

# The Lake George Gem and Mineral Club -

## Club News

March, 2018



Program for the month: Saturday March 10, 2018. Because of last month's cancellation, Steve Veatch will try again in March:

### “Cripple Creek High Grading: The Untold Stories”, by Steven Veatch

Take a mind-boggling look at one of the most significant parts of the history of the Pikes Peak region—the Cripple Creek Gold Rush. This astonishing program provides a new perspective on the untold stories of high grading (stealing) valuable ore in the mining district. The story is told through stunning images of ore and striking historic photographs. For fans of local history, this is an essential program. Join Steven Veatch as he explores the additional details and perspectives on Cripple Creek he has amassed through lost photographs, forgotten diaries, and recently found records. You don't want to miss this.

We will also continue a **silent auction for some cool specimens** and other items donated by Club members. The specimens will be displayed at the back/side of the room with “bid sheets”. Each item will have a minimum starting bid. You write your bid and initials in a blank space on the sheet and then watch to see if others outbid you. You can keep on bidding until the President says bidding is closed. So, bring some CASH and be prepared for the fun!

**Remember, membership in the LGGMC closes on March 31. Be sure you renew by that date. A membership application is attached to this newsletter, or you can renew easily online at [lggmc.org](http://lggmc.org).**

**Please read:** We will soon move the Club Library to the Pikes Peak Historical Society Museum in Florissant, where it will be more accessible than it is in its current location. In order to prepare for the move, we ask that members return all borrowed items asap (by the Feb. meeting, at least).

We are still looking for a place to set up our club's lapidary equipment, which is now in storage. If you know of a place that has water, electricity (including 220V), and heat, please contact one of the club officers.

Lake George Gem and Mineral Club

March, 2018

✓ ✓ Here's a message President, **Robert Baker**:

The February meeting was canceled due to a National Weather advisory. Your safety is paramount.

We planned to discuss some issues and propose making changes to the scholarship program and to have presentations at the club meetings throughout the year.

The Scholarship Program has had difficulties finding qualified or interested recipients in the last few years. We amended the By Laws in order to provide a continuing scholarship to prior Earth-science scholars. We now have another proposal to provide club funds to Interns working at the Colorado School of Mines Geology Museum, Denver Museum of Natural History, or other qualified organization. These fine organizations could use some help providing funds to their interns; this has had an impact on the research and display efforts of these organizations. We would request that recipients of LGGM Club funds submit an annual report or presentation describing their accomplishments or the use of the club funds.

Presentations at the club meeting are a great opportunity for educational and informative talks by experienced miners, geologists, educators, and club members to share that experience with the rest of the membership. In the past we have only had presentations during the off season meetings. I propose that we have presentations throughout the year. Coordinating with the Field Trip Chair to have nearby trips on those meeting Saturdays should not impact the number of trips that we schedule during collecting season.

Upcoming talks include **John Rakowski** ("Tools for Rock hounding and How to Use Them") in April, **Paul Combs** in May ("Dinosaur Wars"), and **Bob Carnein** in June ("How You Can Use Mineral Associations to Help Identify Minerals"). I want to explore having talks through the summer months, possibly including useful information about some of our upcoming field trips. Be thinking about this.

### Coming Events

✓ ✓ Several mineral, fossil, and geology clubs meet relatively nearby and encourage visitors. These include:

> **Cañon City Geology Club**, meets on the 2<sup>nd</sup> Monday of the month at 6PM in the United Methodist Church, Cañon City;

> **Colorado Springs Mineralogical Society**, meets on the 3<sup>rd</sup> Thursday of each month at 7PM in the Mt. Carmel Veteran's Service Center, 530 Communication Circle, Colorado Springs;

> **Columbine Gem & Mineral Society**, meets on the 2<sup>nd</sup> Thursday of each month, 6:30PM in the meeting room, Mt. Shavano Manor, 525 W. 16<sup>th</sup> (at J St.), Salida;

> **Pueblo Rockhounds**, meets on the 3<sup>rd</sup> Thursday of each month at 6:30PM in the Westminster Presbyterian Church, 10 University Circle, Pueblo.

