PACIFIC NORTHWEST CHAPTER
FRIENDS OF MINERALOGY

December 2016

PNWFM NEWSLETTER

Inside this issue:

PNWFM Contacts

Bruce Kelley
President
bruce.kelley@gmail.com

Gary Hinderman
Vice President
gkmhind@comcast.net

Karen Hinderman
Secretary
gkmhind@comcast.net

Scott Ankenbrand
Treasurer
scottanken-brand@gmail.com

Bruce Kelley
Symposium Chairman
bruce.kelley@gmail.com

Bruce Kelley
Webmaster
bruce.kelley@gmail.com

Beth Heesacker
Newsletter Editor
heesacker@coho.net

President's Message

Greetings, mineral lovers! It is symposium wrap-up time, but also time to announce what's coming in the next couple of years.

So Many Volunteers!

I would like to thank all the volunteers who made our "Minerals of the Northeast US and Fluorescent Minerals" symposium such a successful event:

Scott Ankenbrand – Registration table, All things money related
Roger Beck – Setup
Bill and Diana Dameron – Setup and Registration Table
Dan Evanich – Setup
Barb and Julian Gray – Projector, General support
Beth and Paul Heesacker – Registration table, Case liner maintenance
Karen and Gary Hinderman – Auctions, Storage Coordinator, Case transportation and setup.
Madison Hinderman – Auction helper
Bruce Kelley – Facebook presence, Procure awards, etc...
Al Liebetrau – Dealer liaison and Hotel room wrangler
Tom Menzel – Night security, Setup, Helping wherever needed
Doug Merson – Publicity, Packets, Setup
Bob Meyer – Facilities liaison, Display coordinator
Allan Young – Speaker recruitment
All of the FM members who set up displays
All four of our speakers: Richard W. Graeme, Bruce Kelley, Dr. Pete Knudsen, and Chris Stefano
And probably half a dozen I'm forgetting…

I say this exactly the same every year, but it is still true: the sheer number of volunteers and the many hours of work you each put in speak proudly of your devotion to FM. It is a pleasure to work with such a committed group. Thank you all!

Awards

We skipped the contests at this year's symposium, but look for some fresh new ideas in 2017.

We did, however, have a Noble Witt Award winner this year. Congratulations to Robert Woodside! You can read my induction speech later in this newsletter.

Symposium 2017-2018

2017: October 13–15: For 2017, we have selected "***Minerals of Morocco"*** which should be spectacular!
2018: Dates TBD. The theme will be one of ***"Pacific Northwest Minerals"*** or ***"Minerals of the Himalayas"***

Member Participation: So many ways to get involved!

Write an article or send in a few photos for the newsletter. Went to Tucson? Send us a trip report! Find a weird fuzzy green mineral you'd like to share? Send us a photo whether you can positively identify it or not; I think mysteries are as fun as scholarly certainty. Thanks to Wes Gannaway, Beth Heesacker, Karen Hinderman, Al Liebetrau, Tom Menzel, Bob Meyer, Don Newsome, Lanny Ream, Alexander Schauss, and myself for providing newsletter content so far this year.

Plan to attend our 2017 symposium:
October 13-15, 2017 *Minerals of Morocco*
"Like" our official Facebook page: facebook.com/PNWFM

Visit the Rice NW Museum of Rocks and Minerals in Hillsboro, OR. PNWFM members get free admission and store discounts. ricenorthwestmuseum.org
Send me ideas for how PNWFM can better serve you and the mineral collecting community.

Until next time,
-- Bruce Kelley, President, PNWFM

The 2016 Noble Witt Award

As I considered how to introduce tonight's Noble Witt award, I came to what must be a universal truth about the award: None of the awardees actually need any introduction to FM! They are all those who attend most of the symposia, volunteer for FM projects and have an impact in the world of mineralogy.

So, with that in mind, tonight I present the Noble Witt award to Dr. Rob Woodside.

Rob has been passionately studying minerals since childhood when he took a hammer to the limestone in his neighbors' rock gardens, looking for calcite crystals. The scolding he received did not dampen his enthusiasm. At age 10, his mother took him to what he describes as "a day in paradise" at the Mineral Gallery of the Royal Ontario Museum. Many kids that age have dreams of careers as astronauts, firefighters or famous actors, but Rob decided he wanted to be the curator of a mineral museum!

He collected miniature size specimens of elements, sulfides and sulfosalts in their best state of crystallization until 2006, when he sold that collection to the Royal Ontario Museum.

More recently, Rob co-authored two articles for *The Mineralogical Record*, including the 2014 FM Article of the Year, *"Famous mineral localities: The Sar-e-Sang lapis mines, Kuran Wa Munjan district, Badakhshan Province, Afghanistan."*

As a member of the mindat management team, Rob combines a scientific approach with his love of minerals.

Rob has a PhD from McMaster University where he studied General Relativity and Solid State Physics and made a career as a college physics professor–perhaps not as glamourous as a museum curator, but I wish more of my professors had Rob's enthusiasm and sense of humor.

I have one example of FM service to share. When I asked Rob in May of 2015 to put together a mineral ID quiz for that year's symposium, he tentatively agreed to try to come up with something. I forgot about it until the week before symposium and when I asked him, he sent what he had. It was a tour-d-force, the mineral quiz to end all mineral quizzes! Every specimen had two or three questions involving habit, crystal form, chemistry, locality… like a 3-page final exam! And the result was that we had more participation in the quiz than we had seen in years.

I asked Rob if he could do one this year, but he had to decline. Sadly, Rob is unable to attend this year because he is undergoing cancer treatments, but I intend to ask him again for 2017.

I am therefore pleased to present the Noble Witt award to Dr. Rob Woodside.

Displays at the 2016 PNWFM Symposium, Great US Copper Localities: Butte, Bisbee and the Upper Peninsula.

By Bob Meyer

Dan Evanich's first case, featuring Minerals from the Historic Copper Mines of Butte Montana.

The 42nd Annual Symposium featured 14 superlative displays, most of which pertained to the symposium theme, *Great US Copper Localities: Butte, Bisbee and the Upper Peninsula*. PNWFM recognizes that the effort involved with putting together displays of such caliber transcends the simple activity of selecting, mounting, and labeling to prepare for the symposium. In actuality, the act of putting together such suites would typically involve years (sometimes many years) spent diligently searching for and solving issues, such as availability and expense, related to acquiring specimens that fit within the themes presented.

Dan Evanich presented two outstanding cases. The first was entitled "Minerals from the Historic Copper Mines of Butte, Montana" and featured 38 specimens, three photos, and a map. Among the specimens was an excellent 12cm tall specimen of indigo blue covellite crystals growing out from a hollow formed by a mass of crystalline pyrite from the Leonard Mine and ex from the Claude D. Huber collection; a lustrous 10 cm group of modified pyritohedral pyrite crystals with a greenish iridescence from the Hickey's Anaconda Mine, ex from the Al Mayo collection and from John Glen circa the 1890's; an exquisite 8 cm group consisting of very dark, large, well-formed digenite crystals with minor pyrite from the Butte District and ex from the George Judd collection of Detroit Michigan; and an excellent 7 cm tall specimen of dark iridescent

crystallized chalcocite crystals from the Leonard Mine, dominated by a large 4 cm striated twin on {110}.

