

The Lake George Gem and Mineral Club -

Club News,
March, 2012



Regular Meeting of the Lake George Gem & Mineral Club
Saturday, March 10, at 10:00AM
Lake George Community Center

Bob Hickey, a volunteer naturalist for Colorado State Parks (AHRA and Mueller State Park) will talk about "**Western Geomorphology**", including overviews of the Earth's structure, plate tectonics, mountain-building events, and hypotheses for how the mountains of western Colorado formed. Mr. Hickey is a retired computer programmer, program manager, and computer-language designer for private companies and the Department of Defense, and a long-time geology enthusiast.

Coming Events

- "Managing Your Mineral Collection"**, by Bob Carnein, Columbine Gem & Mineral Society monthly meeting, 6:30PM, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida. ... **March 8**
- Friends of Mineralogy** Monthly meeting, VIP Room, Denver Museum of Nature and Science, 7:30PM. ... **March 8**
- "Twenty-Three Pegmatites in 5 Days"**, by Pete Modreski, North Jeffco Mineral Club monthly meeting, 7:30PM, North Jeffco Community Recreation Center, 6842 N. Wadsworth Blvd., Arvada. ... **March 9**
- Colorado Springs Mineralogical Society** monthly meeting, 7:30PM, Colorado Springs Senior Center, 1514 N. Hancock. ... **March 15**
- Pueblo Rockhounds** monthly meeting, 7:30PM, Westminster Presbyterian Church, 10 University Circle. ... **March 15**
- "Paleogeography of the Denver, Cheyenne, and Colorado Headwaters Basins, from the Latest Cretaceous through the Eocene"**, Colorado Scientific Society monthly meeting, 7PM, Shepherd of the Hills Presbyterian Church, 20th Ave. at Simms St., Lakewood. ... **March 15**
- Rocky Mountain Federation of Mineralogical Societies Convention and Show**, Creative Arts Bldg., NM State Fairgrounds, Albuquerque (advance registration by March 1.) Go to www.RMFMS.org for information. ... **March 16-18**
- Ft. Collins Rockhounds Annual Show**, Larimer Co. Fairgrounds, Ft. Collins. Contact Dave Halliburton (970-493-6168) for info. ... **March 23-25**
- Colorado Mineral and Fossil Spring Show**, Ramada Plaza Hotel (formerly Holiday Inn), 4849 Bannock St. (frontage road on west side of I-25, north of I-70), 10-6 Fri., 10-5 Sun.; free admission and parking. ... **Apr. 20-22**

CSM Sealed-Bid Auction Ends, 9AM. Go to CSM Facebook page for details.

... April 24

Colorado Mineral Society Annual Auction, Holy Shepherd Lutheran Church, 920 Kipling St., Lakewood. Contact Richard Nelson (rsnelso@gmail.com) for info.

... May 5

Lake George Gem & Mineral Club Annual Show, Details to follow.

... Aug. 17-19

Please Welcome the Following New Members:

Reggie & Gabriel Abbott

Kathy Conley

Isaac Frank

Rex & Sonia Oliver

Club News

?? About 18 members and guests attended the February 11 meeting. President **John Rakowski** reminded those in attendance that **2012 dues are due**, and we will remove unpaid members from the mailing list in March. As an added bonus, paid members receive free admission (by presenting their card) at the Western Museum of Mining and Industry. He also reminded members that applications for the annual Club scholarship are due in March. The scholarship is for a Teller or Park Co. resident or relative of a member. John read the draft guidelines for the Club claim, which will be published in the Newsletter. After the business meeting, we received a "Behind the Scenes Tour" of the Smithsonian's Mineral and Gem Collections, via a DVD of a talk presented by Jeff Post at the 2011 Dallas Mineral Symposium.

?? Best wishes to **Dick Lackmond**, who is recuperating from knee replacement surgery and to **Marge Breth**, who will soon undergo heart surgery.

?? New Trip Coordinator **Richard Kawamoto** has booked two (2) early trips with local miner and mineral dealer Joseph L. Dorris; he has several others in the works; and is seeking leaders and ideas for new localities! He can be contacted at kawahome@wildblue.net.

