The Lake George Gem and Mineral Club -

Club News

August, 2018

Program for the month: Saturday August 11, 2018, 9:00AM.

Bob Carnein will talk about **"How to Organize, Catalog, and Care For Your Mineral Collection"**. Please check out the article later in this newsletter for more information. **After the program**, interested Club members will mark the field for the show or take off for a visit to the "barite dike" and magnetite locality near Tarryall.

Silent Auction: If we have time, we will continue the monthly silent auction. Do you have extra specimens that you don't want to banish to the "rock garden", but also don't have room to store in your cabinet? You can donate them for the benefit of Club projects. This month's silent auction will feature at least one excellent fluorescent specimen, as well as more goodies from **Kent Greenes** and **Phil Rudd**. So, bring some CASH and be prepared for the fun!

DEDICATION It is with sadness that I dedicate this issue of the Lake George Newsletter to two members who died in the last 2 months. Glenn Haggett, who passed away in May, was President of the Club in 2013. I didn't know Glenn well, but I know he discharged his duties faithfully and with good humor.

Dick Lackmond, whom I knew better, was a truly unique individual, and many of us will miss him, especially when we visit the Eureka Tunnel mine and the famous zircon locality, near St. Peters Dome. Despite recently losing his lovely wife Pat and despite facing another in a long list of joint-replacement operations, Dick managed to make it to the June meeting. He was one of the most determined mineral enthusiasts I have known; I'll always remember Dick clamoring over downed trees and treacherous ground with his oxygen tank on the long haul into and out of the Eureka Tunnel a couple of years ago. Death is about the only thing that would stop Dick, and many of us will miss his booming voice and dedication. He passed away on July 13. –Bob Carnein

✔ ✔ Here's a message President, **Robert Baker**:
FROM THE PRESIDENT We appreciate the hard work and dedication of our field-trip leaders and stand by their decisions on Club trips. The President or field trip chairperson will make sure that each field trip has a designated leader who will assure compliance with all field trip rules and safe practices and who is familiar with

the location, ownership and hazards of the field trip site. Participants must comply with the directions of the Trip Leader, those who cannot comply with the Field Trip Rules and any specific onsite directions may be asked to leave. Please read the "Field-Trip Rules" on the Club website.

UPCOMING PRESENTATIONS

September- **Dave Alexander**, Prospecting in the Pikes Peak Region

October- Hoping for a "How to clean your mineral specimen" talk; discussion of the future of our annual show and changes to the Constitution and By-Laws.

November-**Richard Kawamoto**, Mining Claims: A review of what a claim is and how to file for a claim.

December- Annual towel show and party, no presentation

Coming Events

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

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

>**Colorado Springs Mineralogical Society**, meets on the 3rd 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 2nd Thursday of each month, 6:30PM in the meeting room, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida;

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

✔ ✔ **Pete Modreski** and others suggest **the following upcoming events:**

.**Thurs., Aug. 2**, 4:00 p.m., **"History of the Gilman mines"**", will be the latest in the series of "**EDTalks**", in the Boettcher Room at the CSM Arthur Lakes Library (1400 Illinois Street, Golden, Colorado). "Ed Raines, Collections Manager at the CSM Geology Museum and recognized expert on Colorado minerals and mining history, will present a series of talks with an in-depth look at important mining districts of Colorado focusing on their history and geology. All are welcome. The schedule of talks includes the following:

August 9, 4 p.m., Geology of Gilman, Colorado

Aug. 3-5, Creede Rock & Mineral Show, at the Creede Underground Mining Museum and Community Center, Creede, Mineral County, CO. 10 a.m. – 5 p.m. daily; see http://creederocks.com/ .

Sat. Aug. 4, Leadville, CO, The National Mining Hall of Fame and Museum is excited to hold its annual **Family Fun Day during Leadville's Boom Days** festival on Saturday, August 4th. We will be hosting activities outside and inside the museum from 3:00 pm – 5:00 pm. for visitors. Activities (outside) include free gold panning for kids. Additional activities will be offered inside the museum with paid admission. See https://www.mininghalloffame.org/ .

Sat.-Sun., Aug. 4-5, 2018, A symposium on **Minerals from the Metallic Ore Deposits of the American Southwest**, sponsored by the Friends of Mineralogy, Colorado Chapter, and the Friends of the Colorado School of Mines Geology Museum. Includes a welcoming reception Friday evening at the CSM Museum (with a verbal auction of deaccessioned specimens from the CSM Museum) and an optional dinner Saturday evening and field trips Sunday afternoon. For more information and registration form see http://friendsofmineralogycolorado.org/ .