Twinned Chalcocite Crystals, forming a 7 cm tall group from the Dan Evanich collection.

Dan Evanich's second case, featuring Copper and Copper Minerals from Bisbee, Arizona.

Dan's second case was entitled "Bisbee, Arizona Copper Mining; Copper and Copper Bearing Mineral Specimens from the Mines of Bisbee" and contained 35 specimens, one photograph, and four diagrams. Specimens included an excellent 12 cm specimen of pale green botryoidal chalcoalumite with druzy azurite crystals forming a mitten-shaped specimen from the Copper Queen Mine; a 2 cm specimen of colorless crystallized leadhillite—an extreme rarity from Bisbee—in a glass tube from the Campbell Mine, with an accompanying Ward's Scientific label, circa 1940; a 12 cm hollow curved example of copper that was precipitated during mining operations from the Tom Bee collection; a 9 cm specimen consisting of isolated balls of pale green malachite, up to 1.1 cm in diameter, attractively arranged on dark blue azurite from the Copper Queen Mine, ex Lorraine Sophia collection; and a 6 cm specimen consisting of dark red lustrous octahedral cuprite crystals, averaging 5 mm in size, with minor copper on matrix from the Copper Queen Mine, ex John Ydren collection by way of Burton Jirgl.

Leadhillite, 2 cm crystal group in a glass vial from the Campbell Mine, Bisbee. Dan Evanich collection.

The Rice Northwest Museum of Rocks and Minerals put in an impressive display entitled, "Copper Colors." The contents of the case were a selection of cut and uncut examples of sunstone (asserted in the case to be calcium-rich plagioclase with inclusions of copper) from the sunstone mines of Eastern Oregon. There were four exquisitely cut stones showing intricate shapes and color-zonation, each in window-like framed cases, and 15 superb faceted stones in a range of hues including red, rose, pale-yellow, and pale-green. These examples came from a recent donation to the Rice NW Museum from Doug Maltby and family and had their origin from the Sunstone Butte and Dust Devil Mines. In addition, there was a necklace with silver-yellow and green sunstones from the White Horse Ranch recently donated by Rex and Erik Tucker and family.

"Copper Colors," a display of cut and uncut Sunstones from Eastern Oregon that were recently donated to the Rice NW Museum of Rocks & Minerals

A pair of faceted sunstones from the Rice NW Museum Case. Recently donated by Doug Matlby and family.

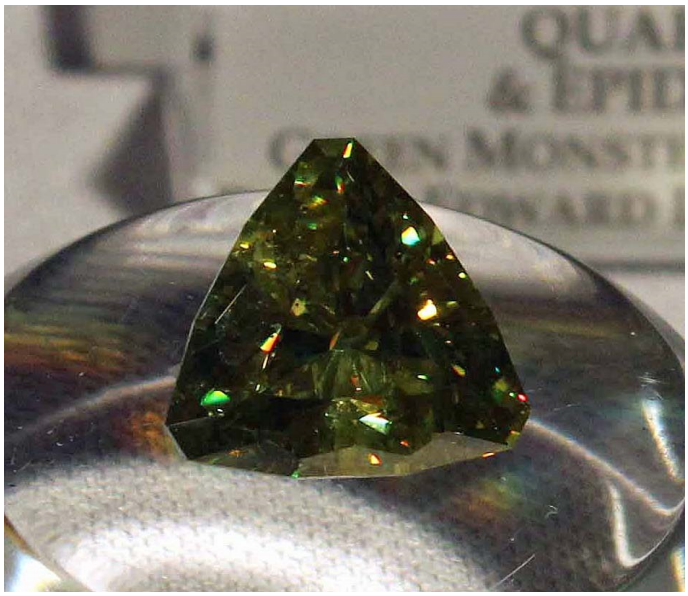
Si and Ann Frazier put in a display entitled "Collecting Japan-Law Twins," consisting of 52 specimens of japan-law twinned quartz and two placards. While quartz is the most common

species in terms of the number of extant specimens, japan-law twinned quartz is not common. The level of effort in terms of time and persistence that it must have taken Si and Ann to put together this display-worthy collection of japan-law twins is staggering. Seeing such a collection was an unexpected benefit to symposium goers in this year dominated by copper minerals, and it is hoped that each attendee took the chance to partake in this rare opportunity to view such a collection. Specimens included an 8 cm group of lustrous, colorless, transparent untwinned quartz crystals with a 3.5 cm japan-law twin from the Kruschev dol. mine, Madan, Bulgaria; a 12 cm long cluster of rock crystal with an unequally developed japan-law twin 7 cm across from the Sankuwasabha District, Kosi Zone, Nepal; and an odd, flattened and etched 7 cm tall japan-law twin lacking re-entrant angles without matrix from Brumado, Bahia, Brazil.

