

The Lake George Gem and Mineral Club -

Club News, *FEBRUARY*,
2013



Regular Meeting of the Lake George Gem & Mineral Club
Saturday, *February 9*, at 10:00AM
Lake George Community Center

Dues are due....see membership application at the end of this Newsletter



Famous Mineral Localities:

THE CRIPPLE CREEK MINING DISTRICT

Colorado

Bob Carnein will talk about "Geology and Minerals of the Cripple Creek District". Specimens and photos from Bob's extensive collection of Cripple Creek minerals and postcards will be available for you to see, and the talk will include photos of specimens from other famous collections. For a preview, check out the article in *The Mineralogical Record*, vol. 36, p. 143-185.



Coming Events

- Columbine Gem and Mineral Society**, monthly meeting, 6:30PM, meeting room, Shavano Manor, 525 W. 16th (at J St.), Salida. ... **Feb. 14**
- Annual Book Sale**: CSM, Golden: Arthur Lakes Library, 1400 Illinois St., and CSM Geology Museum, 1310 Maple St. Go to http://library.mines.edu/LB_Book_Sale for info ... **Feb. 18-22**
- Pueblo Rockhounds**, monthly meeting, 7:30PM, Westminster Presbyterian Church, 10 University Circle, Pueblo. ... **Feb. 21**
- Colorado Springs Mineralogical Society**, monthly meeting, 7PM, Colorado Springs Senior Center, 1514 N. Hancock, Colorado Springs. ... **Feb. 21**
- Denver Gem & Mineral Guild, Gem & Mineral Show**, free adm. And parking. ... **Feb. 22-24**
Jefferson Co. Fairgrounds Exhibition Building.
- "Ice worlds and their fossils"**, Western Interior Paleontological Society annual symposium, Green Center, CSM, Golden; admission charge. For info, visit symposium@westernpaleo.org. ... **March 16-17**
- Ft. Collins Rockhounds Gem & Mineral Show**, (admission charge) McKee 4-H Bldg. at the Ranch (Larimer Co. Fairgrounds), I-25 Exit 259, Loveland. ... **March 22-24**

Club News

♥ Congratulations to Lake George Pebble Pup **Ciena Higginbotham**, who won the first place award in the National Fossil Day poster competition, presented January 19 at the new Florissant Fossil Beds National Monument visitor center.

♥ Many thanks to **Paul Combs** for his recent presentations to the Club, the most recent of which covered the Paleozoic Era at the January 12 meeting.

♥ Plans are afoot to have a Club volunteer day at the Western Museum of Mining and Industry.

♥ According to **Norma Engelberg**, her brother, **John Gibbs** is recovering from his recent heart surgery.

♥ **Dick Lackmond** has suggested that the Club needs to have a discussion about the Lapidary Workshop, which is receiving very little use. Dick wants interested members to contact him with their choice from among these 3 options:

- ◆ Discontinue the lap shop
- ◆ Move the shop to another location; cut down on number of machines, and keep use on a reservation basis. If shop is to be moved, where do we store "extra" equipment, or should we sell it?
- ◆ Have someone else take over the shop.

You can contact Dick at dlackmond@q.com with your input.

♥ **Steve Veatch** has the following list of potential Pebble Pups field trips for 2013-14. He'd like feedback and additional suggestions (steven.veatch@gmail.com)

- Trip to Alma and special tour of Parris Mill, transportation by Cripple Creek Park and Rec Bus (cost approx \$10)
- Trip to Horseshoe Cirque and mining sites, transportation by Cripple Creek Park and Rec Bus (cost approx \$10)
- Trip to Cache Creek
- Trip to Cripple Creek, transportation by Cripple Creek Park and Rec Bus (cost approx \$10)
- Trip to Florissant Fossil Beds and the quarry for collecting
- Trip to Rocky Mtn Arsenal, transportation by Cripple Creek Park and Rec Bus (cost approx \$10)
- Trip to Dino Ridge, Fossil Trace, CSM Museum to see the amazing strontium borate mineral "Veatchite" [fall trip] transportation by Cripple Creek Park and Rec Bus (cost approx \$10)
- Trip to Leadville and Mining Hall of Fame transportation by Cripple Creek Park and Rec Bus (cost approx \$10) [This will be a winter trip 2014]
- Behind the scenes at the Denver Museum of Nature and Science [this will be a winter trip 2014]
- Garden of the Gods late fall

♥ Here are some other notes from Steve regarding Pebble Pups:

We will also be working with the mine in Cripple Creek and their environmental department to do a student project that is submitted with the EPA. Each student gets a certificate from President Obama. This has been cleared with the mine and is all set up. **Bob Carnein** and I will be leads, but our looming obligations is just setting dates with the gold mine.