✓ ✓ **Watch for the following upcoming events:**

**Thurs., Mar. 1, 4:00 p.m.**, Van Tuyl Lecture at Colorado School of Mines, "**Record of sediment transport from the Himalayan-sourced Ganges-Brahmaputra Rivers to the deep-sea Bengal fan: 18 Myr of fan deposition from detrital zircons**", by Mike Blum, Department of Geology, University of Kansas; Berthoud Hall, room 241.

**Thurs., Mar. 1, 7:00 p.m.**, First Thursday lecture series of the Friends of the Colorado School of Mines Geology Museum, **The Boulder County Tungsten District and its History**, by Ed Raines, Collections Manager, CSM Museum. Program will be at the Ben H. Parker Student Center, Ballroom "E", Maple Street, Golden, Colorado 80401. Socializing begins at 6:30 p.m. and the lecture will start at 7:00. Admission is free and all are welcome!

**Lake George Gem and Mineral Club**

**March, 2018**

**Tues., Mar. 6**, 10:30 a.m., USGS Rocky Mountain Science Seminar, Building 25 Lecture Hall, Denver Federal Center, “**Replacement, metasomatism dynamics, and the blind spot of geochemists**”, by Enrique Merino, Indiana Univ.

**Thurs., Mar. 8, 4:00 p.m.**, Van Tuyl Lecture at Colorado School of Mines, “**Meeting the challenges of the world’s growing dependence on groundwater**”, by Bill Alley, United States Geological Survey & National Groundwater Association; Berthoud Hall, room 241.

**March 8**, 7:30 p.m. Friends of Mineralogy, Colorado Chapter, bimonthly meeting, at Lakewood Event Center, 7864 W. Jewell Ave. “Mineral Species and Occurrences of the Swiss Alpine Clefts”, by Brent Lockhart, of Houston, TX.

**April 6-8**: Ft. Collins Rockhounds Gem & Mineral Show, Larimer Co. Fairgrounds, 5280 Arena Circle, Loveland.

**April 6**: North Jeffco Gem & Mineral Club Silent Auction, Arvada Community Center, 6842 Wadsworth Blvd., Arvada.

**April 13-15**: Colorado Mineral and Fossil Spring Show, Crown Plaza Hotel/Convention Center, 15500 E. 40<sup>th</sup>, Denver.

**May 10**, 7:30 p.m., Friends of Mineralogy, Colorado Chapter, bimonthly meeting, at Lakewood Event Center, 7864 W. Jewell Ave.: Speaker Markus Raschke on “Five Days on Xuebaoding Mountain, Sichuan Province, China: minerals and geology”, by Markus Raschke.

**June 1-3**: Pikes Peak Gem & Mineral Show, Norris Penrose Event Center, 1045 Lower Gold Camp Rd., Colorado Springs.

**June 15-17**: Victor Gem and Mineral Show, downtown Victor, CO.

**August 17-19: 19<sup>th</sup> Annual Lake George Gem & Mineral Club gem and mineral show. Details to come!**

✓ ✓ Many thanks to **John and Debbie Rakowski and Steve Veatch**, who attended a recent Library Board meeting, proposing that the local libraries rescind the decision to charge \$10 per hour for non-profits to meet in the library. The Board made a favorable decision, and there will be no charge for us to use the room in the Florissant Library either for regular Club activities or for Pebble Pups in the future.

✓ ✓ Field-trip coordinator **Billy Bell** is working on a great schedule of trips for this spring and summer. So far:

April 18: Arroya gulch (gemmy almandine garnet) (easy)

April 21: Baculite Mesa (Cretaceous fossils) (easy)

April 28: Harvey blue barite mine (barite crystals) (easy)

May 2: Baculite Mesa (Cretaceous fossils) (easy)

May 12: Patience/Piety claims (smoky quartz, fluorite) (easy)

May 16: Shelf Road (geology) (easy)

May 19: McGraw Park Bailey, CO, Queen Bee mine (amazonite/smoky quartz/fluorite) (moderate)

May 23: Harvey blue barite mine (barite crystals) (easy)

May 26: Memorial Day weekend (field trip, anyone?)