Sat., Aug. 11, 10 a.m. – 2 p.m., **Dinosaur Discovery Day** at Dinosaur Ridge, featuring "Reptile and Bird Day". Public tour day at Dinosaur Ridge, 16831 W. Alameda Parkway, Morrison. Walk up and down the Ridge to see interpretive guides explain the various fossil and geology stations, or ride a guided shuttle up and/or back for $4. See www.dinoridge.org .

Aug. 9-12, Contin-Tail rock & mineral show, Buena Vista Rodeo Grounds, Buena Vista, CO; see www.facebook.com/ContinTail

Aug. 16-19, Woodland Park Rock, Gem, & Jewelry Show, Woodland Park, CO; see https://www.facebook.com/woodlandparkrockandgemshow/

Aug. 17-19, Lake George Gem & Mineral Show, sponsored by the Lake George Gem and Mineral Club, Lake George, CO. See http://www.lggmclub.org/

Sep. 7-15, Colorado Mineral and Fossil Fall Show, Crowne Plaza Hotel - Airport, 15500 E. 40th Ave. Denver, CO.

Sat., Sep. 8, 10 a.m. – 2 p.m., **Dinosaur Discovery Day** at Dinosaur Ridge, featuring "Gem and Mineral Day". Public tour day at Dinosaur Ridge, 16831 W. Alameda Parkway, Morrison. Walk up and down the Ridge to see interpretive guides explain the various fossil and geology stations, or ride a guided shuttle up and/or back for $4. See www.dinoridge.org .

Sep. 8-16, Denver Coliseum Mineral, Fossil, and Gem Show, Denver Coliseum; see http://www.coliseumshow.com/

Sep. 12-15, Denver Fine Mineral Show, Denver Marriott West**,** 1717 Denver West Blvd.; see http://finemineralshow.com/denver/

Sep. 14-16, 51st annual Denver Gem and Mineral Show, Denver Mart, 451 E 58th Ave., Denver, CO. **Minerals of Mexico** is the 2018 show theme. See http://denvershow.org

Wed. Sept. 19, 7:30 p.m., Friends of Mineralogy, Colorado Chapter, bimonthly meeting, after the Denver Gem and Mineral Show (rescheduled so as not to conflict with events the week of the show) Topic TBA. Lakeview Event Center, 7864 W. Jewell Ave., Lakewood CO.

Thurs., Sep. 20, Colorado Scientific Society Student Paper Night; oral or poster presentations by graduate (or undergraduate) students on their earth science research topics, with an award given for the best presentation. To be held at the Arbor House, Maple Grove Park, 14600 W. 32nd Ave., Golden CO. For more information (including for students who wish to apply to present a paper) see http://coloscisoc.org .

Sat., Oct. 13, 9 a.m. – 3 p.m., **Dinosaur Discovery Day** at Dinosaur Ridge, featuring "**Girl Scout Day**". Public tour day at Dinosaur Ridge, 16831 W. Alameda Parkway, Morrison. Walk up and down the Ridge to see interpretive guides explain the various fossil and geology stations, or ride a guided shuttle up and/or back for $4. There will be special activities and earth science badges to complete for Girl Scouts, who may register in advance [$6 for Scouts to register]. See www.dinoridge.org for more info.

Thurs., Oct. 18, 7:00 p.m., Colorado Scientific Society October meeting, **"Structural Geology of Colorado"** by Ned Sterne, plus a possible 2nd speaker. Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood.

Sat., Oct. 20, 12 noon**, Littleton Gem & Mineral Club, silent and verbal auction**. Seller setups (club retains 20% commission) at 11, silent auction begins at noon, verbal auction at 1 p.m., checkout starts at 3:30 p.m.

Nov. 10-11, 39th annual New Mexico Mineral Symposium, at New Mexico Institute of Mining & Technology, Socorro, NM; see https://geoinfo.nmt.edu/museum/minsymp/home.cfml .

Wed., Nov. 14, 7:30 p.m., **Friends of Mineralogy, Colorado Chapter** bimonthly meeting (rescheduled so as not to conflict with people's travel to the New Mexico Mineral Symposium the previous week). Topic TBA. Lakeview Event Center, 7864 W. Jewell Ave., Lakewood CO.

Thurs. Nov. 15, 7:00 p.m., Colorado Scientific Society November meeting, **"Geothermal Energy**", by Jeff Winick, DOE, plus a possible 2nd speaker. Shepherd of the Hills Church, Lakewood.

