

FRIENDS OF MINERALOGY NATIONAL NEWSLETTER

Volume 43, No.3

September 2013

to promote, support, protect and expand the collection of mineral specimens and to further the recognition of the scientific, economic and aesthetic value of minerals and collecting mineral specimens.







SUMMER COLLECTING AT ITS BEST

Archer McGill shows off a floater Japan law twin quartz on Joe George's Purple Hope Claim at Green Ridge, Washington. Photo by Rick Dilhoff.

NJFM

Friends of Mineralogy has a new chapter affiliation. New Jersey Friends of Mineralogy joins the national ranks. Welcome NJFM.

FALL BUSINESS MEETING

Friends of Mineralogy to meet in Denver on September 13th during the Denver Show. Page 6.

PRESIDENT'S MESSAGE

It seems like just yesterday that the summer collecting season was upon us, and now we are already in September. Where did the summer go? As usual, my plans for several field trips were sabotaged by other obligations, but I did get out on a couple of occasions and made the most of those opportunities. I hope you made the most of your collecting opportunities as well.

I am pleased to announce that we have welcomed a new FM chapter into our family. A charter for the New Jersey chapter of the Friends of Mineral was recently approved. This region has a rich mineralogical history and we wish them a lasting and successful future.



The 46th Annual Denver Gem and Mineral Show is upon us, and this year the Friends of Mineralogy will be recognizing those exhibits that best reflect the educational objectives of our organization. As such, we will be presenting awards for the best educational case by an individual and best educational case by an organization. As you know, we have been presenting similar awards at the Tucson Gem and Mineral Show for many years, and I hope that this is something that we can further expand upon in the future.

On Friday afternoon, September 13, at 3:30, we will be holding our fall membership meeting at the Denver Merchandise Mart in a room to be announced at the Show. Look for flyers posted around the Show Floor. This is a good opportunity to learn about what your organization is doing and also voice your opinions on matters affecting FM, all in a very informal setting. Lately, this meeting has been sparsely attended, and I would ask any members who are going to be at the show that day to please try to set aside 30 minutes to an hour of your time to join us. We need and welcome your participation.

Allan Young President

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FALL BUSINESS MEETING

Friends of Mineralogy will hold it's annual fall business meeting in conjunction with the Denver Show on Friday September 13th at 3:30pm in room K3537. All members are encouraged to attend. This is one of only two meetings a year where members can present ideas, express opinions, and voice concerns about the goals and activities of the group.

DENVER SHOW SPEAKER SCHEDULE

Friday

12:00 PM: Presentation: Snowmass: Mastodons and Mammoths, Sloths and Camels, Oh My!

by Richard Stucky (Denver Museum of Nature and Science)

1:00 PM: Presentation: Arthur Lakes: Discovering Dinosaurs video

2:00 PM: Presentation: So Many Tourmalines, So Little Time by Jim Spann

2:00 PM: SMMP Board Meeting (Room K35-37)

2:30 PM: SMMP General Meeting (Room K35-37)

3:30 PM: Friends of Mineralogy Meeting (Room K3537)

Saturday

12:00 PM: Presentation: Pikes Peak Pebble Pups presentations by Luke, Zach, Jenna and Blake

1:00 PM - 3:00 PM: Presentation: "Meet the Curator" by numerous museum curators (museum cases)

1:00 PM: Presentation: Starting a Mineral Collection: What You Should Know about Tourmaline by Peter J Modreski

2:00 PM: Presentation: Gold Specimens - The Lure of the Precious Metal by Wayne Leicht

3:00 PM: Presentation: Burma by Bill Larson

Saturday Night Special in the Palm Court of the Denver Mart Main Building

6:00 PM - 7:00 PM: Refreshments and Cash Bar

7:00 PM - 8:00 PM: Awards Presentations

8:00 PM - 9:00 PM: Presentation: "The Tales that Tourmalines Tell" by Michael Wise