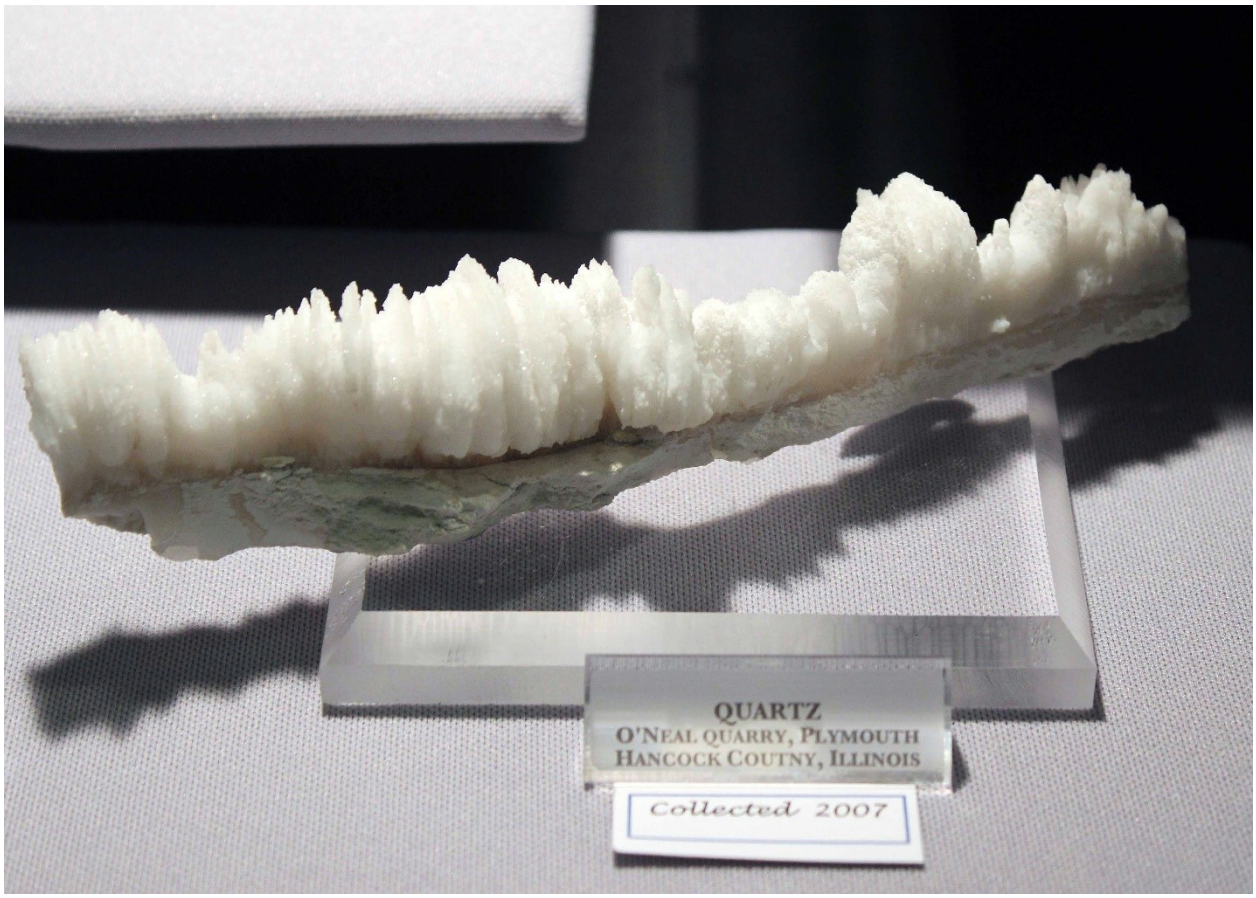
Si and Ann Frazier's case, entitled, "Collecting Japan-Law Twins."

Bill and Diana Dameron put in a very attractive display entitled, "PC Mine Specimens (And Other Quartz)," consisting of 32 specimens, a 14.25 carat faceted sphalerite from the PC Mine, and an explanatory placard. Among the specimens was an 8 cm long sceptered rock crystal quartz crystal growing from the front of a group of striated pyrite crystals from Spruce Ridge, King County Washington, USA; a 9 cm group of thin tapering quartz crystals colored-green by inclusions of acicular actinolite from Mega Horio, Serifos Island, Greece; an excellent and unusual specimen consisting of a rosette-like cluster of short red-hued amethyst scepters with white bases about 8 cm across from Karur, Tamil Nadu, India; and a superb a 3.5 cm tall thin tabular japan-law twin with minor re-entrant angles, predominantly white in color, but possessing amethyst color-zones at the tips of the *r* faces. In addition, Bill and Diana challenged symposium attendees to guess how an unusual specimen of quartz from O'Neal Quarry, Hancock County, Illinois was formed. The specimen consists of a parallel row of thin white crystallized aggregates stacked along one surface of what appears to be rock or a thin matrix of quartz. The specimen is about 16 cm long. Here is my guess: the aggregates often have pointed ends that provide a clue that the piece may be pseudomorphous, possibly after calcite or anhydrite. The druzy surface suggests a secondary period of crystallization.

Bill and Diana Dameron's case, entitled, "PC Mine Specimens (And Other Quartz)"



A 14.25 carat faceted Sphalerite from the PC Mine, Jefferson County, Montana. Cut by Mike Gray. Bill and Diana Dameron collection.



Bill and Diana Dameron's mystery specimen, 16 cm long. How did this form?

Steve Falconberry's case. Three specimens a tad larger than thumbnails.

Steve Falconberry presented a case consisting of three large cabinet specimens and five photographs. Near a label stating "Best Estate Sale" was a single white calcite scalenohedron from "Tri-State," measuring about 37.5 cm long. There was also a specimen of red quartz in a vug, about 16 cm across from "Red Hill, Oranje River, South Africa" [*sic*]; and a large specimen of amethyst, 35 cm specimen across from the Ahani Mine, Dept. of Santa Cruz, Bolivia. There was a label near the amethyst and red quartz stating "Best Self Collected." There were five photographs included in the display that depicted collecting activities.

Brittany Burkhardt's display of specimens, photographs, and other eclectic objects of interest.

Brittany Burkhardt put together a case containing an interesting and artistic arrangement of many specimens, but also including shells, fossils, photographs—many depicting collecting activities, a mandala-like drawing, and other items of beauty and interest. Even more than the other cases, the objects presented represent the story of a life's interest. The items included an arrangement of 18 colorful fluorite cleavages of increasing size; an 11 cm hemispherical group of lustrous black sphalerite with calcite on dolomite encrusted chert in a specimen 22 cm across—most likely from the Sweetwater Mine, Reynolds County, Missouri, USA; a 12.5 cm high tufa formation without apparent point of attachment from the USA (resting point down on the sphalerite); a 14 cm specimen of self-dug copper presented by Brittany for use as a business card holder; an attractive pink spiral-shaped Slit Worm shell 19 cm across from the Philippines; and "The Snail," (attribution supplied by the author), an amber colored 4 cm fluorite sphere on a sliver of quartz from China in a superb arrangement reminiscent of a snail—the overall specimen size is 8 cm long.

Detail of Brittany Burkhardt's case, including a 9 cm long Fluorite Botryoid in a Specimen reminiscent of a Snail.

Sean Finneson presented a display consisting of 14 outstanding pieces from the Michigan copper country. Providence favored both Sean and symposium goers this year, because the symposium theme and Sean's current collection mandate coincided. There are numerous ways that mineral collectors approach the task of building a collection. Sean's approach is to ensure that each specimen in his collection is significant—meaning that they are each on a plane with the finest specimens that were ever produced from his area of interest—the Michigan copper country, an area that some people would argue has been the greatest mineral specimen producing area in the US. These 14 pieces represent Sean's entire collection. The specimens in the case were each significant, and as with some of the other cases, it is hoped that symposium attendees took the opportunity to study this impressive group of specimens. Supreme among the copper specimens was an esthetic group of sharp metallic brown somewhat elongated crystals forming a group roughly "L" shaped 8.5 cm in height from the Wolverine mine. The newest specimen in the collection is a 9.5 x 8.2 x 6.2 cm group of superb equant copper crystals from the Pewabic Lode Quincy Mining Co., Lake Superior Copper District, Houghton Co., Michigan ex from the Dan Haskins Collection. Another favorite in Sean's case was a scrimshaw depiction of an early shaft house on a 10 cm high datolite nodule.

Sean Finneson's case of minerals, primarily Copper and Silver from the Michigan Copper Country.

