



THE GEODE

Lakeside Gem and Mineral Club, Inc. (LGMC)

www.lakesidegemandmineralclub.com E-mail: lakesidegemandmineralclub@yahoo.com

Volume 83, Issue 5

May 2015

Club purpose: Promote activities of mutual interest for collecting and displaying of gems and minerals.

Address: Lakeside Gem & Mineral Club, Inc., PO Box 6652, Kennewick, WA 99336-0603

May Meetings

Club: Wednesday May 6, 2015– 6:30 social, 7:00 p.m. meeting.

Seventh Day Adventist Church, 7305 W 10th Ave.,
Kennewick

Junior Club meets May 12, 2015 -- 6:30 pm; Banner
Bank, 203 W 1st Ave., Kennewick

Junior Club Leader Thora Trumbo (509) 582-4297

GEODE Submission Deadlines:

- 15th – member articles & photos
- Day after Board mtg. - officer & committee contributions

E-mail them to

mickeemadden@charter.net

or call (509) 438-5798 to make other arrangements

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Refreshments: Evelyn Cataldo, Sally Lyons,
Kathy Larson, Judi Allison

Coffee: Mary Lou Omstead.

Program: “Rock Swap.” See page 4 for info

The Bragging Table for May

Over the past month, many club members attended the Yakima Gem & Mineral Show, or the NFMS show in Odgen, or our own Lakeside show. Bring your show purchases, either from a silent auction table or a vendor, to the meeting to share with us. Hope to see recent purchases of minerals, fossils, jewelry and lapidary rock on the Bragging Table.

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Member contact information updates:

Please notify Cindy Guettinger at
clguettinger@att.net

A new **refreshment person** is needed. At the May meeting, the position will be explained. It's certainly not difficult, but unless someone steps up, there will likely be no drinks and treats at future meetings.

Thank you, Mickee Madden

Club Minutes - April 1, 2015

Club President, Evelyn Cataldo, opened the meeting at 7:00 p.m.

Secretary's Report: The motion was made and approved to accept the Secretary's report as printed with the correction to state that men from the mission will be utilized on Sunday, 4-19-15, only to help unload trucks at the storage facility.

Treasurer's Report: Provided by Bert Kaé-Je (not published per historic Board policy).

General Business

- Guests and new members were welcomed.
- Programs: Kathy Larson has arranged for May's Club program to be a rock swap beginning at 6:30 pm in the parking lot at the church, with the meeting to follow.

Show Report: Evelyn gave a presentation on the time line for our upcoming gem show.

Old Business:

- Plaques from the November show and tell program were presented to Jim Murphy, "Winning Cab", and Elmer Ringering, "Collector of the Year".
- Chris Sorensen shared that the membership would like to see raffle funds going to support program speakers and school district kits. She thanked everyone for their feedback and will renew the survey as we go along.
- Heather Moon has signup sheets and information available regarding Club night at a Dust Devils game.
- April is Earth Month and the Club is filling 4 cases centering on the rocks/minerals of the Northwest for display at The Reach.

New Business

- The Yakima Show is April 11 and 12, and will be at the fairgrounds this year.
- Larry Hulstrom has t-shirts and hats available at \$10 each.

Bragging Table: Various picture jaspers were brought in by members. Marvin Barger showed miscellaneous pieces of Biggs, Owyhee and other jaspers, many of which are no longer available. Elmer Ringering brought Jungle Creek Jasper he found many years ago, and a very heavy piece of something he found in Arizona. Any guesses as to what it is? Evelyn and Dom Cataldo settled a bet with their Rocky Butte Jasper, which they also donated for door prizes.

Door Prizes: Kevin won an ammonite specimen, Marvin Barger got a pyrite specimen, Evelyn Cataldo chose an Easter egg tree, Steve Shoemaker and Ray Gifford took mystery rocks and Caroline Bowdish and Rosann Ferris each won Rocky Butte Jasper.

Program: Dr. Scott Ferris gave a great presentation on medical issues in the field. Thank you Dr. Ferris.

Next Meeting: Wednesday, May 6, 2015, 6:30 social, 7:00 p.m. program: Members' Swap Rocks in the Parking Lot!!

The meeting adjourned at 9:40 pm.