?? New Meeting Location, Lapidary Workshop, April 14-th only, 9am. Gather at DENNY's, 100 Morning Sun Drive, Woodland Park! LGGMClub business meeting; then Lapidary Arts appreciation Demo at LGGMC LapShop (practically across the street). **Dan Alfrey** has set up the large meeting room @ No Cost. Please feel free to order off menu. Breakfast followed by 10am Mtg., 10:30ish Demo... contact Richard Kawamoto or Dick Lackmond for more info.

?? WE NEED A LIBRARIAN! Please contact president **John Rakowski** to serve, Thank you.

?? Our fantastic new Gem Show Chair **Dan Alfrey** has had a series of meetings to improve our already outstanding Annual Gem & Mineral Show (August 17-18-19). Special Thanks goes to past chair & current president, Mr. **John Rakowski** ! A jump-start Dealer-Only field trip has been confirmed !!!!

?? Here are this month's "Bench Tips" from Brad Smith:

PROBLEMS WITH SMALL DRILLS

When drilling small holes, you sometimes encounter new problems. We're talking about drills that are less than 1 mm (which is 18 gauge or .040 inches). Often the chuck will not tighten

Lake George Gem and Mineral Club

March, 2012

down far enough to grip a small twist drill. You can solve this two ways - with a chuck adapter or by buying your small drills with a 3/32 inch shank size. Either way you have a 3/32 shank to go into the chuck of your drill press, Foredom or Dremel, so changing bits is fast and easy.

Remember that small drills are much more prone to breaking because of too much pressure or if you tilt the drill or the workpiece when the drill is in the hole. And drilling always goes easier with a little wax or oil on the tip. Almost anything will work - Three and One, injection wax, mineral oil, Burr Life, car oil, olive oil, etc.

USING PRE-MADE BEZEL CUPS

As a general rule of thumb I assume it's going to take me 15 - 20 minutes to make a bezel for an ordinary cabochon, so for some projects buying pre-made cups can save a lot of time. But if you go this route, keep in mind three things. First, try to get cups made from fine silver, not sterling. Remember that fine silver is softer and burnishes over the stone more easily.

Second, you may have trouble matching the shape and size of the stone with the shape and size of the bezel cup. Purchased cups can only be found in a limited number of standard sizes. You may have to adjust your choice of gemstone to match the cup. The other consideration is that pre-made cups often have fairly low side walls. While these are fine for low-dome stones, they will not adequately secure stones with steep side walls.

Lastly before setting, check the fit of your gemstone in the cup, particularly around the bottom. The bottom corners of a stamped cup are much more rounded than a bezel you would fabricate yourself. This causes a problem with some stones. If your stone has a sharp edge around the bottom, burnishing over the bezel will place a lot of stress on the stone and may cause it to crack. To avoid this, I round off the bottom edge of the stone with a diamond file (or use sandpaper on soft stones).

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More BenchTips by Brad Smith are at: groups.yahoo.com/group/BenchTips/ or [facebook.com/BenchTips](https://www.facebook.com/BenchTips).

?? Brad Smith also sent the following news items that may be of interest:

"Sunstone Theft"

Tucson police investigate major theft from gem show vendor

Thieves stole thousands of sunstones worth about \$900,000 dollars.

<http://www.kgun9.com/news/local/138859364.html>

"\$400 Million Emerald"

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For a glimpse into the emerald gem trade, from South American mines to storefront dealers, the National Geographic Channel is airing a program called "The 400 Million Dollar Emerald". Subject is called the Bahia emerald.

Some say it's the largest ever found, weighing in at 840 pounds and containing roughly 180,000 carats. Unearthed in Brazil in 2001, the Bahia emerald has an incredible history that fits its massive size. It spent months in a submerged bank vault in New Orleans after Hurricane Katrina and was even posted on eBay with a buy it now price of \$75 million. Others point out that the real stone is presently in lock-up pending litigation, and the piece

shown in the NatGeo story is just a mock-up that is far more spectacular than the real stone. Regardless of what Bahia really looks like, the video gives an interesting view of how emeralds are found, cut, and traded.
<http://channel.nationalgeographic.com/channel/explorer/400-million-dollar-emerald-pictures/>

Pebble Pups Corner

Steven Veatch will present the March 20 program, titled "**Exploring Caves**". Artifacts and fossils from caves will be displayed, and the "mineral of the month" will be calcite. Please Remember: Bring your identified mineral sets from last month to be checked!

