstone of CA

Beryl - State mineral of NH

Bowenite - State mineral of RI

Chlorastrolite - State gemstone of MI

Coal - State mineral of KY, State rock of UT, *Bituminous* - State rock of WV

Copper - State mineral of AZ and UT

Coral Agatized - State rock of FL, *Black* - State gemstone of HI, *Mississippian* - State gemstone of WV

Cumberlandite - State rock of RI

Diamond - State gemstone of AR

Emerald - State gemstone of NC

Flint Ohio - State gemstone of OH

Fluorite - State mineral of IL

Galena - State mineral of MO and WI

Garnet - State gemstone of NY, *Almandine* - State mineral of CT, *Star* - State gemstone of ID, *Grossular* - State gemstone of VT

Gold - State mineral of AK, CA, and NC

Granite - State rock of NC, NH, and VT, *Blue* - State rock of SC, *Red* - State rock of WI

Hematite - State mineral of AB

Jade (Nephrite) - State gemstone of AK, *Wyoming Nephrite* - State gemstone of WY

Lapearlite - State gemstone of LA

Limestone - State rock of TN, *Salem* State rock of IN

Marble - State rock of AB and VT, *Yule* - State rock of CO

Moonstone - State gemstone of FL

Mozarkite - State rock of MO

Nelsonite - State rock of VA

Opal Black Fire - State gemstone of NV

Palmwood Oligocene Petrified - State rock of TX



Official State Stone of Texas

Texas designated petrified palmwood as the official state "stone" in 1969 (petrified wood is actually a fossil rather than a stone). Petrified wood is also the state gem of Washington, and the state fossil of North Dakota and Louisiana. All State Fossils - All State Stones

What is now arid Texas was a lush tropical forest 100 million years ago. Trees that fell into mineral-rich mud before having a chance to decay became petrified wood, which is actually a quartz-like stone. The organic wood cells were replaced over time by minerals, often retaining the detailed shape of the original prehistoric wood. Petrified wood is called the most beautiful of fossils.

The spotted look of palmwood is caused by fossilized rod-like structures within the original wood. Depending upon the angle the stone is cut, they show up as spots, tapering rods, or lines. Petrified palm wood is very hard and takes a wonderful polish, making beautiful jewelry

Pearl Freshwater - State gemstone of KY, *Tennessee River* - State gemstone of TN

Petoskey Stone - State rock of MI

Petrified Wood - State gemstone of WA and State rock of MS

Quartz - State gemstone of GA, State mineral of AR, *Rose* - State mineral of SD, *Smoky* - State gemstone of NH, *Star Blue* - State gemstone of AB, *Geode* - State rock of IA

Rhodochrosite - State mineral of CO

Rhodonite - State gemstone of MA

Roxbury Puddingstone - State rock of MA

Sandstone - State rock of NV

Sapphire Montana - State gemstone of MT

Serpentine - State rock of CA

Sillimanite - State mineral of DE

Silver - State mineral of NV and TX

Slate - State rock of VT

Staurolite - State mineral of GA

Sunstone Oregon - State gemstone of OR

Talc - State mineral of VT

Topaz - State gemstone of UT, *Texas Blue* - State gemstone of TX

Tourmaline - State gemstone of ME

Turquoise - State gemstone of AZ, NM, and Semi-Precious gemstone of NV

BENCH TIPS BY BRAD SMITH

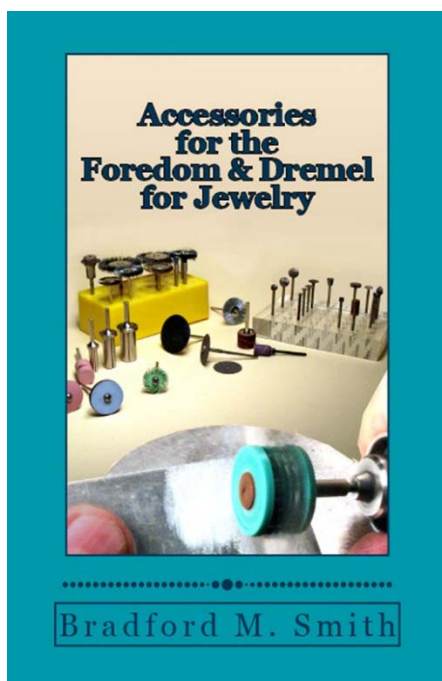
JUST A DROP



Hobby shops and model airplane stores carry small plastic dispenser bottles that are handy for putting a drop of flux, oil, or glue just where you want it. They have a length of small metal tubing coming out the top that lets you squeeze out very small drops.

I use one with a short length of tubing for oil when I'm sawing or when drilling harder metals like steel. Another bottle I found in a plastics store has a longer length of metal tubing on it. Plastics people use them for dispensing fast drying glues to join pieces of acrylic. The long metal tube lets you reach into tight places. Either of these is handy for flux at the soldering station.

New Book on Foredom Tool Bits



Confused by all the tool bits available for your flexible shaft or hand-held motor tool? "Accessories for the Foredom and Dremel" explains what each is good for, which ones save the most time, and the tool bits that best improve the quality of your work. Also included are bench tips for getting good results and cautions for safe use.