Respectfully Submitted,
Sally Lyon, Secretary



WASHINGTON ROCKS

Do you have rocks from Washington State? Do you know where they came from?
Do you know how they formed?

Chris Sorensen is going to bring some rocks from Washington and a geological map. She has rocks from different locations that illustrate how the geology differed.

Bring some Washington rocks to show and tell (limit two per junior please).



Obsidian Needles

- Obsidian is actually volcanic glass. It formed from molten rhyolite and cooled before the minerals within could crystallize, instead hardening as a jumble of molecules. In the Pacific Northwest, obsidian typically formed when highly viscous (thick, sticky) rhyolite lava rich with silica (quartz material), but almost devoid of water, cooled as a large mass. The extremely thick nature of the lava prevented mineral growth.
- Obsidian is unmistakable for any other rock. It has sharp edges when broken, exhibits conchoidal fracturing (when struck, circular cracks appear), and it is translucent in thin sections. Most obsidian is black, but it can contain “smears” of gray or brown. Obsidian develops a dull, dusty surface coating when weathered, which can be broken away to reveal the glassy interior.
- Obsidian is rated 6-7 on Moh’s scale, so it is harder than, and does not mark a ceramic tile. Look for obsidian in mountains, quarries and road cuts. Glass Butte is a mountain of obsidian located along US-20 about 80 miles southeast of Bend, Oregon.

May's Program: "Rock Swap"

Have some rocks that need a new home? Would you like to find some new rocks to replace those old rocks? Think you can bargain like the best of them? Bring them to the meeting and we will be holding a rock swap outside in the parking lot. No pricing and selling is allowed, just swapping. We will use our truck beds, tailgates and trunks of our cars to display our rocks. You will have until 7:45 pm to complete your bartering. Then it will be time for snacks and the business meeting. Who's bringing the cookies?

Guidelines for rock swap

Park in back of the church from 6:30 to 7:45. Please use caution so no one gets hurt.

Swaps will occur using the backs of cars, trucks or tables if individuals wish to bring them.

This is a swap meet so we suggest no cash sales.

Individuals are encouraged to offer rock or lapidary items they have produced themselves.

This is an opportunity for newer members to get to know older members and for members to reduce their inventory without a lot of work.

At 7:45 swap will end and clean up begin. Everyone will then adjourn to the kitchen for some yummy snacks. I heard cupcakes will be provided.

A short regular meeting will start at 8:00 with MAYBE the results from the show.

2015 Field Trips Update

May 9	China Hollow	Jasper	LGMC – Kerry Norton (509) 391-0057
May 23	Saddle Mountain (WSMC)	Petrified wood, etc.	Details: website mineralcouncil.org
June 5-7	Hollywood Ranch	Petrified wood	LGMC – Dom Cataldo
June 15	Emerald Creek, ID (WSMC)	Garnet, etc.	Details: website mineralcouncil.org
June 21-24	McDermitt, NV (WSMC)		Details: website mineralcouncil.org
July 18	Cataldo collection and shop		LGMC – Dom & Evelyn Cataldo
August	Little Naches	Thunder eggs, etc.	LGMC – Heather Moon, Ray Gifford, Sean Hall
Sept. 12-13	Red Top Mountain (POW-WOW)		Details: website mineralcouncil.org

- Field Trips: Larry Hulstrom shared details of his contact with a garnet mine owner representative near Clarkia, Idaho. The mine is being made available by appointment for rock club members in the area to dig. He can accommodate up to 25 people at a time, there is no charge to dig. He does however charge \$25 per pound for any material taken out, with the exception of garnets larger than 2 ½ inches in diameter. These larger specimens are kept there or may be negotiated. The mine is open during the week and on weekends, and Larry has all the pertinent contact information.
- The Walla Walla Club will be hosting a field trip to Saddle Mountain on April 12.
- Kerry Norton has information on a field trip to China Hollow, near Wasco, OR. Signup sheets are available.
- Interest has been expressed in a field trip to the Bruneau rock pile in southern Idaho. Anyone willing to organize and lead this trip and find some really nice petrified driftwood, contact Evelyn Cataldo.