I have been requiring all of the Pebble Pups who submit poetry to provide art. I am also trying to teach some sketching for their journals. I want to work on the art portion some more this summer, and I have the services of a professional art teacher who can provide instruction. I would like to accomplish this in Woodland Park, where it is between Lake George and Colorado Springs on two Saturday mornings. If the response is good, we could continue the lessons once each month through the fall. The professional artist will do this for free. I may need to get a small amount of money for some art paper from our clubs--but the cost will be minimal. I will try and use the Woodland Park Senior Center to conduct the lessons. The RMFMS and the MWFMS both have art contests, so with some real instruction we can produce art with cachet. Also, the pups will have fun doing this. They can even enter their art in the Teller County Fair and compete with me!

Steve will offer a course at WMMI Feb. 23, titled "**History and Science Writing for Teachers and Learners of All Ages**"

Topics include:

- Basic research how-to
- Identifying and developing story ideas
- Discovering the difference between a subject and a story
- Outlining and structuring stories
- Strategies for opening and making transitions between your story and its larger context
- Understanding the role of the editor in publication
- Practical session on using photography for articles
- How to approach formal scientific writing
- Ideas for publication of writing projects

All other course materials will be provided with admission, including morning snacks (An additional writer's resource kit CD will be available for purchase for only \$5), and a certificate of completion will be awarded upon completion of the workshop.

The course fee is \$20 for adults and just \$10 for students (21 to 13 years). WMMI Members receive \$5 off adult admission, and \$2 off student admission. Space is limited to 30 people. Advance registration is required. Please call (719) 488-0880 or email at rsvp@wmmi.org.

--**Steve Veatch**

♥ **John Rakowski** sent in the following note about a new book:

Jim Sapp of Pine Junction, an active member of the Park County Historical Society says: "I have just published the second edition of "***GOLD in the Gravel - A history of gold mining in Colorado***" by Linda Bjorklund. It is on-line for your review at:

<http://www.blurb.com/bookstore/detail/3985632>

All profits from this book go to the Park County Local History Archives a 501 C3 non-profit organization."

♥ Here are some "Museum Musings" from Bruce Geller, of the CSM Geology Museum: "Activity in our Geology Museum continues at a rapid pace. My fifth year at the helm of the Museum has seen more change and improvements. I'm proud to announce that we were recently selected by Tripadvisor.com as the #2 ranked tourist attraction in Golden, in terms of visitor satisfaction, out of 28 Golden attractions, and were awarded their Certificate of Excellence. This resulted from the help of our Advisory Council, Student Aides, staff, FCSMGM, donors, volunteers, specimen loaners, visitors, visiting researchers, CSM faculty, administrators, and students who support us in so many ways. Our 2012 Gift Shop sales were up 42% and our donations box was down 1%. Our facebook fans increased by 36%.

Here is the year in review. Our Advisory Council has met monthly. Among other things, we ratified an optical instruments protocol. Continuing projects include improving our database and cataloguing many new donations in two warehouses.

I have met monthly with our twelve Student Aides. Nine Aides are currently geology majors.

I held weekly meetings with our Collections managers and volunteers. These are the folks who maintain our collection, prepare new displays, and keep our Gift Shop well stocked. Our volunteer ranks have now risen to roughly 55. They created a marvelous display for the Denver Mineral Show last September. As far as I know, this was the first time that a group of museum volunteers has erected a display of their own collections in a major mineral show in North America.

We reprinted 20,000 museum brochures through the generosity of Jane and Marshall C. Crouch III. We are also grateful to have received grants from the Golden Civic Foundation and the Greater Denver Area Gem and Mineral Council.