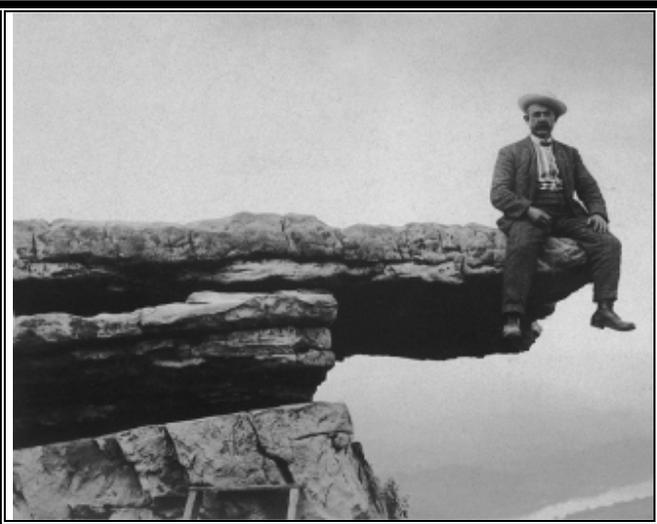
Please check out the poem and article by Pebble Pups members from the Lake George and Colorado Springs clubs, published under this month's "Notes from the Editor".

Bob Carnein talked to 5 Pebble Pups on February 21. The program covered "**Basic Mineral-Identification Skills**".

Remember, parents and other guests are welcome to attend Pebble Pups meetings, which are normally held at **6PM on the third Tuesday** of the month in the **Lake George Community Center**.

NOTES FROM THE EDITOR

Bob Carnein, Editor
ccarnein@gmail.com
719-687-2739



Steve Veatch encourages Pebble Pups members to try their hands at composing poetry. Presented here, for the first time, is a poem by Lake George Junior Member Ciena Higginbotham. This poem will soon be published in *Rock and Gem* magazine.

Gold Rush

By Ciena Higginbotham,
Lake George Gem and Mineral Club Junior Program

Lake George Gem and Mineral Club

March, 2012

There was once a fellow from the days of old
Who stumbled upon a chunk of gold
He tried to keep quiet but rumor got out
Everyone knew there was gold, no doubt

People everywhere, came from all around
Hoping to find their own sparkling mound
They knelt in the stream and sifted away
Through rock and sand—searching everyday

They searched and searched and searched for gold
Hoping to find some before they are old
They persevered and never gave up
And soon they had gold in their cup

It all started when a fellow found gold
And this is how the story is told



© Ciena Higginbotham

Poet's bio: **Ciena Higginbotham** is 14 years old and an 8th grade homeschooler. She lives in the beautiful Rocky Mountains in Colorado. She's always had a fascination with geology and has been collecting rocks since she was little. She has attended the Lake George Gem and Mineral Club Pebble Pups since 2010. With the assistance of the group, she had the chance to help write an article and earn several awards. Her other interests include writing, drawing, painting, and musical activities.

Up next is an article by a Colorado Springs Junior Member.

Lake George Gem and Mineral Club

March, 2012

A Short Note on Wavellite

By Luke Sattler

Colorado Springs Mineralogical Society Junior Member

Discovered by William Wavell in 1809, the mineral *wavellite* is an interesting mineral that should be in everyone's collection. It has an attractive color and displays interesting crystal habits.

Wavellite has three different and distinct crystal habits. The first — which is the most common—is spherical (figure 1); the spherical crystal habit appears mainly on host minerals such as limonite, turquoise, quartz, or variscite. If you were to break the spherical crystals open, you would see radiating lines that make up the crystal structure.