June 9: (club meeting) Topaz Mountain (smoky quartz, topaz) (easy)

June 16: Calumet mine (epidote, quartz, magnetite, corundum) (moderate)

June 20: Trinidad Lake State Park (K-T Boundary) (easy)

June 23: Sedalia Copper Mine (almandine garnet, other minerals) (long, steep hike)

## **Pebble Pup and Earth Science Scholars Corner**

By Steven Wade Veatch

**Lake George Gem and Mineral Club**

**March, 2018**

# A Pebble Pup Geode

by  
Jacob Kania

At our Pebble Pups meeting, we learned many things about geodes. The geode I worked on was found in Dugway Utah. I sawed it in half with a diamond tipped blade! Inside was a cavity lined with the mineral quartz. The geode fluoresced green under an ultraviolet black light. On the outside of the geode, an eye-shaped ridge occurred on the end of the broken geode.



View of a Dugway Geode. Quartz crystals line the cavity of the geode. From the Jacob Kania collection. Image © by the author.

**About the author:** Jacob Kania is a member of the Pikes Peak Pebble Pups and is 8 years old. He attends the Lake George Charter School and is in 2<sup>nd</sup> grade.



✓ ✓ Also from Steve comes this note about a class at the Florissant Fossil Beds:

**Lake George Gem and Mineral Club**

**March, 2018**

**Saturday, March 24, Introduction to Nature Photography, 1:00 PM – 3:00 PM.** Join volunteer interpretive ranger Steve Veatch and Pebble Pup Ben Elick for a hands on photography workshop amid the spectacular scenery of the Florissant Fossil Beds National Monument. While walking a trail you will learn on-location composition strategies that will turn your photo into something more than a snapshot! The workshop will teach you how to tell stories with your photos. Learn how to take photos of your next field trip. This field trip is for everyone and is open to the public, pebble pups, and members of the Lake George Gem and Mineral Club. Meet at the visitor center. Be prepared for outdoor conditions by dressing in layers, wearing a hat and sunscreen, etc. Bring water and snacks and most importantly your own camera. Standard admission rates apply.

✓ ✓ A recent online article from the Geological Society of America: **Massive Reserves of Mercury Discovered in Northern Permafrost**

A new study shows that northern permafrost soils are the largest reservoir of mercury on the planet. "This discovery is a game-changer," says Paul Schuster, a U.S.G.S. hydrologist and the study's lead author. "We've quantified a pool of mercury that had not been done previously, and the results have profound implications for better understanding the global mercury cycle." Melting permafrost was already a concern because it contains immense reserves of frozen methane, which will be released as it warms. Mercury, which is volatile, is now a new source of concern.

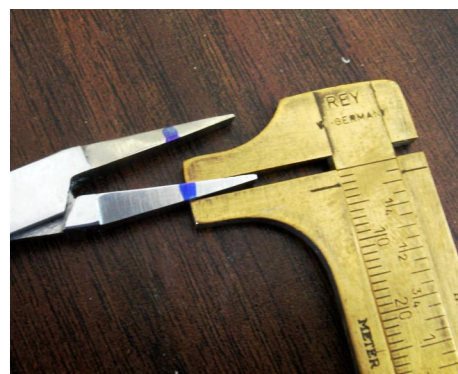
✓ ✓ If you haven't seen the USPS's new stamps celebrating bioluminescent life, check them out the next time you visit the Post Office.

✓ ✓ And here is the latest installment of "Bench Tips" by Brad Smith ([www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)):

### MODIFYING PLIERS

Sometimes a few changes to your tools can make work go faster and improve the quality at the same time. Stock tools need to be polished and can be customized using standard jewelry skills. Here's an example:

While making a lot of chainmail, I noticed I was ending up with a few scratched jump rings that required extra cleanup time before the chain could be polished. So I started looking into what I was doing wrong. Making jump rings and weaving them into chainmail designs involves a lot of opening and closing of the rings. I typically use two square jaw pliers to do this, one for each hand. The jaws of my pliers were pretty much scratch free because on a new tool I typically relieve any sharp edges, sand away any tool marks on working surfaces, and give those areas a quick polish.



That helped but was not the whole problem. While making chain, rings would sometimes slip out of the pliers or slide within the jaws as I was trying to twist them open or closed. I noticed the jaws close at an angle, and gave me the idea of forming a groove at the end of the jaw that would grasp the ring gently without scratching it. Not only have these pliers worked well for chainmail, but I've found several other problem jobs that this modification solves very nicely.