Sunday

1:00 PM: Presentation: A Woman's Perspective on Mineral Collecting by Gail Spann 1:00 PM - 3:00 PM: Presentation: "Meet the Curator" by numerous museum curators (museum cases)2:00 PM: Presentation: Fluorescent Aspects of WY/MT Border Area Banded Agates by John Hurst 3:00 PM: Presentation: Tourmaline: The Garbage Can Mineral by Bob Jones



Copper, 22cm,tall
Michigan, USA (D1521)
Mark Mauthner photo courtesy Heritage auctions (ha.com)



MIDWEST CHAPTER

INDIANA trip was "HOOSIERIFFIC"!!

On Friday August 9th, 17 FM Midwest members tried their luck at the Roger's Group Quarry in Mitchell, Indiana. Quarry superintendent Danny Powell pointed out before the trip that there would be two pyrite bearing layers in the quarry. He

was correct; several collectors picked up dozens of small pyrite specimens that appeared to have multiple cube faces stacked upon each other.

Danny also said that we might run into some selenite. We absolutely did with John Lindsay collecting several 5 gallon buckets of the material for his Dearborn, MI "Minerals for Minors" program. Kathy Bailey collected for Dayton area schools, and I garnered 400 hand specimens for OESTA. Three forms of gypsum were present - sheet like selenite, fibrous satin spar, and crystalline forms. Some of the gypsum exhibited both the sheet-like and fibrous growth habits on single specimens. I did see one dolomite specimen.



Later on Friday afternoon, the group fragmented and traveled to find a quartz-bearing geode site near Ft. Ritner. Also present were crinoid stems.

On Saturday, FM took 15 collectors to the Heidelberg Lehigh Quarry in Mitchell where we were welcomed by host Tyler Kalber. Though the collecting here was tougher, the specimens were worth the search. Kathy Bailey found a

very nice specimen of purple fluorite & calcite. This was a bit of a surprise for this quarry. John Lindsay found some nice multi-mineral specimens featuring quartz, celestine and calcite. Scott Kell came up with a calcite, celestine specimen and also one comprised of calcite, celestine and dolomite.



Finally, we capped the weekend off with a FM talk by our founder Dr. Nelson Shaffer of Indiana University. He was his usual witty self, lecturing us on meteors. Nelson has actually found three of them

himself which is very difficult. Before leaving the show, we had to circulate amongst the merchants at the Bedford Gem and Mineral Show. The one most familiar and accommodating to collectors was FM's own Bob Harman. He was selling part of his geode collection. Also on hand to keep things lively was Hoosier state field trip man, Steve Garza. If you have never met Steve, you have been missing a treat. One hour spent with this colorful personality is like spending a whole day with anyone else.



Celestine - Rockwood Quarry (Michigan) - Mike Royal

Calcite - Rockwood Quarry (Michigan) — Mika Royal

While collecting this weekend, a person in our group who is highly qualified in safety commended our members. On the Friday trip, several of our collectors approached a muck (blast) pile that appeared unstable. They gave it a look, and decided there were safer areas in which one could collect. I do not know who the collectors were, but they left a potentially hazardous area after they deemed it unsafe, and did so without any reminders from the safety person aforementioned. This speaks well of you members. Keep up the good work.

On this trip, we had plenty to do in two days. Our quarry hosts were cordial, we had fun talking with each other, and we left our collecting in a safe manner.



SCFM Notes Southern California Chapter, Filends of Mineralog

Fall Symposium

Following the success of the Spring 2013 SCFM Symposium, the theme "GO FOR GOLD" will be continued. The Fall Symposium will be hosted by Professor Bruce Bridenbecker of Copper Mtn College.

Oct 12, Saturday.