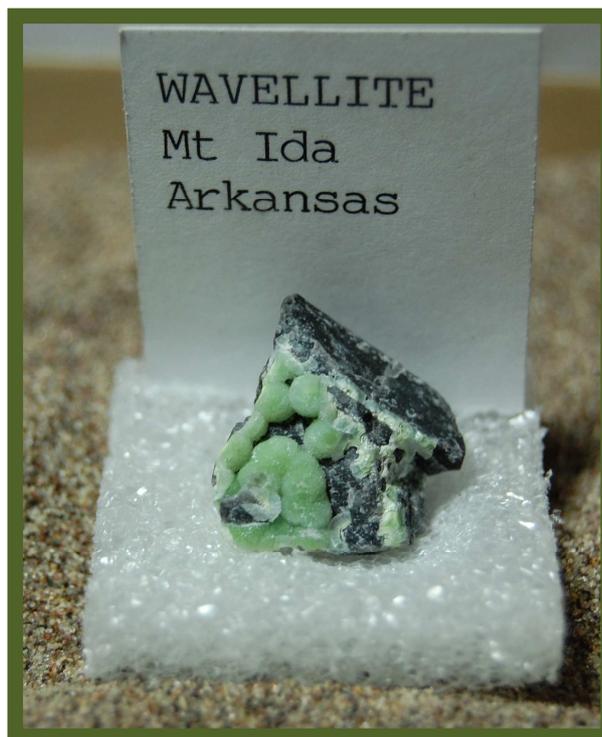


Figure 1. Wavellite (Image by Luke Sattler © 2012)

The second crystal habit, which is striated prisms, is the most beautiful and rarest of wavellite crystal habits. Specimens of striated prisms of wavellite are primarily found in Queensland, Australia and are expensive to purchase.

Lake George Gem and Mineral Club

March, 2012

The third crystal form is radial and is made up of straight prism crystals that radiate out from a center point (figure 2). This habit of wavellite is also mainly found in Queensland Australia and is also rare.



Figure 2. Image by Lou Perloff ©/Photo Atlas Of Minerals, used by permission.

A few interesting facts about wavellite include a hardness of 3.5 to 4; a density of 2.37g/cm^3 ; and wavellite has many colors: brown, green (most common), yellow, blue black, purple, and clear (also common). Wavellite has some uses but not many—wavellite today is a mineral of interest to collectors and is found in discriminating collectors' mineral cabinets; wavellite is mined for its phosphate content, from which manufacturers get phosphorus for toothpaste, water treatment applications, fertilizers, fire starters, fireworks and many other uses.

Wavellite is formed as a secondary mineral of low-grade metamorphic rocks in limonitic and phosphate deposits. It rarely forms as a mineral in hydrothermal veins.

The locations shown in figure 3 include Mt. Ida in Arkansas, USA, Devon, England, where William Wavell discovered it, Mt. Pleasant in Pennsylvania, USA, and Queensland, Australia.



Figure 3. Map of wavellite locations. Wavellite only occurs in certain locations of the world. Image Google maps ©; (<http://www.mindat.org>). Used with permission.

This short note should give you the basic facts about this interesting mineral; due to the limited locations, your best bet for obtaining a specimen for your cabinet is at a local rock and gem show.

References:

([Http/; www.mindat.com](http://www.mindat.com))
 Babbington (1805) Phil. Trans.: 162.
 Davy (1805) Phil. Trans.: 155, 162 (as Hydrargillite).
 Thomson; von Moll (1809)



Author's bio: Luke has been faithfully attending meetings of the Colorado Springs Mineralogical Society's Pebble Pup/Junior meetings for over three years. He has made many contributions to the programs, brings rocks and minerals to share with the other youth members, has helped the instructor on many occasions, and has articles and research papers published in international magazines and local newspapers. He is a skilled researcher in the geosciences.