Resources for Club Members

- *Rock saw oil.* Max Hatfield - (509) 582-6028
- *Tumbling grit.* \$2/lb. For every 5 lbs. of tumbled rock you donate, get 1 lb. of grit free. Frank & Mary Lou Omstead - (509) 783-2798

CHINA HOLLOW JASPER

On May 9th, Kerry Norton will lead a field trip to the China Hollow Jasper Mine near Wasco, Oregon. This is a Biggs-type jasper that is still being mined today. Following is the China Hollow story as written by the owner of the jasper claim.

Hi My name is Don Hilderbrand,

A little bit on Biggs and China Hollow. I have always loved rocks. In 1999 I got to buy one of the Biggs mines in north Central Oregon. In the 60's through 1980 a man named Fred Dormaier dug this rock and brought it to the modern world. I have sold this material on ebay some, earlier on as "chrockso." Now I have a small shop in Wasco just south of Biggs. I have been taking this rock to Quartzsite for the fifth year now in 2011. Tucson Electric Park RV Gem Show saw this material for the first time in January.

The material that comes from this mine is fantastic hard jasper and agate. Along with the original "Biggs" Pattern a material called "Biggs Lace", some fantastic agate and tons of dendritic Jasper come from here. I don't mean a lot of dendrites. I mean tons of beautiful rock loaded with dendrites. This material has been quite the hit with the knappers, sphere makers and anyone that likes rocks. This material I dubbed "China Hollow" as the creek the mine is in, is China Hollow Creek, a stone's throw from the town of Biggs. I was taught a lot of what I know of the Biggs jasper by Howard Dolph a very honorable man, He is gone now but his knowledge and his memory is strong in my mind. I did try to name an agate that comes from my mine after him, but a man somewhat less than Howard has ruined that honor. I no longer push that name onto this beautiful agate. The stone is still available as China Hollow Agate.

The China Hollow mine material was mined as early as 12,000 years ago, by the Native Americans for their "Columbia River Gem Points". Howard told me points were found in a dig back in the 30's that were from my mine. He stated, "those points came from your mine, kid. I can tell from the colors present, also these colors were only present after heat treating." Mines in this Biggs triangle all have different "fingerprints", slight differences in color and pattern.

Kerry needs to let the owner know about the number of people going on the field trip. There is a maximum number that will be allowed, so it is important to either send Kerry an email or give him a call to confirm your space on the trip. Kerry's phone number is (509)391-0057 or his email address is kerry_norton@ymail.com.

GEMSTONE TREATMENTS, PART 3

Jerry Johnson, Gemologist

Impregnation: Many of us have used such things as epoxy, OPTICON and “super glue” to fill cracks and voids in various materials. These products and many others have been used to fill cracks and voids in many gemstones. I will cover only a couple of examples.

Emerald:

- One of main reasons that emeralds are very expensive is that most of them are not of gem quality. A flawless emerald is indeed a rare gem. The “oiling” of emeralds to seal fractures has been done for many centuries.
- Cedarwood oil is one of the most widely used filling substances today. This is because it has a higher refractive index and viscosity than other oils (linseed, rapeseed, mineral, and vegetable oil). Cedarwood oil is extracted from coniferous trees and is composed of tricyclic compounds (cedrol, cedrene, cedrenol).
- Other materials include the various artificial resins (Opticon, Epon, Araldite and Epo Tek) and waxes (beeswax, paraffin wax, vegetable wax).
- About 90% of the emeralds evaluated by gemological laboratories have been impregnated. As a stone cutter I recommend that anyone who may be considering doing any repair work on emeralds should be extremely cautious in accepting any work that involves recutting. It is most likely that some of the filler will be removed and then the recut stone will look worse as the fractures re-appear.

Turquoise

- The use of turquoise in jewelry can be traced back 70 centuries. As with emerald, the supply of high quality material is limited. The vast majority of turquoise is porous and the pores can be filled with oil, wax, plastic, resins, and various silicates. The trade has generally referred to these treatments as “stabilization” and since they are widely used there is little effort to disclose such treatments.
- About 15 years ago a new treatment started to appear in the marketplace. It is now known as “Zachery-Treated Turquoise”, named after James Zachery who invented the process. It is proprietary. Today, millions of carats of turquoise have been treated by this process. The result is a very stable medium blue stone. This type of treatment cannot be detected by standard gemological techniques. Evaluation of treated stones by energy-dispersive X-ray fluorescence shows the presence of potassium. Such evaluations can be done only laboratories such as the GIA (Gemological Institute of America).