Copper crystal group, 8.5 cm high, Wolverine mine, Michigan, USA. Sean Finneson collection.

Sharp equant crystals of Copper, Pewabic Lode Quincy Mining Co., Lake Superior Copper District, Houghton Co., Michigan, USA, 9.5 cm high. Sean Finneson collection.

Scrimshaw depiction of an early shafthouse on a Datolite nodule, Keweenaw Peninsula, Michigan, USA. 10 cm high. Sean Finneson collection.

Allan Young's Display—Copper-Bearing Minerals of the U.S.

Allan Young blessed symposium goers with a professionally presented display consisting of 32 very fine specimens entitled "Copper-Bearing Minerals of the U.S." In addition, Allan included three issues of the Mineralogical Record, representing the three aspects of the symposium theme this year: Michigan's Upper Peninsula, Bisbee, and Butte. Included was a 2.5 cm tall specimen of veszelyite, from the Black Pine mine, Granite County, Montana, U.S.A, consisting of sharp, lustrous, dark blue crystals of up to 1.8 cm in length in an esthetic grouping with a bit of malachite—certainly one of the finest examples extant. There was a 2.2 cm high specimen of rich blue terminated crystals of diaboleite in a cellular matrix from the Mammoth-St. Anthony Mine, Tiger, Pinal County, Arizona, U.S.A.; an exquisite 2 cm high specimen consisting of four roughly cubic copper crystals forming a row, like fingers, on top of a sharp silver crystal from the Wolverine mine, Keweenaw Peninsula, Michigan, U.S.A.; a superb dark metallic blue specimen of chalcocite, 2 cm high, from the Bristol Copper mine, Hartford County, Connecticut, U.S.A., consisting of a somewhat elongated tabular hexagonal crystal, 1.5 cm high, on other chalcocite crystals on matrix; and a lovely 2 cm specimen of malachite coating or replacing a nest of copper wires upon which were perched a number of small milky crystals of rhombohedral calcite from Bisbee, Cochise County, Arizona, U.S.A.

Veszelyite, a very fine Crystal Group, 2.5 cm, Allan Young collection.

Copper Crystals studding a Silver Crystal, 2.2 cm, Allan Young collection.

PNWFM President Bruce Kelley's case: Copper Minerals from Localities in the USA

PNWFM President Bruce Kelley exhibited a display consisting of 34 specimens, many self-collected, entitled "Copper Minerals from Localities in the USA." Among the specimens was a specimen of pale blue crystallized barahonaite-(Al) from the 80 foot level, Gold Hill mine, Tooele

Crystallized Azurite Spheroids from the Shannon Pit, Morenci mine, Greenlee County, Arizona, USA. 11 cm specimen

County, Utah, USA; a specimen of azurite 11 cm across, occurring as deep blue crystallized spheroids, attractively arranged on an unreferenced white mineral with cuprite from the Shannon Pit, Morenci mine, Greenlee County, Arizona, USA; and an 8 cm specimen consisting of masses and bright blue crystals of caledonite occurring in a 5 x 3 cm zone within rock from the Reward mine, Inyo County, California, USA.

Bob Meyer's display of minerals from Butte, Bisbee, and the Upper Peninsula.

Bob Meyer presented a display of 30 specimens ranging in size from thumbnail to large cabinet all according the symposium theme: Butte, Bisbee, and the Upper Peninsula. Specimens from Butte included an exceptional digenite 11 cm across from the Leonard mine, consisting of a thick vein of sulfide, primarily pyrite and sphalerite, one surface of which was covered with sharp gray digenite crystals of up to 2.2 cm in size with minor quartz; a 9 cm specimen of lightly iridescent pyrite crystals, exhibiting the trademark octahedral/pyritohedral form of some Butte pyrite, in an esthetic grouping with quartz and bornite crystals; an excellent and unusual specimen of deep pink rhombohedral crystals of rhodochrosite *on a matrix* of milky quartz crystals from the Emma mine, 10 cm across, ex Lazard Cahn collection, circa 1920s; a superb 4 cm specimen of thin lustrous metallic indigo blue covellite crystal on quartz with yellow hinsdallite crystals, most likely from the Leonard mine; and a 5.5 cm specimen of lustrous black enargite crystals, upon which were scattered a number of pale blue apatite crystals to 1 cm in size from the Leonard mine. Specimens from Bisbee included a rare classic example of cuprite as inclusions in calcite crystals, 8 cm across, from the 200' level, Czar mine; an excellent specimen of dark iridescent copper, 10 cm across, in an arborescent group from the Cole mine, ex Scott W. Williams; a 7.5 cm specimen of cerussite, a mineral that is scarce in specimens from Bisbee, as white equant twinned hexagonal crystals on goethite from the 1900' level, Campbell shaft, ex Carlton M. Davis collection; an attractive specimen of cuprite coating copper crystals 7.5 cm across from the Irish Mag Mine, ex Clinton and John L. Parnau collections; and an 11 cm specimen of chatoyant green malachite, with chatoyancy in malachite a trademark for Bisbee, from the 1900' level, Campbell shaft, ex Harold Eales and Scott J. Williams collections. Finally, specimens from the upper peninsula included a huge example of skull copper (copper that formed around a cobble), 22 cm across, from the Osceola Mine, Osceola, Houghton Co., Michigan, U.S.A.; a very good 8 cm specimen of silver, as crudely formed crystals studding a large copper crystal from the Keweenaw Peninsula, Michigan, U.S.A., ex U.S. National Museum collection, and an excellent thumbnail specimen consisting of a sharp crystal of silver, 2 cm high, from the Lake Superior mine, Phoenix, Keweenaw County, Michigan, U.S.A. ex from the Rob W. M. Woodside collection.

Rhodochrosite crystals on matrix from the Emma mine, 9 cm. Robert O. Meyer collection.