The Friends of the CSM Geology Museum now has over 120 members from around the world, an increase of 52%. They have generously provided several stunning pieces for our collection and became members of the Rocky Mountain Federation of Mineral Societies. The Friends have ratified their new logo, are currently reviewing their by-laws, and are investigating becoming recognized as a 501c(3) organization. During the past year, they ran very popular field trips to the Royal Ontario Museum in Toronto, Marty Zinn's mineral collection, the Henderson Mine, North Table Mountain, Lake City, the Picketwire Canyon dinosaur trackway, and two trips near Socorro, NM in conjunction with the New Mexico Minerals Symposium. As always, Friends members receive 20% discounts in our Gift Shop, and an e-mail newsletter. A Lake George Gem and Mineral Club

February, 2013

membership renewal form can be found at:
http://issuu.com/csmgeologymuseum/docs/friends_app.

Other 2012 events deserving mention included processing numerous donations, identifying many specimens, and securing many impressive loans. Our fifth Museum Book Sale combined with our Garage Sale last February was very well attended. We held a sealed bid auction of 13 high-end specimens that was a mild success. Our geology trail continues to be enjoyed by our guests. We received full ownership of over 8000 specimens given to us in 1965 by the Colorado State Historical Society. A team of CSM students did a fine job installing new digital controls for our UV display and a remote control device for our tour guides to use. Five of our staff graduated in May, which created many staffing challenges, but some really great rookies have done a fine job as their replacements. I gave a paper in August in Dresden, Germany at an international conference for mineral museum curators, about the people that help run our Museum, which was well received.

Our Annual Open House last September was an overwhelming success. Over 283 guests enjoyed our refreshments, music from the CSM string quartet, and our ten new and three updated exhibits. We are innovatively using a new generation of LEDs in six exhibits. The ten new exhibits include: Vasily Konovalenko's gem carving entitled "Gold Prospectors" on loan from the Denver Museum of Nature and Science, Mexican minerals from Kerith Graeber, Arizona minerals from Les Presmyk, American turquoise from John Haney, Copper minerals from Marty Zinn, Elmwood Mine specimens from Stephen Neely, Chinese snuff bottles from an anonymous collector, Petrified wood identified by specie from Melvin and Bertina Lentz, Self-collected specimens from one of our Collections Managers named Tom Hughes, and Colorado barite specimens from many local collectors. Our three updated exhibits involve fossils, micromounts, and mining artifacts. In late September, I gave two lectures at the Baltimore Micromount Symposium. Our Garage Sale last November 3rd was very popular.

As for upcoming events, we look forward to another combined book and garage sale from February 18-22 in the large Conference Room across the hall from our Museum entrance. Prices will decrease on most items every day of that week. (We gladly accept your book, journal, and specimen donations throughout the year). Second, our Annual Open House is scheduled for September 11, 2013 from 6 to 9 P.M.

Finally, come visit our Museum during our normal hours: Monday – Saturday 9 A.M. to 4 P.M., Sundays 1 P.M. – 4 P.M., except for certain legal and school holidays. Admission to our Museum is free (donations are greatly appreciated), but parking fees are required in our lots and on campus streets Mondays through Fridays before 5 P.M. Further information is available on our website, or by phone."

Happy New Year!
Bruce
303-273-3823

♥ **Richard Kawamoto, John Rakowski, and Dick Lackmond** are planning field trips for this summer, and they need member input. Contact one or all of them with your suggestions and to volunteer to lead trips.

♥ Here are this month's **Bench Tips from Brad Smith**:

BenchTips for the Month

BENCH SHEARS

When cutting sheet metal, it's quicker and easier to use a set of shop shears, as compared with using a hand saw. The cut is not as precise, but many times you don't need that. Shears will easily cut up to 24 gauge sheet, and some will cut 22 or even 20 gauge. Current prices for

shears run from \$13 - \$22 in jewelry catalogs, and the Joyce Chen scissors recommended on some jewelry blogs run more than \$20. But we found a cheaper alternative at the 99 Cent Store - some gardening utility scissors that were only \$1.07. I buy a half dozen of them at a time for use in my jewelry classes. They're great for cutting bezels, trimming around a bezel cup, and cutting a piece off a larger sheet.