Corundum

- Sapphires and rubies have subjected to treatments to fill fractures and this has been done with glass and silicates.
- In the past, titanium has been introduced into sapphire to improve the blue color. There is a relatively new treatment that changes the color of these stones and I have chosen to include the discussion in this “Impregnation” section of the articles on gemstone treatments. The process involves the solid state diffusion of beryllium into the crystal structure of corundum. Detailed evaluations of the stones and process have been conducted by the GIA.
- Color in sapphires and rubies occurs because of impurities within the crystal structure. Typical impurities are iron, titanium, magnesium, chromium and silicon. Color arises as a result of the transfer of electrons between the ions in the crystal lattice. Ions with an excess positive charge are called donors and ions with a relative charge of -1 are termed acceptors. A complete understanding of how these ions interact requires a knowledge of band theory and is far beyond the scope of this discussion. But the observed color depends upon the valence of the various ions and how they affect absorption of light.
- It was discovered that the introduction of beryllium into the lattice could result in various colors depending upon what other impurities were present. This was first done in Thailand by packing sapphires with finely ground chrysoberyl. The stones were heated to very high temperatures (1800 C) in an oxidizing atmosphere. Subsequently evaluations at the GIA employed the use of fluxes with chrysoberyl or beryllium oxide. A wide variety of colors were produced in their tests. Also, redder rubies and bluer sapphires were a result of the treatments.

Continued on next page

GEMSTONE TREATMENTS continued

Identification of beryllium treated stones might be accomplished with various magnification techniques. The most positive means to identify these treated stones is by Secondary Ion Mass Spectroscopy or by Laser Ablation Inductively Coupled Plasma Mass Spectroscopy.

It is my opinion that this type of treatment of corundum represents one of the most significant gemstone treatments to ever impact the marketplace.

For further information on this subject I refer the reader to the article entitled "Beryllium Diffusion of Ruby and Sapphire" which appeared in the Summer 2003 (Vol. 39, No. 2) issue of *Gems & Gemology*.

Richardson Rock Ranch by Mickee Madden

Three weeks ago, Rosann & Scott Ferris and my husband and I, headed off for a weekend at the Richardson Rock Ranch. We arrived at our motel in Madras late Friday morning, While Scott went off by himself to scout for fishing possibilities, the three of us headed for the ranch. Our intentions were to go digging at the Flame jasper and Blue opal beds. To our disappointment that whole section of beds are closed because of the conditions of the roads. All that remained were the Red and Blue beds, and the Pony Butte area.

On the plus side, the roads leading to these are wider and smoother than ever. The downer was, it was slim pickings at the available sites. At the moss beds, you really need a serious sledge hammer to get anywhere, and we brought everything BUT with us. However, this is not to say we didn't find some treasures. Way out in the Blue bed, I found a chunk of Flame jasper. Rosann found tube agate and jaspers. Steve and I managed to fill two buckets and we left pretty happy with what we had.

On Saturday, we decided to check out the 50 cent a pound and the dollar a pound piles. Mind you, to dig your own, it's a dollar a pound, so the 50 cent mound was very appealing. During past years going through the "Diggers Heaven" heap, Steve and I mostly found petrified wood. Not my personal favorite. However, "Diggers Heaven" (located at the left side and to the rear of the office) lived up to its name. We found every color of moss agate, incredible jaspers and materials I haven't identified yet. We filled four tall buckets and barely dimpled the pile.

The dollar a pound pile was equally well-stocked. Yup, two more buckets of treasures.

The crowning glory came when my husband started looking through a heap of Labradorite out in front of the office. We've purchased a lot of this over the years, but I've never seen the like of what they were selling this year! At \$5.00 a pound, it was the best purchase of the weekend.

They are also importing more materials from around the world.

It's fun to go digging and get dirty, but this rock hound HIGHLY recommends checking out all the material around the main office.

Richardson Rock Ranch will forever remain my favorite getaway.

From President Evelyn....

Congratulations to Show Chairman Kathy Larson and all of you who helped to organize and put on such a great 2015 Rock & Gem Show. It was a success story! As the dealers were packing up, I had an opportunity to speak with several of them. Two dealers informed me that our show was their very favorite due to our hospitality, friendliness and helpfulness. Our new dealer, Maple Tree, hopes that we will invite him back and that our potluck was AWESOME.