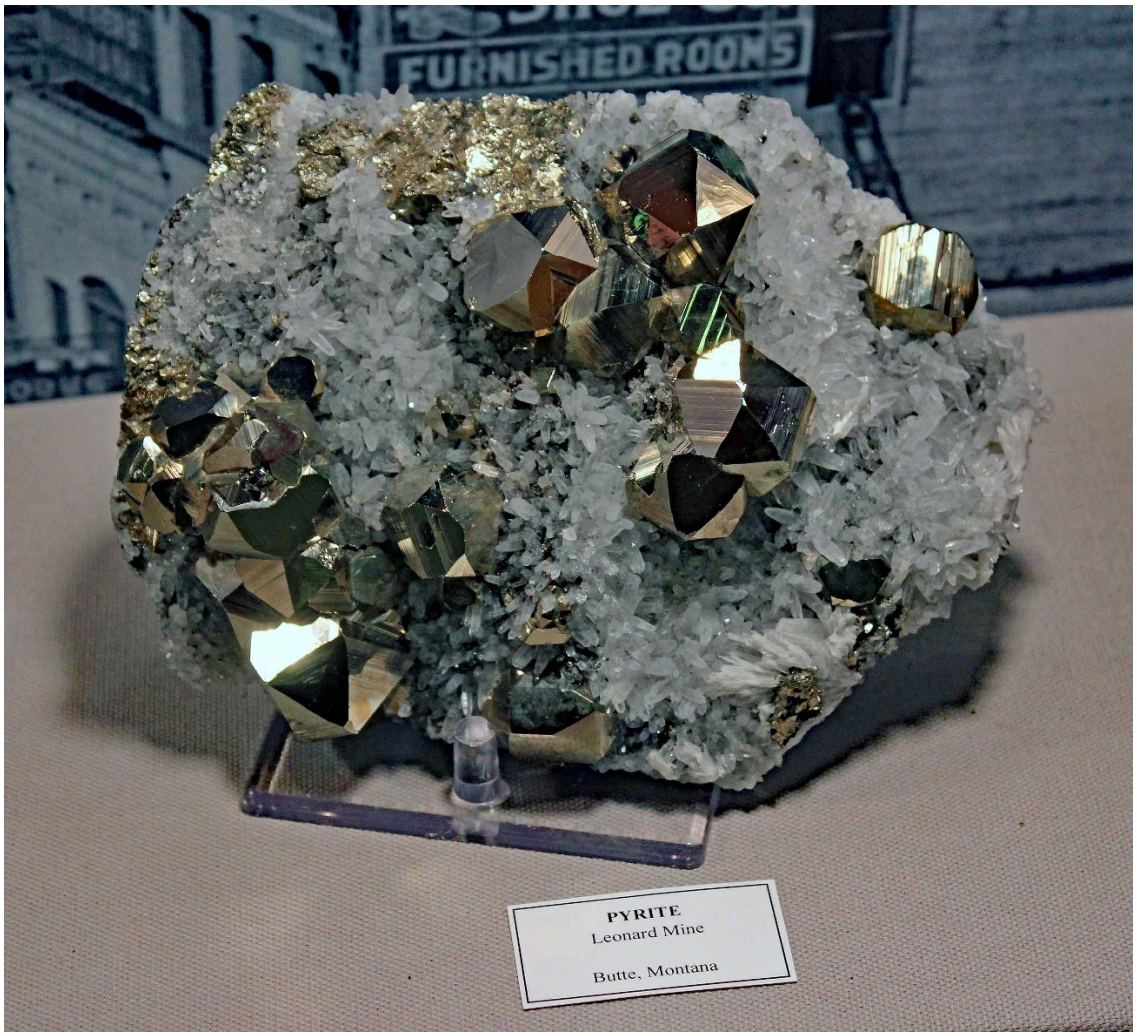
Digenite crystals to 2.2 cm on matrix from the Leonard mine, Butte, Montana, U.S.A. 11 cm specimen. Robert O. Meyer collection.

Peter Knudsen's case of Minerals from Butte, Montana.

Peter Knudsen put in an outstanding display consisting of 34 specimens and four large photographs with the topic of minerals of Butte, Montana. The case included several specimens of pyrite, including a beautiful example with lustrous brassy octahedral-pyritohedral crystals of

Covellite crystals with Pyrite, 9 cm across, from the East Colusa mine. Peter Knudsen collection.

up to 3 cm in size perched on a 20 cm matrix of small quartz crystals from the Leonard mine. Additional specimens included a very fine rhodochrosite, 15 cm across, consisting of 2 cm medium pink rhombohedrons in a group from the Emma mine; a very fine 9 cm specimen of covellite, consisting of a group of large indigo-blue metallic crystals, up to 3.5 cm in size and some with well-defined pyramidal faces, with minor pyrite from the East Colusa mine; an exquisite specimen of thick chalcocite after covellite crystals in a stellate grouping 8 cm across from the Leonard mine; and an 8 cm specimen of silver, consisting of a pure intertwined group of thin wires, a very uncommon example to be preserved from the mines of Butte, from the Lexington mine.



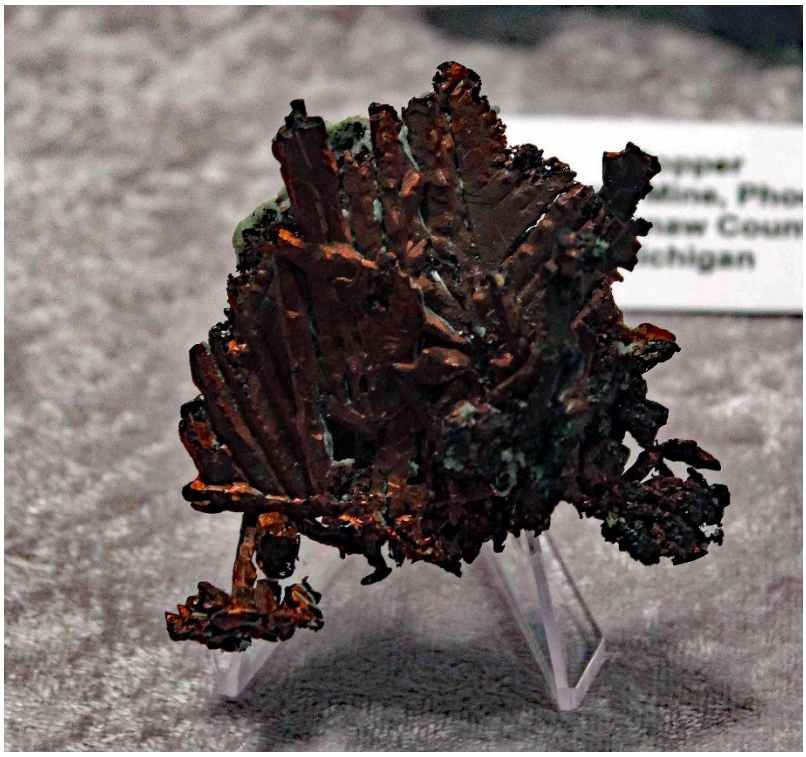
Pyrite Crystals on Quartz from the Leonard mine. 20 cm across. Peter Knudsen collection.

Chalcocite pseudomorph after thick Covellite crystals, 8 cm in size. Peter Knudsen collection.