The book is available on Amazon at [amazon.com/dp/B074LG35ZV/](https://www.amazon.com/dp/B074LG35ZV/)

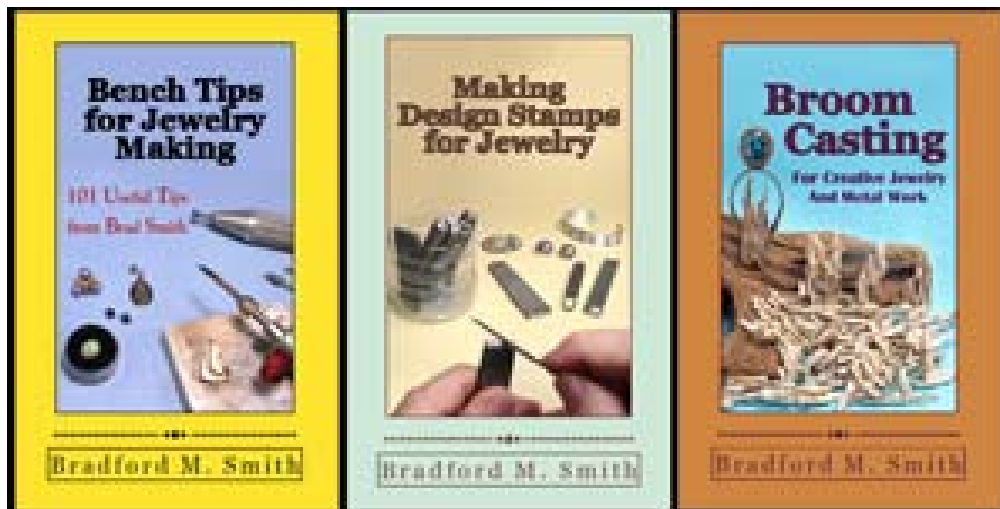
FOREDOM MAINTENANCE

If you have a Foredom flexshaft, it makes sense to check it over every so often to be sure it's running properly. But how to do that? You've probably lost the little booklet that came with the unit. Well, being the good company it is, Foredom has put together an extensive set of videos on how to do almost anything.

The series covers set-up, lubrication, replacing a sheath, motor maintenance, and handpiece maintenance. Few if any special tools are needed. You can watch the videos at www.foredom.net/flexibleshaftmachinemaintenance.aspx particularly under "Foredom Basics" or the "Foredom Shafting..." categories. Any repair parts needed are available on the Foredom site or from most jewelry supply catalogs.

Learn more new skills with:

See all Brad's jewelry books at Amazon.com/author/bradfordsmith



CONCRETIONS

from Wikipedia, Stone Chipper, Aug 2017

Origins



Detailed studies (i.e., Boles *et al.*, 1985; Thyne and Boles, 1989; Scotchman, 1991; Mozley and Burns, 1993; McBride *et al.*, 2003; Chan *et al.*, 2005; Mozley and Davis, 2005) published in peer-reviewed journals have demonstrated that concretions form after sediments are buried but before the sediment is fully lithified during

diagenesis. They typically form when a mineral precipitates and cements sediment around a nucleus, which is often organic, such as a leaf, tooth, piece of shell or fossil. Some of the most unusual concretion nuclei, as documented by Al-Agha *et al.* (1995), are World War II military shells, bombs, and shrapnel, which are found inside siderite concretions found in an English coastal salt marsh. Depending on the environmental conditions present at the time of their formation, concretions can be created by either concentric or pervasive growth (Mozley, 1996; Raiswell and Fisher, 2000). In concentric growth, the concretion grows as successive layers of mineral precipitate around a central core. This process results in roughly spherical concretions that grow with time. In the case of pervasive growth, cementation of the host sediments, by infilling of its pore space by precipitated minerals, occurs simultaneously throughout the volume of the area, which in time becomes a concretion. Concretions are often exposed at the surface by subsequent erosion that removes the weaker, uncemented material.



Composition

They are commonly composed of a carbonate mineral such as calcite; an amorphous or microcrystalline form of silica such as chert, flint, or jasper; or an iron oxide or hydroxide such as goethite and hematite. They can also be composed of other minerals that include dolomite, ankerite, siderite, pyrite, marcasite, barite and gypsum. Although concretions often consist of a single dominant mineral, other minerals can be present depending on the environmental conditions which created them. For example, carbonate concretions, which form in response to the reduction of sulfates by bacteria, often contain minor percentages of pyrite. Other concretions, which formed as a result of microbial sulfate reduction, consist of a mixture of

calcite, barite, and pyrite.

Occurrence

Concretions are found in a variety of rocks, but are particularly common in shales, siltstones, and sandstones. They often outwardly resemble fossils or rocks that look as if they do not belong to the stratum in which they were found. Occasionally, concretions contain a fossil, either as its nucleus or as a component that was incorporated during its growth but concretions are not fossils themselves.