Nov. 16-18, **Denver Area Mineral Dealers Show,** Jefferson County Fairgrounds, Golden CO**.** Free admission, public welcome.

✔ ✔ **John Rakowski** received the following note from **Jared Tadla,** one of last year's scholarship winners, who is finishing his second year at Colorado School of Mines:

"***I wanted to thank you and the Club again for the scholarship I received for the 2017-2018 school year. I'll update you on how the year went since I switched from Petroleum engineering to Geological Engineering. I found that I really excel at and enjoy Geology, finishing in the top percentile of my intro level engineering terrain analysis courses and mineralogy courses. Also, I have decided to pursue the exploration track of Geological Engineering and will be taking optical mineralogy and structural geology this fall. I even made the honor roll this past spring, which I never have made before! I still have 2 years remaining in my undergraduate degree and will be attempting to get hired as an intern in the petroleum or mineral industries next summer.***

Again, apologies for my mistake and lack of correspondence due to email problems, I really appreciated the aid that your scholarship provided me last year!"

Thanks again,

Jared S.Tadla
Colorado School of Mines - Class of 2020
Platte Canyon High School - Class of 2015

✔ ✔ .A quick request from our Field Trip Coordinator –**Billy Bell:**

Please take a look at the remaining field trips to check that a field trip leader is appointed to each trip.

If you see my name, Billy B, on the list or no name, **please consider leading that trip**. No field trip leaders = no field trip

We would like to Thank all of the Members who have been helping us with the trips. Thanks for all your effort, time, and support.

…and here's the updated list, as of August 1:

Aug 11 - Sat	Badger Flats - Magnetite/Fluorite/Barite/Malachite	Easy/Med	Linda W
Aug 15 - Wed	Piety/Patience Claim	Easy/Med	John S
Aug 17/19- Fri-Sun	LGGMC Rock & Gem Show	Easy	
Aug 29 - Wed	Petrified Wood - Any IDEAS??		
Aug 31 - Sept 2	LABOR DAY		
Sept 8 - Sat	Breckenridge Bi-Pyreimidal Quartz	Easy/Med	Billy B/ ???
Sept 15 - Sat	Midway Springs - Banded Aragonite/Actinolite/Peacock/Opal	Easy	Bob B /Billy B
Oct 05/07 - Fri-Sun	Grand Junction - Barite/Calcite/Amethyst		Billy B
Oct 20 - Sat	North Table Mountain Quarry	Med	Bob C

-------	Red = Setup Trip
-------	Black = Still Working on Permissions or Locations
-------	Blue = Special Event / Holiday
****	Purple = Canceled due to Weather/Conditions

<<<<<< Please Check Back - More Field Trips Coming Soon >>>>>>

We are also working on a trip to the Colorado School of Mines Geology Museum.

✔ ✔ **Norma Engelberg** sent a short article about a recent trip to New Mexico:

A Trip to Socorro, N.M.

By Norma Engelberg

The best times to take a trip to Socorro, N.M. are fall, winter and spring. Summer is good, too, but daytime heat leaves bird and wildlife watching and geological exploration for dawn and dusk.

Suzanne Core and I went in early May, a great time for birders (Suzanne) and very amateur botanists (me) to visit the Bosque Del Apache National Wildlife Refuge south of Socorro.

Early May catches the end of spring and the beginning of summer. The weather is nice but a bit iffy, day to day, which is how I ended up buying a pretty but expensive hoodie at the Karl G. Jansky Very Large Array National Radio Astronomy Observatory's excellent gift shop.

As usual, geology forms the foundation upon which everything else around Socorro happens. Here in the Pikes Peak Region, our foundation is the granite with the same name and the sediments that are all that's left of the Ancestral Rockies.

In Socorro and the rest of the middle of New Mexico, it's the Rio Grande Rift.

The University of Utah Rio Grande Rift website states:

"A rift is created when the Earth's lithosphere (the strong "skin" layer at the surface) stretches and thins. Rifts typically have an elongated valley bounded by faults and a thin crust. The Rio Grande Rift began forming between 35 and 29 million years ago when Earth's lithosphere began to spread apart, triggering volcanism (volcanic activity) in the region. It stretches from the state of Chihuahua, Mexico, to at least Leadville, Colorado (and probably continues further north). Continental rifts like the Rio Grande form basins (topographic depressions) that fill with sediments over millions of years. In Albuquerque, New Mexico, the basin sediments are three miles thick. The Rio Grande Rift continues to widen very slowly today."