Be sure to read the story about China Hollow Jasper in this issue and the field trip to that site that Kerry Norton is leading on May 9th. Reservations for the trip need to be made through Kerry.

Put the June 5, 6 and 7th field trip to the Holleywood Ranch in Oregon on your schedule. You will need to let Dom Cataldo know if you are going on the trip since reservations need to be made with the Holleywood Ranch. More details will be available at the May meeting.

Check out the article in this issue on our new Lakeside Raffle. There is a great collection of prizes on the raffle table. Don't miss out on the limited opportunity to purchase tickets.

Program Chairlady Kathy has a fun program planned for our upcoming meeting. Read more about it in this issue of *The Geode*. I'm in process of deciding what I can bring to trade. See you at the trading tables.



Give It a Try Cleaning Agates & Jaspers

This is something that I've used for cleaning rifle cases and worked great. Modified it a bit and tried it on our agates/jasper. Worked fabulous.

- 1 Qt Hot Distilled H₂O
- 1 cup White Vinegar
- 2 heaping T Lemi-Shine
- 1/4 cup Dawn

Mix well until the Lemi-shine dissolves. Put rock into solution and shake or stir periodically. Works wonders and is way cheaper than CLR or Lime-Away. Lemi-Shine can be found at Wal Mart or almost any grocery store. It is a powdered, concentrated citric acid designed to clean dishwashers. About \$4 for a good-sized bottle that will make dozens of batches.

* **Andy Johnson** shared Doug Schonewald's post on LGMC facebook page Aug 2014

LGMC Board of Directors

Officers E-mail: lakesidegemandmineralclub@yahoo.com

President	Evelyn Cataldo – 628-0170	Director	Wayne Larson – 586-1203
Vice President	Chris Sorensen – 392-1362	Director*	Yvonne Legare – 585-5514
Secretary	Sally Lyon – 947-8443	Federation Representative	Larry Hulstrom – 783-6210
Treasurer	Bert Kaé-Je – 582-3766	Junior Club Leader	Thora Trumbo – 582-4297
Past President	Marty Casto – 628-3509	Bulletin Editor	Mickee Madden – 438-5798

Phone numbers are all Area Code 509. By-Laws specify two year elected terms of office for Board Members, beginning in November. President, Vice President and one Director begin in even numbered years. Secretary, Treasurer and one Director (*) begin in odd numbered years. Federation Representative, Junior Club Leader, Bulletin Editor and Committee Chairs are Board-approved volunteers. By-Laws at www.lakesidegemandmineralclub.com

Available Club Officer Positions

Assistant Junior Club Leader

The Junior Club meets the second Tuesday of each month, except July. The Club is generally designed for children between the ages of 8 to 16 years. Call Thora Trumbo at (509) 582-4297 to express your interest.

Rockhound Legislative Advocate

When notified by the AFMS, the NFMS, ALAA or club members about legislative issues that will affect rockhounding activities, forward that information to club members via email lists. Call Evelyn Cataldo at (509) 628-0170 for details.



Club Affiliations:

American Federation of Mineralogical Societies (AFMS) <http://www.amfed.org>

Northwest Federation of Mineralogical Societies (NFMS)

<http://www.amfed.org/nfms>

American Lands Access Association (ALAA)

<http://www.amlands.org>

Member: Tri-Cities Visitor and Convention Bureau



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Have You Purchased Your Raffle Tickets Yet?

Yes, it's true, the club is sponsoring a raffle. The recent survey completed by Vice-President Chris highlighted the members' desire for more guest speakers if we were able to generate some special funding. Elmer Ringering started the raffle prizes with a contribution of a finished round of *Araucaria* wood from Arizona. Soon to follow was a spectacular creation by Bert KaJe, a silversmithing project from Sally Lyon, a handmade glass bead necklace by Chris Sorensen, a man's belt buckle by Max Hatfield, a beautiful carved eagle, a unique gem tree and more. All the prizes will be on display at the next meeting and tickets will be available. Tickets are \$1 each or six tickets for \$5. The drawing will be held at our meeting on June 3rd. See Pat Lambert for tickets.