- 9 AM Arrive at Copper Mtn College, register, and participate in demonstration of placer gold recovery equipment.
- 11 AM—lecture: "Gold Mining in the Dale District."
- Noon—collect catered lunch; depart for Dale District for discussion of geology by Prof. Bridenbecker; inspect placer claims and operations.
- Camp & dinner near the Chambliss and Cadiz trilobite locality.

Oct 13, Sunday

Tentative plans include collecting halite, selenite, and celestine at both Bristol and Danby Dry Lakes. Time permitting, visit the farthest west outcrop of the latest Miocene Bouse Formation and Lawlor Tuff to discuss the relationship of the Bristol Trough to the development of the Colorado River trough. The trip will end about 3 PM Sunday.

The Spring 2013 SCFM Symposium was hosted by Dr. Todd Heibel, Dr. Don Buchannan, and Ms. Megan Shadrick. Lectures and demonstrations started off the program:

- History of Gold in California and the Transverse Range: Gold Chemistry, Megan Shadrick
- Mojave Gold: The Rand and Coolgardie Districts: Professor Bruce Bridenbecker
- Placer Gold Recovery dry washing and equipment (DVD) from Gold Fever Prospecting, Inc.,

The 45 trip participants then followed a field guide developed by Ty Schuiling and Bob Reynolds to discuss lode and placer gold deposits with stops at Cajon Pass, Crowder Canyon, Atolia scheelite placers, the Kelly Silver Mine, Randsburg Museum, Randsburg placers, view of Goler District, and Hard Cash Gulch at Summit Diggings. Camp and dinner were at Owl Canyon Campground north of Barstow.

Sunday, the group visited Coolgardie Camp where dry



washing techniques were demonstrated. Following stops were near the American Progress Gold Mine in the northeastern Calico Mountains, a locality with wollastonite in marble, and a final stop at the Mojave River Valley Museum in Barstow to pan for gold!

SCFM member Ty Schuiling pans for flakes of gold at the Mojave River Valley Museum, Barstow







SCFM members are treated to a demonstration of dry washing techniques at Coolgardie Camp

Four new mineral exhibits were developed and installed at the Mojave River Valley Museum in Barstow.

The Boron Open-Pit Mine is one of two world-class borate deposits; the other is in Turkey. Boron and arsenic were introduced by hot springs into a Miocene lake 18 million years ago. Sodium borates are water soluble, but percolating groundwater alters sodium borates to less soluble calcium, magnesium and strontium borate minerals. Of the eighty different minerals found at this site, fifteen are borate minerals. Four sodium borates (borax, tincalconite, kernite, and ulexite) and a calcium borate (colemanite) are of particular economic importance.





Mojave Saline Minerals occur in Pleistocene dry lakes. During the Ice Ages, Mojave Desert basins filled with water and formed large lakes. Many evaporated by 9,000 years BP, leaving borates, salt brine, or gypsum. Searles Lake produces borates, carbonates, and sulfates. These "salts" are processed to produce commercial products. Production from Searles Lake includes sodium, potash, boron, lithium, bromine, liquid bromine and boric acid. Mojave Miocene lakes (18 to 10 million years) close to hot springs contained borax. Dry lake sediments were uplifted to form the Calico Mountains east of Barstow and the Funeral and Green-

water mountains of Death Valley. Notable occurrences are very large crystals of colemanite as well as blue celestine and white meyerhofferite replacing invoite.

California Quartz. Quartz, one of Earth's building blocks, crystallizes from hydrothermal fluids in pegmatites and veins. It can crystallize from cool groundwater in fractures and within geodes. Quartz is silicon dioxide: SiO₂. Its crystal structure is hexagonal: six-sided. At hardness 7, it will scratch steel, glass, feldspar. Impurities give quartz its color. Quartz crystal lattices disrupted by radiation turn "smoky." Quartz relatives include microcrystalline chert and cryptocrystalline chalcedony; hydrated silicon dioxide is opal.