Most rifts are located in oceans and usually at the edges of continental plates, but the Rio Grande, the East African Rift and the Lake Baikal Rift in Russia are called mid-continental rifts for good reason. And, when the description says the rift continues to widen "very slowly" it's referring to 1.5 millimeters of east-west movement in Colorado and 2.5 millimeters in New Mexico.

Located at the southern end of the Middle Rio Grande Basin where the Rio Grande Rift narrows and then widens out farther south, Socorro is a great place to leave our local geological groove.

The Rio Grande River follows part of the rift from its source in Southern Colorado before eventually turning east into Texas and Mexico to the Gulf.

The Bosque's wetlands follow the Rio Grande River, but they aren't exactly natural. River flow is sketchy with all the water being pulled out of it by farmers and cities in both the U.S. and Mexico so at certain times of the year, refuge managers flood the wetlands to mimic historic water-flow patterns and maintain waterfowl habitat that was on the verge of drying up. They also grow corn for the area's wintering-over cranes and waterfowl.

(left) The holes in these cliffs at the Bosque Del Apache NWR are homes to hundreds of bees' nests.
(right) Part of the Rio Grande River Valley, the wetlands in the Bosque Del Apache are home to many different species of water birds. Sandhill and other cranes and waterfowl over winter in the Bosque.

The Bosque isn't all about wetlands. It sits like an oasis in the middle of a desert. Taking advantage of the desert climate, the Bosque is also home to the Laura Jean Deal Desert Arboretum, featuring more than 100 cacti and succulents. In early May, many of these plants are already in full bloom.

The Very Large Array is also a product of the local geology. Radio telescopes need isolated areas shielded from the electronic clutter of civilization. The array is surrounded by a ring of mountains that serve as barriers and these giant telescopes are so sensitive that visitors must turn off their cellphones and other electronic devices.

Watching 27 giant radio receivers turn in unison toward distant and invisible parts of the sky was a thrill.

Finally, we took time to visit the Mineral Museum on the New Mexico Tech campus. The museum started in 1889 to help educate engineers and geologists working in local mines. It soon became a world-class, award-winning collection.

The original collection was lost to a fire in 1928. The collection was rebuilt with purchases and donations by a variety of benefactors. In 1938, when the museum reopened, there were 3,000 specimens. Now it has more than 15,000 different pieces. A new museum building opened in 2015 and new displays are being installed.

The museum still helps educate geology and mining students who attend the technical college. During the school year, the local mountains reverberate as budding miners practice their blasting skills.

Interesting websites:

For more information about the rift, check out this blog by our own Steven Veatch: http://coloradoearthscience.blogspot.com/2012/12/the-rio-grande-rift.html. For information about the Bosque Del Apache Wildlife Refuge, visit www.fws.gov/refuge/Bosque_del_Apache. Information about the Very Large Array is available at www.vla.nrao.edu

(left) After as many as six moves, the Mineral Museum at New Mexico Tech in Socorro, N.M., has a new permanent building, constructed in 2015.
(right) These are just a small example of the many mineral displays in the New Mexico Tech Mineral Museum in Socorro, N.M. Displays also include mining artifacts and a fluorescent mineral display.

All photos by **Norma Engelberg**

✔ ✔ **Steve Veatch** sent this note about a Lake George Pebble Pup, **William Wray**, who will have his article on K2 granite (previously published in this newsletter) published later this year:

"I am pleased to announce that William Wray, a Lake George Pebble Pup, will have his article published by an international rock, gem, and fossil magazine in a few weeks. We are all very proud of William Wray."

✔ ✔ **Frank Rosenberg** sent this account of the July gold-panning trip to, including photos:
Loren Lowe, thank you for talking to us about gold panning at our July club meeting and then teaching us how to pan for gold the following weekend. We all had a great trip under the leadership of our president Bob Baker.

Frank also reports as follows about the Topaz Mountain trip:

Saturday, July 14th, what a great day for collecting ! Thank you Krystle and Joe Dorris for hosting a fabulous topaz dig at your Topaz Mountain Gem mine! We all had a good time while collecting a wide variety of topaz that seemed to be appearing throughout the day.