BEZEL CLOSER

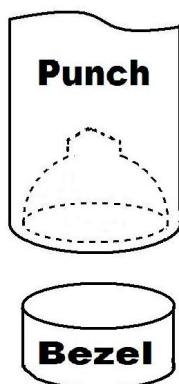
A bezel closer is a steel punch that makes quick work out of pushing the metal down over a round stone and burnishing it. The working end is a concave cavity that fits over your bezel or prong setting and is pushed and twisted to capture the stone. Sets can be purchased but are expensive and contain many sizes you will probably never use. If all you need is one or two sizes, here's how you can make them yourself.

Find a good quality, round steel rod a little larger in diameter than your bezel cup or prong setting. Cut a 5-inch length. File both ends flat. Locate the center of one end, centerpunch a divot, and drill a small pilot hole about 5 mm deep. Remember to use a little oil as lubricant when cutting steel.

Select a ball bur a bit smaller than the steel rod but slightly larger than the bezel. Enlarge the pilot hole to a full hemispherical cavity. Test for proper fit with your bezel. Bezel should first contact the cavity about a third of the way in. When the size is correct, polish the cavity using Zam on a length of chopstick in your flexshaft. If the tool is not polished, it will leave scratches on your bezel or prongs.

When using the tool, the first step is to capture the stone correctly. I usually work by hand and push the punch straight down over the bezel or prongs. This causes the metal to start bending over the stone. Now inspect with a lens to be sure the stone is staying level. This is repeated until the stone is seated on its bearing and can't move anymore.

Next, you want to force the metal down onto the stone uniformly all the way around. While this can be done by hand, I often gently tap the punch with a hammer. Finally, I burnish the bezel by twisting the punch around.



More Bench Tips by Brad Smith are at [facebook.com/BenchTips/](https://www.facebook.com/BenchTips/) or see the book "Bench Tips for Jewelry Making" on Amazon.

Earth-Science Scholars/Pebble Pups Corner

Earth-Science Scholars and Pebble Pups meet on the **third Tuesday of each month at 6PM in the Lake George Community Center.** Here's this year's schedule:

Feb.: **Special class on Science Writing and Research—S. Veatch**

Feb. or March: **Field Trip to Cave of the Winds**

March: **"Minerals and How We Identify Them"—B. Carnein**

April: **"The Amazing World of Crystals"—B. Carnein**

May: **"Orienteering"—D. Alfrey**

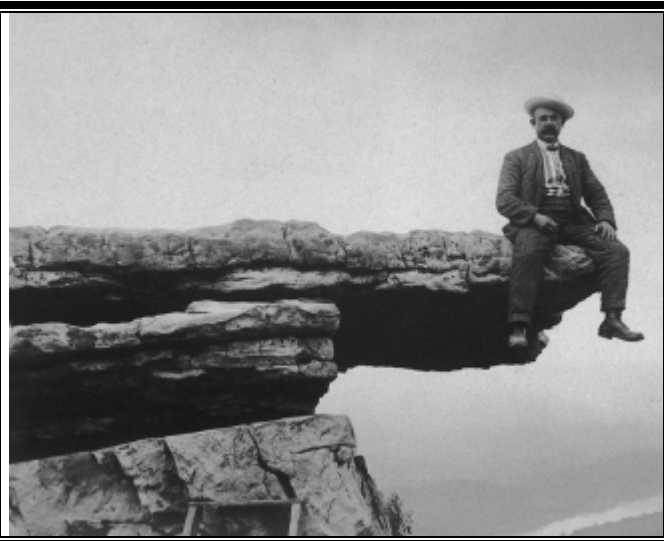
Please see notes from **Steve Veatch** (above) for more Pebble Pups information.

Be sure you check regularly at www.LGGMClub.org for details and updates.

Remember, new students and their parents are always welcome; Earth-Science Scholars and Pebble Pups are welcome on LGGM Club field trips!