UPCOMING WORKSHOPS

Upcoming workshops are scheduled for:

October 21 – We will have a class to show how to fuse glass into a self-designed dichroic glass pendant. Each piece will go into the kiln for a 2 hour heat and about a 4 hour cool. These pieces I will bring to the next meeting. After getting the kiln going I will furnish materials for a wire wrapping class. This will be a refresher for some so it might be fun. Estimates time will be 9 to 1 or 2. Class and materials will be \$25.00. Lunch is not included. We have a full class already. Our kiln only holds 9 pieces. -----Charlie Timme

November 11 – Macro Photography. In the first photography class, we learned about lighting and photographing small objects. Rocks can be a bit bland in a photograph just by themselves so on this class we will explore Macro Photography.

By some definitions, a macro photograph is one in which the size of the subject on the negative or image sensor is life size or greater. However, in other uses it refers to a finished photograph of a subject at greater than life size.

Some of the tools we used last time will be needed here along with a few add-ons to take highly magnified images of extremely small subjects. You could begin by slipping a diopter lens to the front of the existing standard lens. This would impart a degree of magnification; you could also install extension tubes between your normal lens and the camera body and finally, you could invest in a fairly expensive — and optically superb — macro lens that was dedicated to macro shooting.

A Close-Up Macro Filter Set such as a Vivitar Series 1- 1 2 4 10 Close-Up Macro Filter Set can be purchased for a very reasonable cost on Amazon for most cameras that accepts screw on filters. Make sure you get the correct size for your lens and camera.

This will obviously leave out many, inexpensive point and shoot cameras, but you can get good results with a non DSLR camera such as a Canon PowerShot with a Lens/Filter Adapter Ring to attach close up/ macro filters, or a Nikon CoolPix with the Lens/Filter Adapter Ring.

There are other adaptors to achieve macro photography so do your research!
Of course if you already have a good DSLR camera, you can't beat a good macro lens!

All can be found on Amazon.com

We will also be using a flash both on and off camera for lighting.

If you need advice on cameras, lens or lighting, feel free to write me at the address below.

Gary A. Chelette
gachelette@att.net

JAPAN'S CHERRY BLOSSOM STONE



An intriguing geological peculiarity has been found in the Japanese city of Kameoka, which lies just over the western mountains of Kyoto city. It's a small subhexagonal-shaped stone of very fine-grained muscovite mica hosted on a type of metamorphic rock called "Hornfels". Interestingly when cracked and opened, their internal cross-sections appear just like tiny golden-pink flowers. They're exclusively called "Cherry Blossom Stones", after the revered flower of Japan and one of the most renowned icons of the country.

The *Science Alert* explains the pattern of these flowers weren't always made of mica. They began their existence as a multifaceted matrix of six prism-shaped crystal deposits of a magnesium-iron-aluminum composite called cordierite, radiating out from a solitary dumbbell-shaped crystal made from a magnesium-aluminum-silicate composite called indialite in the center. Moreover; cherry blossom stones are hosted in a matrix of hornfels, a very fine-grained, contact metamorphic rock shaped underground about 100 million years ago by the intense heat of molten lava. The sub-hexagonal formed masses of cordierite/indialite in the hornfels contain seven individual crystals. At the center of each mass is a dumbbell-shaped indialite crystal very narrow at the center, and fairly wide

at the ends. Adjacent the indialite crystal are six prism-shaped cordierite crystals. They're widest at the center of each cherry blossom stone and narrowest at the ends.

The cordierite-indialite masses underwent a 2nd metamorphic event when they were uncovered to a type of hot water called hydrothermal fluids. These fluids altered the chemical composition of minerals inside the cherry blossom stones, producing mica to change the original cordierite-indialite inclusion. Since they have to undergo two penetrating and very specific types of metamorphosis in order to shape, cherry blossom stones are extremely rare, and found only in central Japan. Therefore; cherry blossom stones that underwent a whole replacement of their internal minerals during their geological lifetime are so subtle inside that they can without difficulty be snapped in half or crushed between one's fingers. In order to preserve the prettiness of their subtle mica patterns, the Japanese locals coat them in a diluted solution of wood glue mixed with water to keep everything in place.



Sources: www.Charismaticplanet.com
www.AmusingPlanet.com
Rocks & Minerals
Science Alert

Additional from the Japanese Kiseki Museum of World Stone:

Mineral called cordierite turns into mica when hydrothermally altered. The altered mineral is called cerasite (cherry blossom stone).

STONEY STATEMENTS
 Clear Lake Gem and Mineral Society, Inc
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(Postage)

Meeting 3rd Monday of the Month
 7:30 P.M.
 Clear Lake Park Building
 5001 NASA Parkway, Seabrook, Texas



Member of:

Next Annual Show
 February 24-25, 2018
 Pasadena Convention Center

CLGMS is on the Web:
<http://www.clgms.org>



American Federation of Mineral Societies

South Central Federation of Mineral Societies

Clear Lake Gem and Mineral Society, Inc

MEMBER: American Federation of Mineralogical Societies and South Central Federation of Mineral Societies			
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