Wayne Orlowski sent a couple of interesting links:

Search your address through a selected period of geologic time. Select a geo-time interval in the upper right box and then enter your address in the upper left box:

https://gizmodo.com/you-can-now-search-for-addresses-across-750-million-yea-1826793778

This summer, 160 years ago, it dawned on Charles Darwin that he might have to go public with the theory of evolution. He had been working on his theory slowly, gradually building it out for decades. And Darwin probably would have kept working on it, if not for a letter he received from English naturalist Alfred Russel Wallace, which outlined Wallace's own ideas about natural selection; ideas that, unfortunately for Darwin, were very similar to his own. Iain McCalman, author of *Darwin's Armada: Four Voyages and the Battle for the Theory of Evolution*, walks us through the complicated origins (no pun intended) of the theory of evolution, and how that theory changed everything from biology to religion to politics and geology.
http://blogs.wgbh.org/innovation-hub/2018/7/27/origin-origin-species/

John Rakowski sent this item about the Club library:

Club Library:

Our website at LGGMClub.org contains a current listing of the books and other material in our Club Library. You can look over the list to find items of interest or visit the library and check out books at the PPHS Museum. We moved the library from the previous location in a cabinet that was only available on meeting days. The library was moved to its present location in the Pikes Peak Historical Society Museum in Florissant, just south of US 24. We did that move to make it easier for members to check out and return materials. The museum is open in the summer Fri/Sat/Mon from 10 AM-4 PM and Sunday 1-4 PM. Fall and Spring opening is 1-4 PM Sat/Sun, and museum is closed Nov-Feb. But if those hours are not convenient, call the museum at 719-748-8259 at least a day or two in advance with a specific day and time, and they'll open up for you. **Norma Engelberg** is our volunteer librarian in case you have questions or suggestions about our library.

The books and other materials can help you with mineral identification, field trip ideas, field collecting techniques, general lapidary work, faceting techniques, gemstone identification, fossil information and a myriad of other interesting topics. The library can help answer many of your questions and give you some great ideas for further appreciation of our hobby. While you're at the museum be sure to examine the mineral specimens

on display, including the two huge 4-foot-tall smoky quartz crystals. That display has been provided by our club to the museum and shows a selection of specimens from this area.

Notes from the Editor

Bob Carnein, Editor

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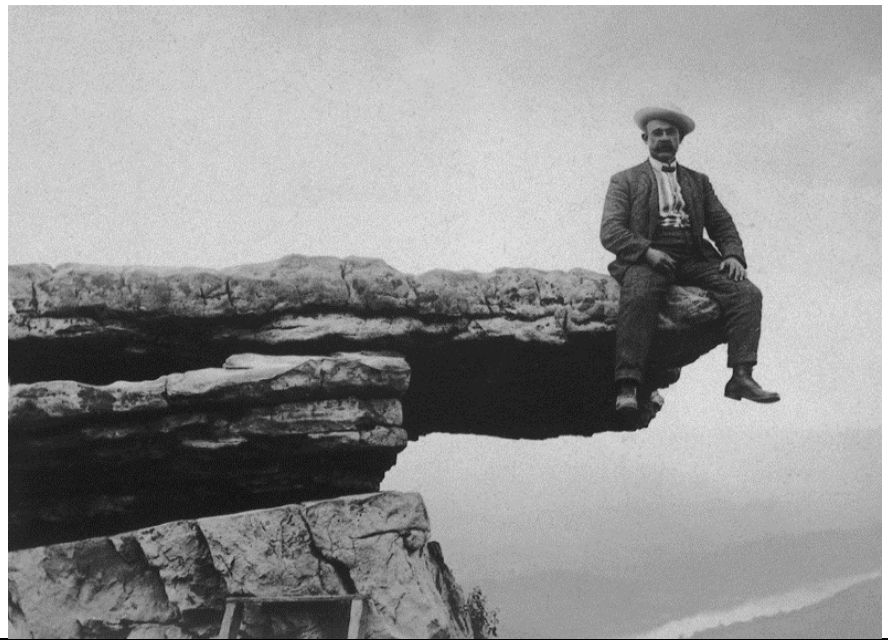


Here's an article by your Editor that relates to the August meeting program:

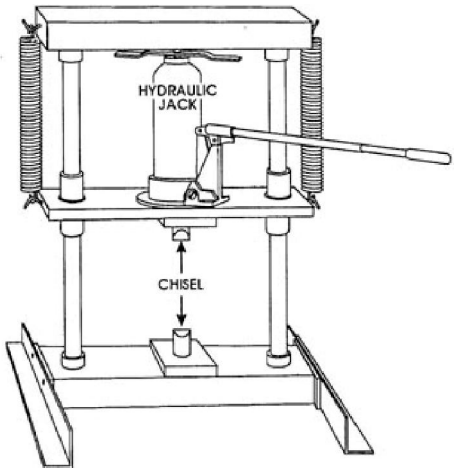
What Makes a Good Mineral Collection?
How to Organize, Catalog, and Care For Your Collection

by Bob Carnein

When you start collecting minerals and join a club, you soon notice that there are two kinds of collectors: those who are what I'd call "casual" collectors and those who are "serious" collectors. From my experience, the "serious" ones are usually (but not always) people who have been at it for years and who have started thinking about how to preserve the scientific, historical, and monetary value of their collection. Casual collectors often evolve into the serious kind. They start out collecting mainly for the social aspects of the hobby but eventually realize that, along with a lot of common odds and ends, they have begun to accumulate some seriously good minerals, whether by purchase, trading, or good luck in the field.