Matt of silver wires, 8 cm, from the Lexington mine, Butte, Peter Knudsen collection

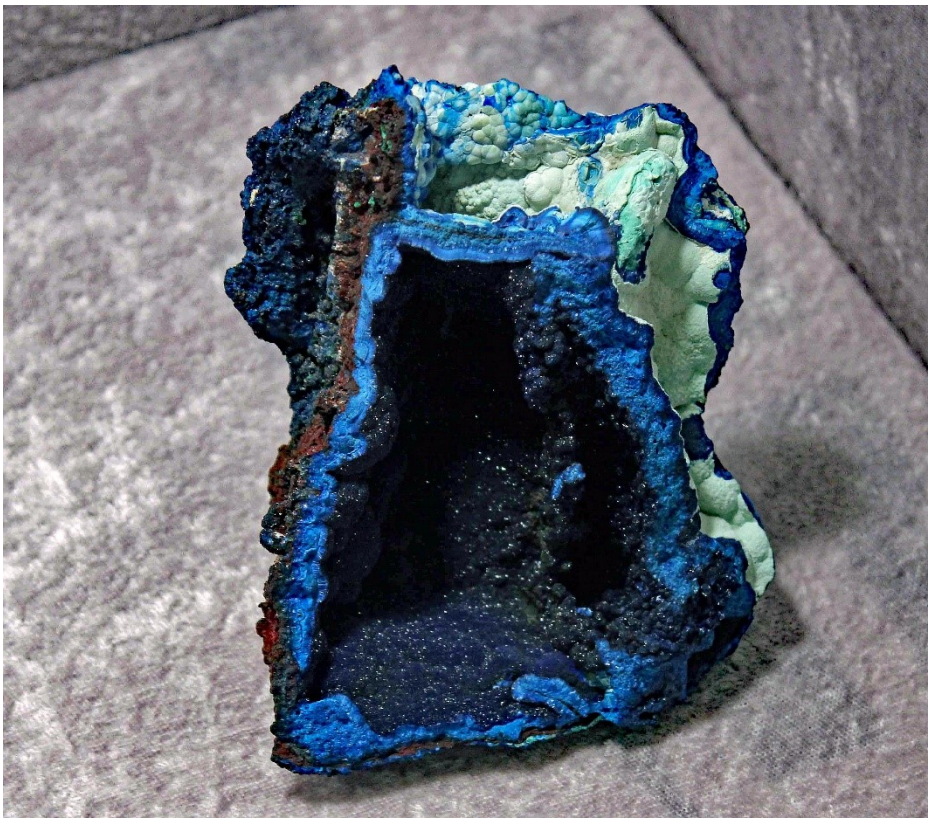
Al and Sue Liebetrau's case entitled "Minerals from the Mines of Upper Michigan and the Warren Mining District of Arizona."

Al and Sue Liebetrau again blessed symposium goers with a superb case entitled, "Minerals from the Mines of Upper Michigan and the Warren Mining District of Arizona" containing 32 specimens ranging from large cabinet to thumbnail in size and including one cabochon. Among the specimens was an extraordinary 7.5 cm high calcite included with copper on copper from the Quincy mine, Hancock, Houghton County, Michigan, U.S.A., consisting of a beautiful translucent 5 cm sharp scalenohedral calcite crystal, colored vibrant red from the copper, perched on a small matrix of dark copper; and also from the Quincy mine, an 8 cm group of very fine Silver crystals. Other specimens included a 15 cm skull copper with at least five hollows from Calumet, Houghton County, Michigan, U.S.A.; a very interesting doubloon-like group of twinned reticulated copper crystals 8 cm across, from the Kearsarge mine, Kearsarge, Houghton County, Michigan, U.S.A., a superb specimen of large complexly twinned copper crystals 10 cm across from the Central mine, Central, Keweenaw Peninsula, Michigan, U.S.A.; and a 17 cm specimen of azurite with what appears to be chalcoalumite or possibly very light-colored malachite from Bisbee, Cochise County, Arizona, U.S.A., dominated an open crystallized cavity 14 cm across lined with bright vibrant blue banded azurite and containing druzy dark blue azurite, on top of which is a zone with the light colored green unreferenced mineral.



Twinned reticulated copper crystals, Kearsarge mine, Houghton County, Michigan. 8 cm. Al and Sue Liebetrau collection.

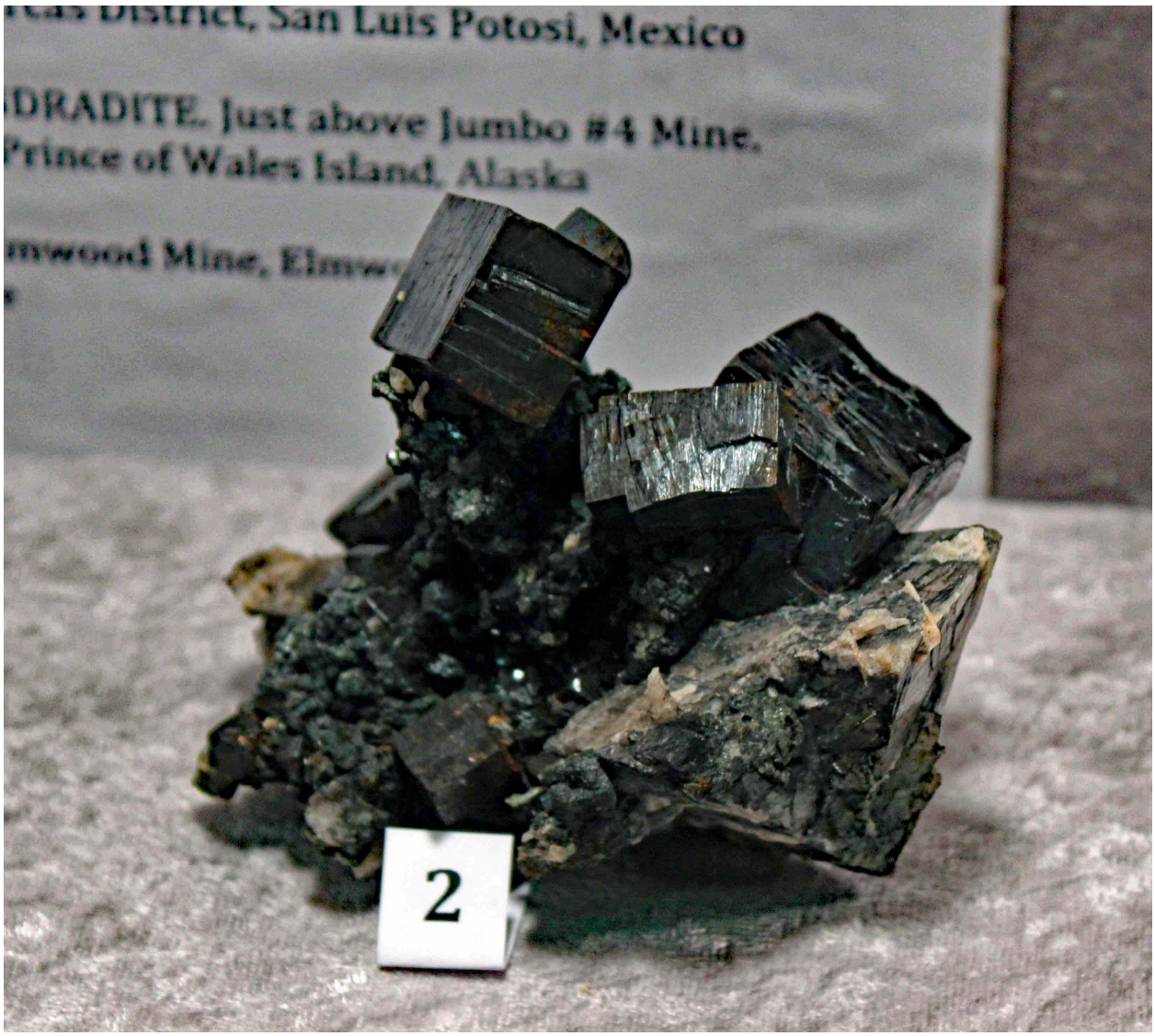
Large twinned copper crystals, Central mine, Keweenaw Peninsula, Michigan. 10 cm. Al and Sue Liebetrau collection.