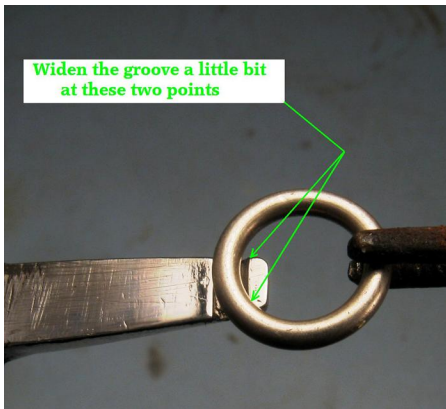
To make up what I needed, I bought two inexpensive sets of square jaw pliers. My preference is for jaws that are about 3.5 - 4mm wide. This provides a good fit for the jump rings I use. You need to have enough metal at the tip of the jaws to be able to cut a groove that's deep enough. If your plier tips are too thin, you'll have to cut them back. Locate and mark the position on the jaw where the thickness is about 1.6 - 2mm.

Cut the tips off with a cutoff wheel or grind them off with a bench grinder. If using a cutoff wheel, be sure to brace and hold both the workpiece and the rotating hand piece securely. If either moves, you will break the abrasive disk. And remember when cutting any metal with a motorized tool, be sure to use good eye protection. A little piece of debris in your eye makes for a bad day.

Now to make the grooves round so they grasp the wire without distorting it, I close the jaws and run a drill through the opening formed by the two rough grooves. I start with a small drill and followed up with a drill just slightly smaller than the wire size I want to grip. In my case that was 14-gauge wire, so I chose a #53 drill.



Finally, the shape of the grooves needs to be refined. I used a coarse, knife edge, silicone polishing wheel on the flexshaft to polish off all marks left by the drill and to round off the outer edges of the groove.



Test for proper fit by laying a jump ring into each groove. In particular, inspect the way the edges of the groove contact the inside of the ring. You may need to widen the groove at this point to avoid the pliers leaving a nick. Do a final polish so the jaws will not scratches as they grip a ring. I used a medium grit, knife edge, silicone polishing wheel, but a sewn buff with tripoli or Zam would also work well.

## MANAGING PRODUCTION

Many readers of these BenchTips sell their jewelry at shows, in galleries or online. They are sole proprietors and constantly under pressure to design new pieces and make enough product to keep up with demand. So their options are few when a large order comes in. They can burn the midnight oil themselves, or they can be smart and get some temporary help. But you need good help, and you often need it fast.

Jewelry assemblers are skilled, trustworthy and reliable craftsmen who make it their business to help others handle overloads and meet deadlines. Flexible arrangements are possible, working by the job, by the hour or by the piece. Each

has a different mix of skills, from fabrication to enameling, casting, stone setting, lapidary and others.

Assemblers are known to the trade, so you may have to ask around to find some references. But some assemblers advertise on the Net. For instance, a good friend of mine, Janice Metz [<JenFT4@aol.com>](mailto:JenFT4@aol.com), has been working with designers and fabricators in the West Los Angeles area since 1997. She specializes in silversmithing, wire-wrapping, beading and stringing.

[See all Brad's jewelry books at Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)

### Notes from the Editor

Bob Carnein, Editor

[ccarnein@gmail.com](mailto:ccarnein@gmail.com)

719-687-2739



As some of you know, I am a “true believer” about some things that have to do with my collection. Here’s what I hope will be a useful article about one of those things.

## *A Worthwhile Winter Project: Your Mineral/Fossil Catalog* by Bob Carnein

For the collector, nothing could be much worse than a group of once fine fossil or crystallized mineral specimens that have been carelessly thrown together in a jumble. One wouldn’t treat valuable jewelry or glassware this way, but, for some reason, some collectors act as if their minerals can withstand being knocked around in boxes or car trunks with no protection. This can make the difference between a 50-cent crystal and one valued in the hundreds of dollars.

An even more common issue, and one that can have a huge effect on the monetary and scientific value of a mineral or fossil, mineral or fossil, is *provenance*. The writer has had the frustrating experience of examining several fine, lovingly assembled mineral and fossil collections, much of whose value was lost when the owner died and unknowing friends and relatives rooted through it, separating labels (if there were any) from their corresponding specimens. In a small collection, a knowledgeable friend or dealer may be able to undo some of the damage. But, without a catalog keyed to numbers attached to the specimens, this may be little more than guesswork.