NOTES FROM THE EDITOR

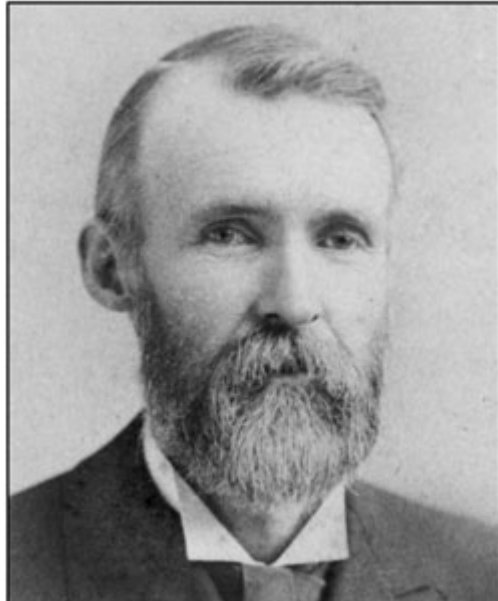
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719-687-2739



As promised, here is a new article by Club member **Andy Weinzapfel**. Andy's articles have won numerous awards, and this one, about a famous mineral collector who worked in the Crystal Peak area, is sure to be of interest.

**PIONEER MINERAL COLLECTORS OF THE CRYSTAL PEAK AREA,
FLORISSANT, COLORADO
TRACKING THE FOOTPRINTS OF A. E. FOOTE**
by: **Andy Weinzapfel**

The Crystal Peak area north of Florissant, encompassing parts of both Teller and Park counties, has a long history of producing a variety of fine mineral specimens, most notably well-formed bluish-green amazonite and smoky quartz crystals. The best of these occur in open space within the Pikes Peak Granite. These “geodes”, into which crystals grow inward, are referred to as *pockets*, *vugs*, or *miarolitic cavities*. The Pikes Peak Historical Society Museum in Florissant currently has many fine specimens from this area in its mineral collection. The upper part of Crystal Peak is visible from the museum parking lot.



Dr. Albert E. Foote 1846-1895

The Ute Indians were the first to visit Crystal Peak, where they collected colorful minerals believed to be imbued with spiritual properties as part of their “vision quest” journey to Pikes Peak.

About 1836, a new jewelry firm, Tiffany’s, was established in New York City. During the first week, it sold a whopping \$4.85 worth of goods for a profit of 33 cents. Circa late 1860s, a clear smoky quartz crystal from the Pikes Peak region was sent to this highly successful business. After noticing the warm color, much more pleasing than the grayish smoky quartz supplied by Brazil,

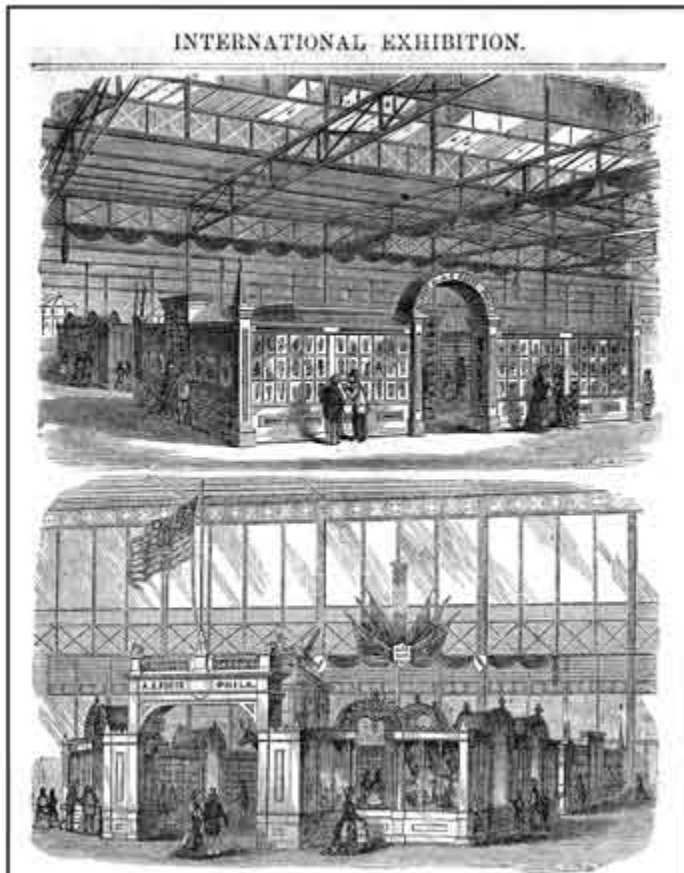
Tiffany’s wrote a letter offering the fabulous price of \$5.00/lb. for the material. This was at a time when \$1.00 was considered a good day’s wage. Thus a new market was born, centered on the Pikes Peak region. By the early 1870s, miners flocked to the Crystal Peak area to collect smoky quartz. There, they encountered what the Indians already were well aware of: exceptionally beautiful amazonite crystals growing with smokies, often together in the same pockets. Today, the amazonite crystals from Crystal Peak are generally considered the best in the world. Smoky quartz crystals there can grow to some of the largest in North America.