Cady Mountains Minerals. Basalt flows filled depositional basins 20 million years ago. Basins were uplifted to form the Cady Mountains, east of Barstow. Vesicles, large gas bubbles in the basalt, were sites for deposition of aragonite (CaCO₃), blue agate (SiO₂), sparkling quartz (SiO₂), pointed calcite crystals (CaCO₃), and round balls of fluorite (CaF₂). Fractures are filled with twinned calcite crystals and green octahedral crystals of fluorite on agate.

DENVER CHAPTER

Colorado Chapter meeting, Sept. 5: The Colorado Chapter, September meeting will take place at 7:30 p.m., Thursday, Sept. 5, in the VIP Room, Denver Museum of Nature & Science. The talk will be on Gem Tourmaline Mining in Maine, by Pete Modreski, USGS (and Chapter president). Pete attended the PEG2013 International Pegmatite Conference, held at Bartlett in the White Mountains of New Hampshire, this spring. The conference included three days of field trips to some classic pegmatite quarries around Paris, Maine, as well as a trip to the Palermo pegmatite in NH, and a visit to the inprogress of construction, Maine Mineral Museum in Bethel, ME. The presentation will show some of what was observed and learned on the field trips, with a summary of the history and geology of pegmatite mining in Maine for gem tourmaline (their state gemstone) since its discovery there in 1820. It will also include showing of a ~7-minute video clip documenting the recovery of gem, green elbaite crystals from a pair of pockets at one of the mines in the area; the video was taken about a week after the conference field trips; it's quite spectacular!

Slide Show about FM-Colorado Chapter at the Denver Show: As part of a slide show prepared to be shown at the Denver Show, depicting the various Denver Council member clubs and their activities, Pete Modreski prepared a short slide show about FMCC and its past activities, part of which has been incorporated into overall Denver Council slide show. The Chapter plans to have an expanded version of this slide show, playing on a laptop at our FM booth (the Mineral Identification booth) at the Denver Show. It will showcase some of the past symposia sponsored by the Chapter,, book publications, field trips, other current projects, and the past history of FM.

NEW JERSEY CHAPTER

As of yet, with summer just ending, we have not met formally as a society, but here is some background info and future plans: - A few of us were formally organizers of the Tri-County Mineral and Lapidary Society which has become defunct mainly to a lack of leadership, recruitment and program. We had left the club due to jobs etc and it fell apart. - Last year I semi-retired and began to spend more time in the hobby of mineral collecting having begun when I was 13 years old. I thought of starting a new organization and after much searching online, came to the conclusion that being part of a parent organization was the best idea.- I started to correspond with Allan and began the process of forming a NJ chapter of FM.- It took about 9 months to search out old friends and recruit new ones and was able to get the minimum 10 to submit a plan for a NJ chapter of FM.- We expect to build a relationship with Rutgers University who are the only ones in the state to still offer an undergraduate degree in Geology. Even Princeton University has given up on that.- We will be coordinating with other state clubs and submitting a listing with location of all the known minerals that have been found in NJ.- We expect to foster a relationship with Rutgers in order to use their resources for study and general education, meet at their Geology Museum and assist in photographing their mineral collection for instructional purposes.- We also hope that the relationship with Rutgers will better enable us to open up previously closed collecting sites within the state. Our membership includes collectors, educators and dealers. Recruitment and program will be paramount activities. We hope to have a show and symposium in the near future. KC Dalby, President

News from Pacific Northwest Friends of Mineralogy



Panoramic view from the Liberty Bell Mountain talus slope, North Cascades, Okanogan County, Washington

This will be one of those summers that are remembered in the Pacific Northwest. With

lots of rain typically in the fall through spring months, at least in the western part of this region, we value the nice weather we are allotted each year during the often too-short summer. This year was an exception so far as the shortness of the summer goes. It has been unusually warm and sunny from late spring through late summer.