Every collector needs to acknowledge that they will eventually start to deteriorate, both mentally and physically. Thank goodness, these two things don't usually happen at the same time. But there are some things every collector should do about his or her collection before they get to that point. This article deals with some of those things.

Clean/Trim Your Specimens This should be the first step after you get home from a field trip. (If you buy a mineral, this usually has been done for you.) If you're like me, you have a space problem in your cabinet or shelves. A big, clunking rock, even one with some nice crystals on one end, probably will end up lost in the rock garden if it hasn't been trimmed down to a reasonable size. Trimming improves the appearance of many specimens, which increases their monetary value.



Left to right: A hydraulic rock splitter (Mindat.org); splitter diagram (fhwa.gov); small rock trimmer (Mindat.org)

For several reasons, I don't recommend trimming in the field. (1) It takes time to do it well, so you'll probably do a bad job if you're in a hurry; (2) The rock probably will be dirty, so you may not notice cracks or other problems that may cause unwanted surprises when you take a hammer and chisel to it. If you can, take the sample home and think about what you're doing. If you're really lucky, you may even have a hydraulic jack rock splitter to help you do a professional job.

Cleaning is a complex issue that will be the subject of a Club program this fall. Suffice it to say that you should start out with a specimen that you can sacrifice. Don't take your best amazonite and dump it into oxalic acid—the result might not please you. If you have questions about cleaning, it's best to ask somebody who has a lot of experience.

Get Rid of Duplicates Once the sample is cleaned and trimmed, look at the other stuff you collected and see whether you still want to keep all of it. Every collector should have at least a few objectives for their collection. If you already have 150 pieces of amazonite, does the new one really add anything to your collection? If it does, you might want to reevaluate the other pieces as well and give a few of them to a beginner or put them into the Club's silent auction.

Make a Label Once the better pieces are cleaned and trimmed, you should prepare individual labels for them. If you put them on a shelf unlabeled, you will eventually begin to confuse localities and other useful information, especially if visitors start moving them around. If you keep the less impressive pieces in a box in the garage, at least include a slip of paper with the locality information and date when you collected them.

Garage storage of minerals from one locality (Carnein photo)

Labels for your better specimens can be as simple or elaborate as you wish, but they should include: (name(s) of mineral(s) present; (2) an accurate description of the locality (**this is MOST IMPORTANT**); (3) date when the specimen was collected (or purchased); (4) if the latter, who from; and (5) a catalog number (see below).

Examples of a pyrite specimen (left) with catalog number (middle) and card-catalog page, original seller's label, and collector's label (right) (Carnein photos)

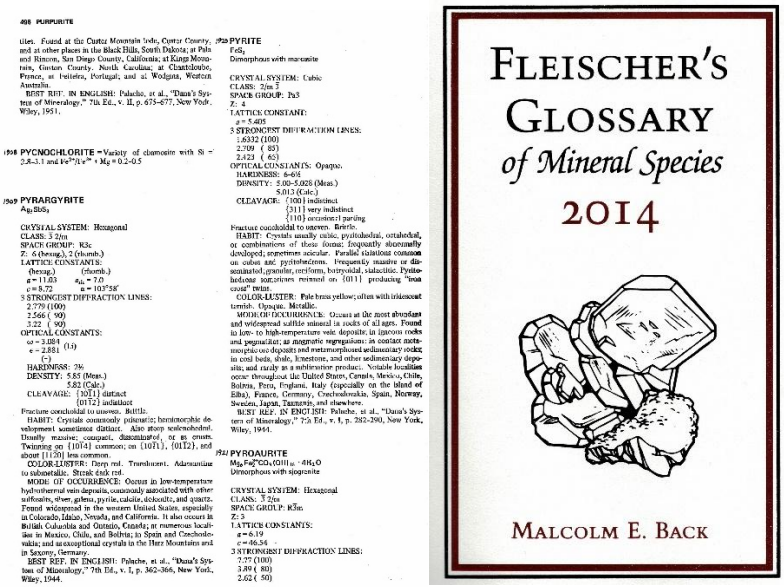
I Xerox my blank labels on acid-free paper that should last for many years. I use permanent black India ink to record the data because I don't trust printer ink to last and because I've never figured out how to integrate my laser printer with the size of my labels, which is determined by the sizes of my storage trays (see below). I prefer white paper to card stock (to me, colored labels are distracting and card stock eventually yellows and/or cracks). But, one's collection labels are a sign of individual taste and can reflect your personality. You can find ideas at the Mineralogical Record's label archive.