Albert Edward Foote was the most important 19th-century mineral collector at Crystal Peak. Many of his outstanding specimens reside today in leading museums worldwide, often under the general label “Pikes Peak”. He was born February 4, 1846 in Hamilton, New York, son of Edward Warren Foote and Phoebe Steere. By the time he graduated from Courtland Academy in Homer, New York, he had developed an intense interest in mineral collecting. He obtained a medical degree in 1867 from the University of Michigan, but there is no record of him ever practicing medicine! This would seem surprising today, but, at that time, America was an agricultural, not a technological society. Medical students were among the very few who studied the physical sciences, and apparently some, like Foote, were “derailed” into other areas of scientific interest. A number of prominent mineralogists of the nineteenth century were also schooled in medicine, including James Dwight Dana, often considered the “father of mineralogy”.

Dr. Foote was leader of a five- month expedition to the upper Michigan copper country in 1868, and was appointed assistant professor of mineralogy and chemistry at Iowa State College in 1870. By then, he owned an extensive mineral collection. He took a leave of absence from Iowa, studied chemistry in Berlin, and visited museums and universities in England, France, and Germany. He returned to Iowa to set up a state-of-the-art laboratory. In 1871, he was promoted to full professor.

Four years later, Foote moved to Philadelphia, where he soon exhibited his best mineral specimens in the 1876 Centennial Exposition, and sold his “extras” just outside the Exposition grounds. Amazonite at this exhibit proved to be a great surprise to many, especially the Russians, who introduced some small crystals with some very high price tags. One report mentioned that, after seeing those from Colorado, the Russians packed up and went home. Dr. Foote’s mineral business steadily expanded. Within a

few years, he was a major dealer. He advertised in scientific journals of the day, and issued extensive catalogs. He carefully labeled his specimens, stressed his scientific credentials, and generally appealed to upscale, well-heeled buyers. He issued an international monthly bulletin called *The Naturalists’ Leisure Hour*, which sold for 50 cents per year in 1879.



Foote’s “Museum of Natural History” at the 1876 Philadelphia International Exhibition, after Wilson, 2012

Dr. Foote continued “scaling up”, spending most of his time collecting minerals, or employing others to do so, in some of the best specimen mining districts of North



America and Europe. His focus in the United States included the colorful copper minerals of Bisbee, AZ, extraterrestrial rocks of Meteor crater, AZ, lead-zinc minerals of Joplin, MI, and amazonite and smoky quartz of the Pikes Peak region. In the late 1870s, he employed 20 to 26 men in the Crystal Peak area, apparently digging mostly north of the peak. While some other areas

Label attached to base of amazonite specimen, after Wilson, 2012

within the Pikes Peak Granite also yielded good specimens, Crystal Peak was considered the best and most prolific, so his effort was focused there. This high-labor endeavour generated a large volume of specimens which ultimately found its way into many private collections and museums around the world. The generic label “Pikes Peak” became a part of the vocabulary for mineral connoisseurs who had never travelled to the American west.

Dr. Foote’s specimens, with labels, often attached to the bottom, occasionally show up for sale at various internet sites and gem and mineral shows.

By the early 1890s, Dr. Foote began to show symptoms of tuberculosis, for which there was no cure. In 1895, he supervised an exhibit at the Atlanta Exposition, dying in Atlanta on October, 10, 1895.

References:

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Odiorne, H. H., 1978, *Colorado Amazonstone: the Treasure of Crystal Peak*: Denver, Forum Publishing Co., 51p.

Pearl, R. M., 1958, *Colorado Gem Trails and Mineral Guide*: Denver, Sage Books, pp 108-113.

Wilson, W.E., 2012, Mineralogical Record Biographical Archive, at www.mineralogicalrecord.com, accessed Dec.15, 2012.

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

2013 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 October, 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 2013 are:

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