On May 26, we had a short business meeting at the <u>2013 Seattle Mineral Market</u>. The primary topics of discussion were the upcoming symposium, the nominations of PNWFM officers for the election this October, suggested additions to the <u>PNWFM Website</u>, and whether we should become more active on social media. Member Bruce Kelley agreed to set up a PNWFM Facebook Page.

The 23rd annual Washington Pass clean-up was held this year on August 9-11 at the Klipchuck Campground in the Okanogan-Wenatchee National Forest. Eleven members of PNWFM formed the work party this year, and our campground hosts had prepared an extensive list of tasks to be completed. Members spread three dump truck loads of gravel, loaded a truck with limbs and debris from one area, installed a campground bumper and leveled another, and cleaned up gravel near a sign on Highway 20. The camp hosts and forest service personnel are highly appreciative of our efforts, and we discuss with them the interesting geology and mineralogy of the area.

The event was first envisioned in 1990 by then PNWFM president Becky Harris as a response to a mess left by some mineral collectors, and also to prevent a repeat of the prohibition against mineral collecting in the Sawtooth National Forest in Idaho. Since then, the event has become a tradition and PNWFM has performed services ranging from litter pickup on Highway 20, the removal of noxious weeds, cleaning up dumped tires, building trails and stairs, cleaning downed limbs and trees, and renovating features in the two local campgrounds.



PNWFM Member Julian Campbell below Liberty Bell Mountain spire



PNWFM member work party at this year's Washington Pass clean-up





Okanoganite-(Y) from Washington Pass area. 1.5 mm FOV

Calciohilarite from the Liberty Bell talus. 4.3mm FOV.

In addition to the clean-up efforts, attendees spend the weekend collecting and socializing. Members travel to the pass to collect at night with UV lights, spend the days collecting or hiking in the impressive North Cascades, and participate in a potluck that has become increasingly a gourmet event on Saturday evening. A trip on Sunday up to the Liberty Bell Mountain talus has been the custom off and on over the years.



View of Hinkhouse Peak and the Washington Pass overlook from Liberty Bell Mountain.

Weather at high altitudes in the North Cascades in unpredictable and while most years feature ideal weather during the clean-up, we have had everything from snow to very hot weather in years past. This year was one that stood out for its unusual weather. The forecast was for hot temperatures with the chance of rain being 30-50 percent. On Friday and Saturday, the days were hot and uncharacteristically humid. It began clouding up very late on Friday night with lightening and some thunder in the distance. It rained hard late that night, but it had cleared off by morning. It clouded up again on Saturday night, with an impressive amount of lightening occurring in the distance. At one point, almost continuous lightening lit up the sky. It rained again that evening, but again had stopped by the morning. On Sunday, ten of us hiked up Liberty Bell Mountain, to moderate temperatures and mostly clear skies. In early afternoon, a group of threatening clouds came up from behind the spire, and this was followed shortly thereafter by thunder and a few rain drops. Realizing that the exposed talus was not the place to weather a thunderstorm, we quickly exited the peak, and were caught shortly after reaching the tree-line in an amazing hailstorm. The hail stones were quite large, some up to 1-1/4" across and averaging ½", and came down thickly for a few minutes, littering the steep slopes with frozen ball bearings. Finally making it down mostly unscathed but soaking to our vehicles sometime later, we realized how enjoyable an experience it was.

The adventure was not over, however. Most attendees come to the area from the west on Washington Highway 20. Unbeknownst to us at that time, the lightening storm we had seen on Saturday night washed out the highway on Rainy Pass, which is just west of Washington Pass. This blocked the normal route most of us would take to go home. The <u>numerous mudslides</u> took two weeks for the Washington DOT and National Park Service to clear.