Alas, most of the collectors I know have not cataloged their collections. The younger ones claim they'll remember what everything is and where it came from. Many collectors don't even bother with labels. As a 74-year-old mineral lover whose collection numbers nearly 2500 specimens, I can tell you that this is a disaster waiting to happen—one that may creep up on you with little warning. I have collected minerals for 63 years, and, during the last 10 years, my memory has slipped a few cogs. Ok, maybe it has slipped just one cog at a time, but, before you know it, the effects add up. I don't remember where that nice pink beryl came from that my uncle gave me in the 1950s (or was it the 1960s). I seem to recall him saying it was from a pegmatite in Connecticut...or was it Maine?

I don't want to leave my lovely wife (who is not a mineral collector) with a worthless hodge-podge, if I'm the first to cross over the great divide. She knows I spent a lot of time and money on my obsession, both buying and collecting that pile of rocks, and I don't think she will appreciate my leaving her with a mess. I would also be ashamed if my collection lost whatever scientific, historic, or monetary value it once had because the locality information is gone. (Somebody will always be able to identify what your specimens are, but locality data are easily lost.)

The only solution to this problem is to catalog your collection. Although you may dread doing this, it is almost as important as the collecting itself. Each specimen in my collection has a number affixed (mostly with mineral tack—that gummy stuff some dealers use to attach a crystal to a stand so it shows to its best advantage). The same number appears on the specimen label and on an index card, each of which records the following information:

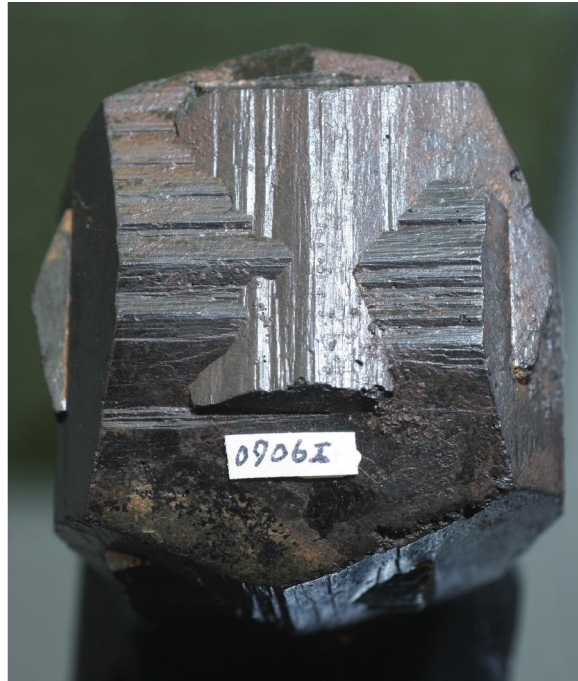
- Mineral name (s)
- Detailed location
- Dealer or collector from whom it was acquired
- Date when specimen was acquired

In addition, the catalog card includes the dimensions (in cm.) and the purchase price (if not self-collected). If you trust them, a number of on-line cataloging systems are available, including one at [Mindat.org](http://Mindat.org) that's free and private and that allows you to upload photographs.

I also save any dealers' labels or previous collectors' labels. Although those may not be interesting to you, many collectors consider them to be important historical documents and will pay a premium if they're included when they buy a specimen.

If you can, start to catalog your collection while you are young (FYI, anything under 60 years is young). Even an old procrastinator like me, who, over the years, did everything except attach numbers to his specimens, can do that final step relatively quickly (it took me about a year). And don't think that, because you collected most of your specimens yourself, they aren't worth cataloging. Your catalog adds to their historical as well as scientific and, yes, monetary value. And cataloging helps you to re-live the fun times you've had assembling your collection, during those long winter days when you can't be out doing what you'd rather be doing—collecting more minerals and fossils!






The newest addition to my collection: a superb "iron cross" pyrite twin from Colombia. Note catalog number on right photo. (Carnein photos)

*I Goethite after pyrite, Superb iron cross twin, 4.5x4.5x4.5cm,  
Gachala, Cundinamarca Dept., Colombia, pur. Shelter Rock  
Minerals, Jan., 2018,*

<p>Pyrite, var. "Iron Cross" twin crystal</p> <p>Gachala Cundinamarca Department, Colombia,</p> <p>pyr3588</p> <p><b>ShelterRockMinerals.com</b></p>
--

<p>No. 0906I</p> <p>Pyrite "iron cross" twin Coated by goethite</p> <p>Gachala, Cundinamarca Dept., Colombia</p> <p>pur. Shelter Rock Minerals, Jan., 2018</p> <hr/> <p>C.R. CARNEIN  DIVIDE, COLORADO</p>
---

Catalog page with labels.