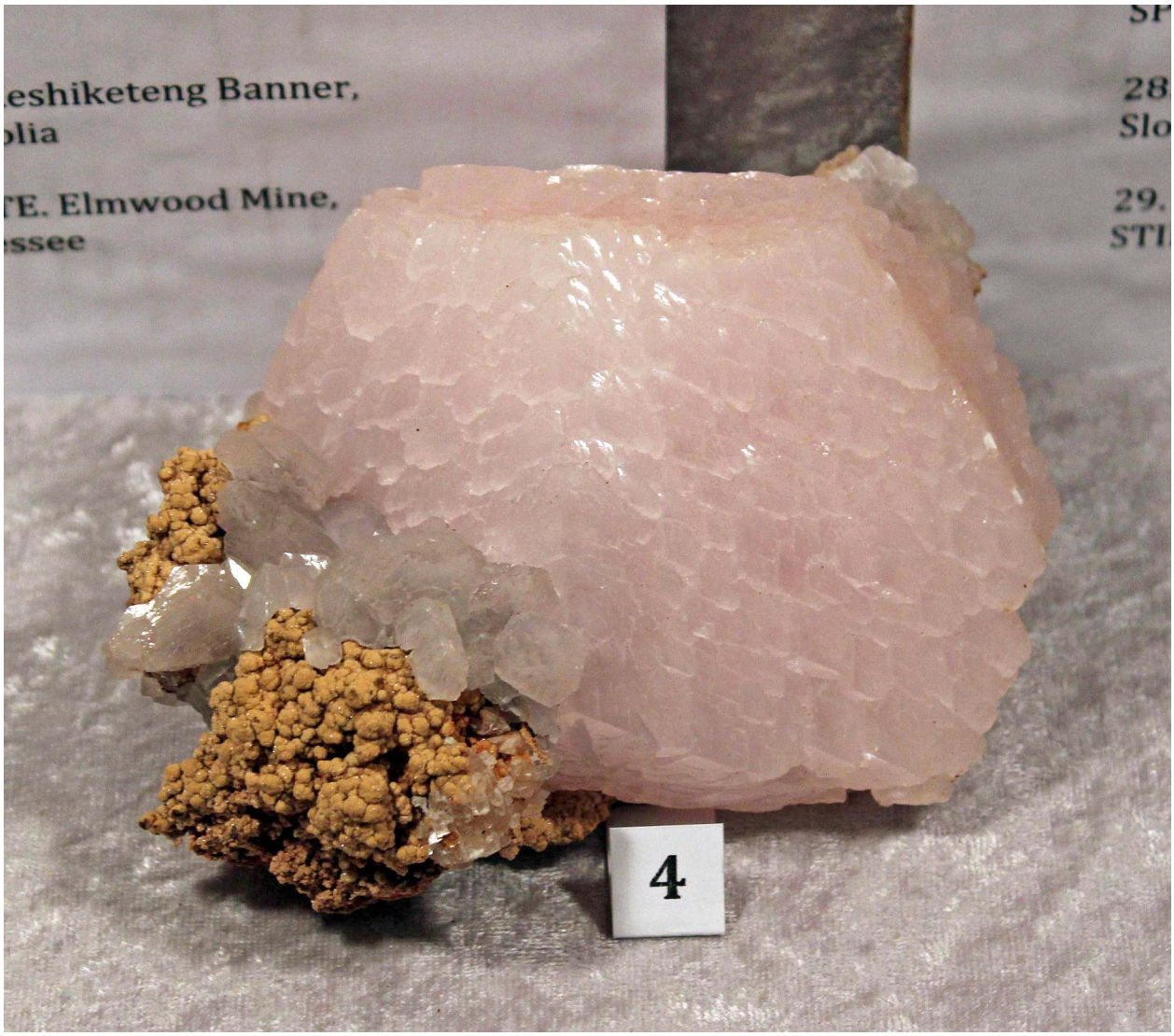
Azurite, 17 cm, from Bisbee, Cochise County, Arizona. Al and Sue Liebetrau collection.

Douglas Toland's case, entitled CRYSTALS: EXAMPLES OF SINGLES AND DOMINANTS

Douglas Toland exhibited an interesting case entitled "Crystals: Examples of Singles and Dominants," consisting of 35 specimens of small to large cabinet in size. Each specimen was numbered in Doug's case, and the key containing species and locality information was included on four placards at the back of the case. Among the specimens was a very good example of goethite pseudomorph after pyrite, 12 cm high, from Copper Mountain, Prince of Wales Island, Alaska, U.S.A. While goethite pseudos after pyrite are generally considered to be relatively common, this specimen is decidedly uncommon in terms of it esthetics, sharpness, and luster. Also included was an excellent 20 cm specimen of manganoan calcite as a medium-pink single, somewhat complexly crystallized crystal of hexagonal shape with minor matrix from the Verchniy mine, Dal'negorsk, Russian Far East; and a sharp lustrous single dodecahedral crystal of andradite, black in color and measuring 8.5 cm across, from just above the Jumbo #4 mine, Copper Mountain, Prince of Wales Island, Alaska, U.S.A.



Goethite pseudomorph after pyrite, 12 cm high, from Copper Mountain, Prince of Wales Island, Alaska. Douglas Toland collection

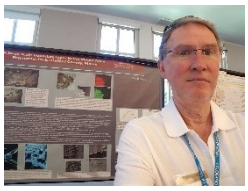


Manganoan Calcite, 20 cm, from the Verchniy mine, Dal'negorsk, Russian Far East. Douglas Toland collection.

PNWFM Members and Friends,

You all have seen the outstanding Mineralogical Record supplements such as *Mineral Collections in the American Midwest*, *Mineral Collections in the American Northeast*, *Mineral Collections in Texas*, to name just a few. I would like to see a supplement of ***Mineral Collections in the American Northwest***. If you would be interested in having some of your specimens in a supplement, let me know and I will pass that information on to Wendell Wilson and Allan Young. The cost has not been determined but it could be in the $500 per page range.