Surprise storm of hail of over I" in size being displayed by PNWFM member Barry Murphy on Liberty Bell Mountain. photos by Randy Becker

The Pacific Northwest Chapter of Friends of Mineralogy will hold its 39th annual Symposium and Mineral Show on October 11-13 at the Red Lion Inn in Kelso, Washington. Please see the attached registration form for details. We have put together an impressive and educational series of talks on one of our favorite subjects, Alkaline Intrusive Complexes. While the subject of alkaline intrusives might seem a bit esoteric to some collectors, such deposits produce a profusion of species and number among some of the most well-known of all localities, for example, Mont Saint-Hilaire, the Erongo region, Mount Malosa, Magnet Cove, and our local Golden Horn Batholith in the Washington Pass area. The prolific nature of these deposits led us to name the symposium this year, Minerals Galore! We cordially invite and encourage all FM members to attend our symposium this year.

—Bob Meyer, President PNWFM



The Pacific Northwest Chapter of the Friends of Mineralogy 39th Annual Symposium and Mineral Show

October 11-13, 2013
Red Lion Inn, Kelso, Washington

Show Theme: Minerals Galore! Alkaline Intrusive Complexes of the World

Guest Speakers

Randy Becker

The Golden Horn Batholith

Henrik Friis

Alkaline Mineral Occurances – An Introduction The Ilimaussaq Complex

David Joyce

Mont Saint-Hilaire Calcite Vein-Dykes of the Grenville Geological Province

Mike Wise

Minerals of the Magnet Cove Alkalic Igneous Complex The Pegmatite Mineralogy of the Mt. Malosa-Zomba Complex

Main Floor Dealers

EARTH'S TREASURES: Richard Kennedy
LEHIGH MINERALS: Jim and Yolanda McEwen
PACIFIC RIM MINERALS: John Meek
XTAL: Dennis Beals

Room Dealers

will be selling minerals from Pacific Northwest and worldwide locations in the North Hallway near the Main Floor Dealers

The Show will feature at least sixteen world-class mineral displays, including a display from the Northwest's finest mineral museum:

The Rice Northwest Museum of Rocks and Minerals

Free Admission to the Mineral Show and Dealers

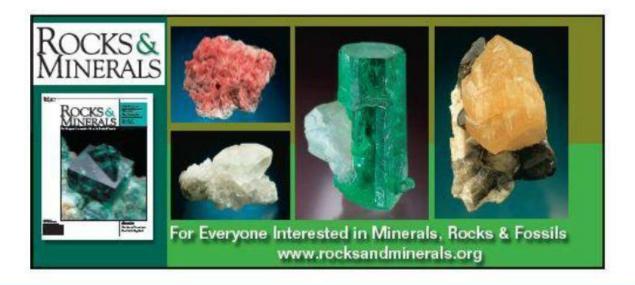
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The Friends of Mineralogy is a long-time affiliate of *The Mineralogical Record* magazine. The magazine was founded in 1970 by John White, who was at that time a curator in the Mineral Sciences Department of the Smithsonian Institution. With the initial help of a financial backer, Arthur Montgomery, White succeeded in launching and bootstrapping the fledgling publication to the point where it was marginally self-sustaining. After seven years as editor and publisher, White stepped aside for a new Editor, Wendell Wilson. Since then the *Mineralogical Record* has grown steadily in size, quality and prominence, thanks to the contributions of over 700 authors, photographers, artists, advertisers and donors. It has become a collective labor of love on the part of the entire mineralogical community worldwide. It is the only journal to have a new mineral species named in its honor (minrecordite), and it is the only journal to have received the Carnegie Mineralogical Award. Subscriptions, back issues, books and a variety of free databases are available online at www.MineralogicalRecord.com.





MINERALOGICAL SOCIETY OF AMERICA

If you are interested in earth, planetary, industrial, or biologic minerals or mineral-like materials, you may want to learn about the Mineralogical Society of America



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Quartz (prase); 15.2 cm tall.
Serifos Island, Cyclade Islands, Kykládes Prefecture, Aegean Islands Department, Greece.
(Hoppel collection D0261) Mark Mauthner photo; courtesy Heritage Auctions (ha.com).