Box 171
Lake George CO. 80827

LGGMClub.org

Lake George Gem & Mineral Club Claim Guidelines

The intent of the LGGMC claim is to provide an area for all Club members, but especially those with minimal experience, to collect minerals with a reasonable expectation of finding worthwhile specimens. We encourage our more experienced members not to deplete the claim area. There is intense mineralization in the surrounding area, where prospecting may be fruitful. Use of the Club claim is strictly on the honor system. We follow the "golden rule" and abide by the American Federation of Mineralogical Societies' Code of Ethics (see below).

Guidelines

- ◆ You **MUST** be a **current member** of either the LGGMC or the DGMC to participate in Club-sponsored field trips. It is okay to join on the day of a planned trip.
- ◆ You are **REQUIRED** to submit the date and approximate hours of your visit to Claim Coordinator Dan Alfrey, preferably by e-mail (AlfreyDan@aol.com) or call 719-440-6234; or use snail mail: PO Box 4164, Woodland Park, CO 80866.
- ◆ Any visit is at **YOUR OWN RISK**. Neither the LGGMC nor DGMC will be liable for injuries or loss of property.
- ◆ We allow **HAND DIGGING ONLY**. No explosives or machinery of any kind can be used.
- ◆ All holes must be **refilled** or **left protected** before you leave. If you camp overnight, cover active holes so as to protect the public and wildlife in the National Forest. Anyone who digs must be available for reclamation.
- ◆ All parking and/or camping is to be in USFS designated locations only.
- ◆ Please pick up all trash, even if it is not yours.
- ◆ **Minimize consumption** (limit bucket loads) and **personal sales** (a few are ok on occasion). Remember the purpose of the Club claim.
- ◆ If you see any damage to claim posts, please **notify Dan or any Club officer** asap.
- ◆ **Follow US Forest Service signage, rules, and regulations.**
- ◆ **Be polite** to others encountered on Forest Service land. Remember that the National Forest is open for all kinds of activities. Some visitors may not approve of digging, but explain that we have this right through ownership of the Claim. If someone shows an interest, take a few minutes to explain what you're doing and encourage them to join one of the clubs.

AFMS Code of Ethics

I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.

I will keep informed on all laws, regulations, or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind -- fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.

I will discard no burning material -- matches, cigarettes, etc.

I will fill all excavation holes, which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule," will use "Good Outdoor Manners," and will at all times conduct myself in a manner which will add to the stature and public "image" of rockhounds everywhere.

DUES ARE DUE! DUES ARE DUE! DUES ARE DUE! DUES ARE DUE!

Lake George Gem and Mineral Club

Box 171

Lake George, Colorado 80827

LGGMClub.org

2011 MEMBERSHIP APPLICATION

Name(s) _____

Address _____ City _____ State ____ Zip _____

Telephone () _____ - _____ E-mail _____

Names and ages of dependent members: _____

Annual membership - dues Jan. 1 through Dec. 31 are as follows:

- Individual (18 and over) \$15.00
- Family (Parents plus dependents under age 18) \$25.00

Annual dues are due on or before March 31. Members with unpaid dues will be dropped from the roster after this date. **Any new member joining on/after August 30 shall pay one half the annual dues.**

I hereby agree to abide by the constitution and by-laws of this club.

Signed _____ Date: ____/____/____

I have previously been a member of Lake George Gem & Mineral Club. Yes ___ No ___

My interest areas include:

Minerals ___ Fossils___ Lapidary ___ Micromounts ___
Other _____

I would be willing to demonstrate any of the above for a club program or educational activity? If yes, which: _____

Please indicate which of the following activities you might be willing to help with:

Writing _____ Editor _____ Mailing _____ Local shows _____

Club Officer _____ Programs _____ Field trips _____ Refreshments _____

Questions about the club or club activities? Contact John Rakowski (719) 748-3861

Rev. Jan. 2011

Lake George Gem and Mineral Club
P.O. Box 171
Lake George, CO 80827

The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts and the great outdoors. The club's informational programs and field trips provide an opportunity to learn about earth sciences, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The club meets the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. **In the winter we meet at 10:00 AM. From April through September, we meet at 9:00 AM, to allow more time for our field trips.**

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (Parents plus dependents under age 18).

Our Officers for 2011 are:

John Rakowski, President

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Wayne Johnston, Treasurer

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