Assign a Catalog Number The most serious problem affecting otherwise fine old collections is the separation of specimens from their labels. I have seen this numerous times—a collector passes on to his or her ultimate reward and family members decide to pack up dad's rocks. In the process, labels get mixed up (if they're saved at all), and what was an organized collection becomes a disorganized jumble that has no scientific or historical value and a much diminished monetary value. We all know this, but it happens anyway.
A competent mineralogist may be able to reunite some of the specimens with their labels, but, in a large collection, this may be strictly guesswork. Anyway, how many competent mineralogists does your spouse know? Although it's always possible to reestablish a specimen's identity, it may be impossible to figure out the locality and other data that were on the label. That's why it's important to catalog your collection.

A catalog consists of two essential parts: (1) a unique number affixed permanently to each specimen; and (2) a book, card file, or electronic list where that number and information about the specimen can be found.
The numbering system is up to you—mine is based on an alphabetical list of mineral species in what was a relatively comprehensive book (*Encyclopedia of Minerals*; Roberts, *et al*., 1974) when I started my catalog. I assigned each mineral in the book a number, starting with 0001 (four digits allows numbers as high as 9999; Earth currently has about 5400 known minerals). The assigned numbers are written next to the description of each mineral. *Fleischer's Glossary of Mineral Species* (Black, 2014) would be my choice now for a comprehensive list, but it's too late for me to change.

Each time you add a mineral to your collection, look up the number for that mineral and use it as your catalog number. I have multiple samples of many things; so, for example, I call my pyrite samples "1920A", "1920B", etc. If a new mineral has been added to the ones listed in Fleischer, you can add it to the alphabetical list by calling it (for example) "0027a" (this would be between 0027 and 0028)—notice the lower-case letter—and then make your first specimen of this mineral "0027aA".

Obviously, you can also simply number each addition to your collection consecutively, starting with 0001. I don't use that system because the numbers don't relate to a particular mineral. For example your number "0001", "0757" and "2370" might all be pyrite, but that wouldn't be obvious to anyone just looking at the numbers, and it makes it difficult to compare data on all specimens of one species.



Left: page in Roberts, *et al.*, 1974, with minerals numbered; right: *Fleischer's Glossary* (Black, 2014)

Once you have assigned a number, it is then keyed to a description on a card in a card file (as my collection), notebook, or electronic database. I've started to upload my catalog to an electronic database at Mindat.org, but, at over 2000 specimens, it's a slow slog. Several free databases are available; I like the one at Mindat.org because it allows you to upload a lot of data, along with pictures. At Mindat, you get to decide whether your mineral catalog is accessible to the public or only to you and your friends. It worries me that Mindat depends, for its existence, on contributions from users; this means it may not be there 50 years from now.

Now, what should your catalog entries include? In my catalog, I include the following information:

- The catalog number (e.g. "1920A");
- Name of the main mineral and others worth mentioning;
- Dimensions of the specimen (I use centimeters);
- Locality information (this should be as complete as you can make it; if you aren't sure, Mindat.org gives complete information for nearly 300,000 localities);
- Date collected, if self-collected;
- Date purchased, if appropriate;
- Dealer's name, if appropriate (or person who gave you the specimen);
- Any other interesting information you want to include (e.g. UV fluorescence; twinning; unidentified minerals; color; etc.).

Get started on this before it's too late (hint: <u>it's only too late if you're deceased</u>!).

<u>A Few Other Thoughts</u>

- If you can afford it, purchase <u>sturdy</u> cardboard trays of different sizes to house your better specimens. This helps to protect them from knocking together and acquiring "Wilbers" (aka "dings"), which mostly affect monetary value. Some boxes come with a soft cotton pad.
- If you bought your specimen or got it from another collector, **keep the label** that came with it—it's of historical interest.

- If you can, house your trays in a multi-drawer cabinet or display case that will protect your collection from dust.