**Monthly Mineral Quiz**

**Answer to last month's quiz: Zircon**

Here's another fluorescent stumper for you. This mineral is grayish green in color, softer than glass but harder than a penny, and has no obvious cleavage. It fluoresces bright yellow in short-wave UV. The specimen came from a pegmatite near Guffey. What is it?



Today's unknown, photographed in white light (left) and short-wave UV (right) (Carnein collection and photos)



**Lake George Gem & Mineral Club**  
Box 171, Lake George, Colorado 80827  
[www.LGGMClub.org](http://www.LGGMClub.org)  
**MEMBERSHIP APPLICATION**

Date: \_\_\_\_ / \_\_\_\_ /20 \_\_\_\_  
Name/s \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone ( \_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_ E-mail \_\_\_\_\_  
(Email is required to receive Newsletter and field trip info.)  
Names/ages of minor members (if family membership): \_\_\_\_\_

Dues for Jan. 1 through Dec. 31 each year are as follows:  
\_\_\_\_ Individual (18 and over) ..... \$15.00  
\_\_\_\_ Family (includes dependents under age 18) ..... \$25.00

Current year membership renewal and application occurs Jan. 1-March 31, after which membership is closed for the current year. Membership/email list will be purged April 1<sup>st</sup> for the current year.

**MEMBERSHIP MUST BE CURRENT TO PARTICIPATE IN ANY FIELD TRIP OR CLUB CLAIM!**

*I agree to abide by Club constitution, by-laws, and rules regarding field trips and club claim visits.*

Signed \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

\*I am or have previously been a member of Lake George Gem & Mineral Club. Yes \_\_\_ No \_\_\_

\*My interest areas include (check all that apply): Minerals \_\_\_ Fossils \_\_\_ Lapidary \_\_\_

Micromounts \_\_\_ Colorado geology \_\_\_ Pebble Pups (ages 7-17) \_\_\_ Mining history \_\_\_

Crystallography \_\_\_ Other \_\_\_\_\_

\*I am willing to give a talk/presentation to [the Club] or [Pebble Pups] on \_\_\_\_\_

and/or lead a field trip to (list) \_\_\_\_\_

\*I am willing to participate/help in the following ways (can choose more than one): Club Officer \_\_\_\_\_

Newsletter Editor/Writer \_\_\_\_\_ Local Show/Show Committee \_\_\_\_\_ Nominating Committee \_\_\_\_\_

Winter Programs Committee \_\_\_\_\_ Field Trips \_\_\_ Art (Badges) \_\_\_ Membership Coordinator \_\_\_\_\_

Website assistance \_\_\_\_\_ Pebble Pups \_\_\_\_\_ Other (be specific): \_\_\_\_\_

Questions about the Club or Activities? Visit the website or contact a Club Officer. Updated 1/2018

**Lake George Gem & Mineral Club**  
**PO Bo 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 opportunities to learn about Earth science, 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 on 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 10:00AM. From April through October, we meet at 9:00AM, 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 2018 are:**

**Robert Baker**, President  
2100 Valley View Drive  
Woodland Park, CO 80863  
719-464-7102  
[bobsboards46@gmail.com](mailto:bobsboards46@gmail.com)

**John Rakowski**, Vice President  
PO Box 608  
Florissant, CO 80816  
719-748-3861  
[rakgeologist@yahoo.com](mailto:rakgeologist@yahoo.com)

**Cathy McLaughlin**, Treasurer  
11595 Owls Nest Rd.  
Guffey, CO 80820  
702-232-3352  
[cathy\\_mclaughlin@hotmail.com](mailto:cathy_mclaughlin@hotmail.com)

**Norma Rhodes**, Secretary  
7546 Duck Hawk Place,  
Fountain, CO 80817  
719-229-5379  
[normajalexander@gmail.com](mailto:normajalexander@gmail.com)

**C.R. (Bob) Carnein**, Newsletter Editor  
507 Donzi Trail  
Florissant, CO 80816  
719-687-2739  
[ccarnein@gmail.com](mailto:ccarnein@gmail.com)