Don Newsome
info@uvsystems.com
Cell (206) 818-1084



The Foord Pegmatite Symposium, a visit to the Colorado School of Mines

By Chuck Hobart

Twenty-five years ago, I lived in Colorado to go to the School of Mines. The geology there was so diverse and readily available. I would go out to all the sites that were in both Pearls and Eckel's book. There were several great sites. One of my favorites was Devils Head a little South of Denver. This was my first exposure to a large pegmatite and have been fascinated by the structure and mineralogy of Pegmatites ever since. I heard there was going to be a convention of scientist at my alma mater to redefine the chemistry nomenclature of pegmatites and could wrangle an invitation with my brother a nuclear chemist from Florida.

Since this seemed to me to be a rather obscure area of geology I expected maybe 20 scientists. I flew from Seattle to Denver rented a car and went with my brother up to Golden to register and was surprised to find about 110 geologists, geochemists, and even one of the owners of the Amazonite mine shown on the TV series "Prospectors". We attended the Foord Pegmatite Symposium, a 2 day 8-hour conference that had presenters from around the world discussing Pegmatites and the various types based on chemistry and structure. The main view was the rare-earth pegmatites Lithium, etc. and the Boron based pegmatites. There were many inputs and rather interesting opinions on both sides. This group was redefining the pegmatite nomenclature for future scientists.

The next two days were field trips and My brother and I went on the Northern Crystal Mountain pegmatite outside of Ft. Collins. This was outside of the small town of Drake and the trail was severe. Some gave up but the Range Rover could handle the first day. We went to a pegmatite that had not been visited since the 1940's Our leader was Mark Jacobson the vice-president of the Colorado chapter of the Friends of Minerology. The area was covered with pegmatites and on the way, we stopped at a pegmatite outcrop and could see several tourmaline crystals. They were a bit weathered but a number were well formed and were a great example of a classically zoned pegmatite. We continued to the site and found a small pegmatite. One of the members had a Geiger counter and could pick up several uraninite specimens. The area in general was well covered with pegmatite outcropping and while most were barren they were a great geological example of zoned granite and large euhedral crystals.

We covered several North Crystal Mountain sites and while my personal crysoberyl search was less then spectacular, many other collectors found small well-formed crystals and there were many garnets and a great specimen of gummite that was found on one of the sites.

My brother David, a nuclear chemist, and I found a wide range of rare earth pegmatites and recovered quite a few specimens, not showy but mineralogically complex. We connected with many sr. geologists and skilled mineralogists and were involved in the redefining of pegmatites. We will be going back to Colorado in 2017 to dig for amazonite, smoky quartz and topaz near Pike's peak. This is a picture of the amazonite that was collected the last time we were there. It was at Devil's Head, CO.

PNWFM Minutes

October 16, 2016

President Bruce Kelley opened the meeting with 27 members in attendance. Bruce thanked everyone involved in putting together another successful symposium including volunteers, dealers, exhibitors, and participants.

Minutes from the last meeting were approved as printed. The timing of the newsletter was discussed. We need a newsletter to come out around July 31st to include the registration for the symposium even if the registration does not include the full slate of speakers. Our newsletter editor, Beth Heesacker, also requested more participation from members. Please send her pictures, articles, reviews, and more. It is tough to be the editor when the membership doesn't contribute (Karen's thoughts). It was also discussed that former members, former symposium attendees, and dealers should all be on a separate distribution list for all things symposium related. Scott Ankenbrand (treasurer), Karen, and Beth will work together to create this list. Also, the treasurer should follow up the symposium with an email to members who did not attend to remind them to pay dues. Our new website is almost ready to roll out. Bruce would like more pictures and past articles such as Bill's article on the history of our group that was printed for our 30th symposium.

2017 Symposium theme is Morocco and is currently scheduled for October 13, 14, 15. Allan Young will work on getting speakers. If he is unsuccessful, our fallback theme is PNW Minerals. Our 2017 symposium dates conflict with the Portland Regional Show. The symposium committee, with newly appointed symposium chair John Lindell, will discuss whether we should try to move the date forward one weekend. Karen Hinderman was appointed hotel liaison. Al Liebetrau will continue one more year in being the dealer and satellite dealer chair. He would like an assistant to volunteer who would then take over this position after 2017. A setup and break down committee of volunteers include Gary Hinderman, Tom Menzel, and Roger Beck. Tom will write out a set of instructions for putting the cases together and taking them apart. A toolbox will be put together to keep with the cases that includes all the tools needed. Bruce volunteered to be contest coordinator. We discussed how to redo the registration form to make it more understandable and to include contests. The symposium committee will look into this. Using the square to take payments on credit cards was a success. Bruce will write up instructions on using the square so that whoever is at the registration table will be informed. The banquet was better this year and all agreed that having the salad and dessert on the tables ahead of time was a good idea. Our 2018 theme will be PNW Minerals or Minerals of the Himalayas.

We revisited the discussion on how to bring in more local people to the show. We all need to be aware when someone is new and make them feel welcome. We could try and bring back some of our Sunday morning talks on more entry level themes. We can look for more ways to advertise locally free. Linda Smith will submit the symposium dates to Rocks and Mineral magazine.

We discussed the use of the Pine Room for satellite dealers. The hotel charged us $250. It seemed to be successful as an alternative this year. However, we need to make sure that this is fair to our room dealers. The symposium committee will discuss this further.

During the lunch hour on Saturday the dealer room was empty. One idea discussed to keep some members around was to have pizza available in the dealer room. We will look into this further and discuss with dealers.

Our contract is up with the hotel next year. We discussed working toward continuing with a new contract with the Red Lion.

It was voted on to continue our annual group membership with the Rice Museum.

Meeting adjourned.

Respectfully Submitted,

Karen Hinderman, Secretary

PACIFIC NORTHWEST
CHAPTER
FRIENDS OF
MINERALOGY

www.PNWFM.org
Editor, Beth Heesacker
4145 NW Heesacker Rd.
Forest Grove, OR 97116
heesacker@coho.net

MINERAL MEETING CALENDAR

2017:

FM Mineral Symposium, February 11
Tucson Convention Center
260 S Church Ave, Tucson, AZ

Atlantic Micromounters Conference, March 31 - April 1
SpringHill Suites Alexandria Marriott
6065 Richmond Hwy, Alexandria, VA

Rochester Mineralogical Symposium, April 20-23
Radisson Hotel Rochester Airport
175 Jefferson Road
Rochester, NY

Micro Mineral Study Group, May 6
9:30 am to 4:30 pm
Camas-Washougal Fire Station #42
4321 NW Parker Street
Camas, WA

Seattle Mineral Market, May 20-21
Lake City Community Center
12531 28th Ave NE,
Seattle, WA

NCMA, June 2-4
El Dorado Community Hall
6139 Pleasant Valley Rd.
El Dorado, CA

43rd Annual PNWFM Symposium, October 13–15
Minerals of Morocco
Red Lion Inn
Kelso, WA