Left to right: Storage boxes (minresco.com); Dave Wilber (youtube.com); Quartz crystal with a "Wilber" on the tip (arcrystalmine.com)

- Be careful about pyrite, which can break down, releasing sulfuric acid vapor that attacks other minerals.
- Be careful about hygroscopic minerals, which can adsorb moisture from the air and may eventually become little piles of powder or worse. Some collectors keep such minerals in sealed jars or coat them with Krylon, which may or may not work.

Final Thoughts Make a plan for disposal of your collection and share it with your family. **Don't count on your *alma mater* accepting your prized minerals** with open arms—find out ahead of time and have one or two dealers you like come and take a look. If possible, get a frank assessment. If you plan to donate your collection and take a tax break, you will need a formal appraisal; these can be expensive and can vary a lot from one dealer to the next.

If you can bear to do it, I recommend that you sell your collection before you die. Your spouse has no idea what it's worth—why leave this up to her or him? Realize that selling minerals is an expensive business; if you sell to a dealer, you will probably receive only 20 to 30% of the retail value. You may do better to sell at a show or on eBay or some other website. Regular estate auctions, yard sales, and flea markets are usually a bad way to sell good material. Finally, **don't forget your friends and family, who might appreciate having a few mementos from your collection**.

References

Black, M.E., 2014, *Fleischer's Glossary of Mineral Species 2014*: Tucson, The Mineralogical Record, Inc.

Roberts, W.L., G.R. Rapp, Jr., and J. Weber, 1974, *Encyclopedia of Minerals*: New York, Van Nostrand Reinhold Company.

✔ ✔ And here is the latest installment of **"Bench Tips" by Brad Smith** (www.BradSmithJewelry.com):

SAWING SMALL TUBING

When making a hinged bracelet, I needed to cut 16 pieces of small diameter silver tubing. These were to be just approximate lengths and trimmed to final size after soldering. Not having a tube cutter, I had trouble holding the tubing on the bench pin while trying to saw through it.

So here's what I did. I drilled a hole in the side of the bench pin just large enough for the tubing to slide into and almost as deep as the length of cut tubing I wanted. Sawing became quick and easy. With my free hand, I inserted the tubing and held it from rotating while sawing off each length.

SECRET INGREDIENT

Those of us who use paste solders sometimes find an old tube has dried out. There should be some way to recondition it, but what to use? Calling tech support at the suppliers didn't work for me. Either they don't know what the ingredient is or won't tell you the secret.

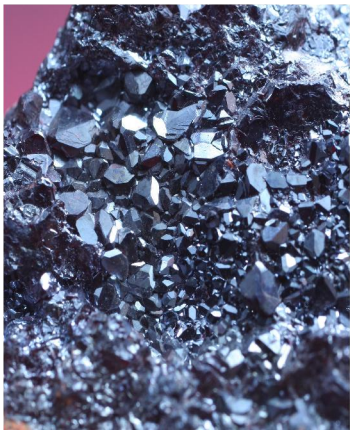
None of us likes to waste an expensive material, especially at $16 - 20 a tube, so I've often experimented with ways to rejuvenate it. Mixing in a liquid flux doesn't work. When the liquid starts to boil off, it spatters the solder in all directions. But after several failed experiments, I finally found a way that does work. My secret ingredient is Vaseline petroleum jelly. Mix in just enough to restore the consistency to something that's usable. If you use too much, the lump of solder will flow over a wide area as soon as the torch starts heating it.

If your solder is in a syringe, it can be a little difficult to get the plunger out. I find the easiest way is to poke a hole through the solder from the tip to the rubber plunger (a bur shaft was the right size for my tube). The hole allows air to enter between the solder and the plunger, allowing the plunger to be slowly withdrawn. Once the solder is out of tube, you can easily add the Vaseline, mix it up, and spoon it back into the syringe.

For those who enjoy these bench tips, I'm happy to announce a second volume is now available on Amazon. "More Bench Tips" includes 86 additional ways to save time, avoid frustration or improve quality at the bench. These new tips cover problems in fabrication, stone setting, casting, soldering, and polishing. Browse through a couple of the new ones at https://amazon.com/dp/B07D4B45JJ/

Pick Up a Few New Jewelry Skills With Brad's "How To Do It" Books
http://amazon.com/author/bradfordsmith

Monthly Mineral Quiz



Answer to last month's quiz: Because of the Chateau fire last month, I didn't have time to post a mineral quiz. So, here's a new one for this month. (Look for answers in next month's newsletter.)
This month's mineral is dark ruby red (though it may look black), has a metallic to adamantine luster, is softer than glass, has a specific gravity of about 6, and occurs as isometric crystals in the oxidized zones in copper sulfide deposits (remember the June program?). What is it?

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).

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