



# BULLETIN OF FRIENDS OF MINERALOGY

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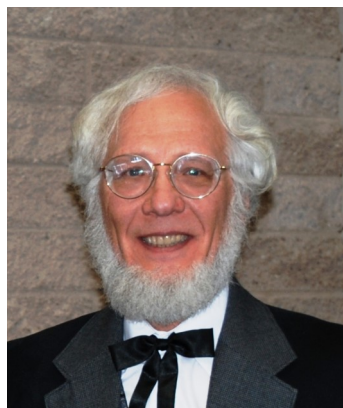
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October 2017

*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.*

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## President's Message By Mark Jacobson

During the past few months, I have been completely occupied with several projects, only a few related to Friends of Mineralogy.

The FM projects are meaningful. Some progress has been made to migrating the FM National website to a more user friendly software platform. The goal is to have a website that will allow for multiple users to administer the site and thus allow it to be for frequently updated. Bill Besse has been advancing this work. The new website should be completed by the end of the year.

A year ago, a loyal supporter of FM had suggested that an account of activities at the Denver Gem & Mineral Show would be of interest to FM. That request has been fulfilled with an exhaustingly complete report of the event which has exhausted this president.

Virgil Lueth and his group of judges chose at the Denver show two worthy recipients of the educational awards. These awards are also described in this newsletter.

I hope that this past summer has been mineralogically productive, successful and ended with you in good health and safe. Until the next newsletter, rest well.



Acanthite from Linqiu, Shanxi Province, China. Compliments of Mineralpedia, Dakota Matrix.



Acanthite from Cobalt-Gowganda dist., Ontario, Canada, Compliments of Mineralpedia. Dakota Matrix.

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**Deadline for the next FM Newsletter is  
December 20, 2017**

## New booklet now available on the Early Mining History of the Himalaya Pegmatite Mine



Green and pink tourmaline, Mesa Grande, Calif.; Owned by Harvard University.

Courtesy of A. H. Petereit



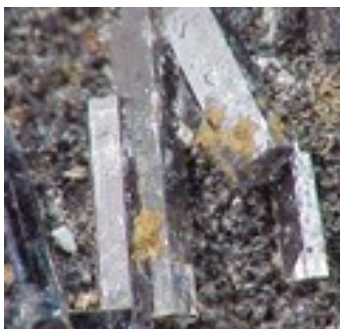
Pink tourmaline in albite with lepidolite, Mesa Grande, Calif.

Theo. Henninger

The early-day history (1896-1913) of gem tourmaline mining at the Himalaya mine, San Diego County, is rife with conflicts by men who truly believed they were on the cusp of being wealthy. This story has been buried in newspaper articles, technical reports and land documents, rarely unearthed in recent accounts. The chief actors in this drama are Lippman Tannenbaum and Jethro Goodman Braye, Jr., with secondary roles played by Charles Russell Orcutt, Archibald Edward Heighway, Jr., David Charles Collier, David L. Hoover and Frank F. Wright. Numerous minor actors in this drama had their own gem mines to exploit. This history recounts these tales from scattered repositories and starts with the discovery of colored tourmaline in California in 1872.

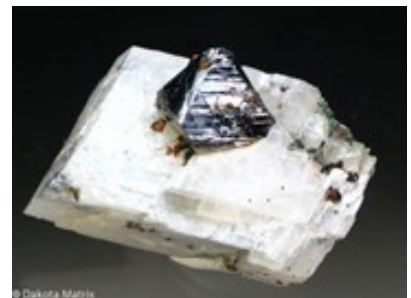
Two Mesa Grande tourmalines sold by Albert H. Petereit of New York City. The 12.65 x 2.64 cm, sea-green to purplish-red, doubly terminated tourmaline on the left was sold to the Harvard Museum. The matrix specimen with a 4.5 x 1.1 cm, flawless pink tourmaline was sold to a private collector.

“The Early Mining History of the Himalaya Pegmatite Mine,” as described above was serialized in the January to June 2017 monthly issues of *Mineral News*. *Mineral News* is a monthly magazine published by Excalibur Mineral Corp., 1885 Seminole Trail - Suite 202, Charlottesville, VA 22901-1160. The publisher decided that the article had sufficient reader interest to reprint it in its entirety as a combined booklet of 29 pages, with the illustrations in color, center stapled, and an 8.5 by 11 inch page format. The article has 18 figures of maps and pictures. This booklet is being sold, with mailing postage prepaid to continental USA addresses at \$15 per copy. Requests for purchase with payment can be mailed to the above address. Orders mailed to an international location should request by email postage charges.



Caracolite from Challacollo mine, Iquique, Tarapaca Prov., Chile, Compliments of Mineralpedia, Dakota Matrix.

Carrollite from Kamoya South mine, Katanga, Congo, Compliments of Mineralpedia, Dakota Matrix.



## Educational Awards at the Denver Gem and Mineral Show, Denver, Colorado September 15-17, 2017

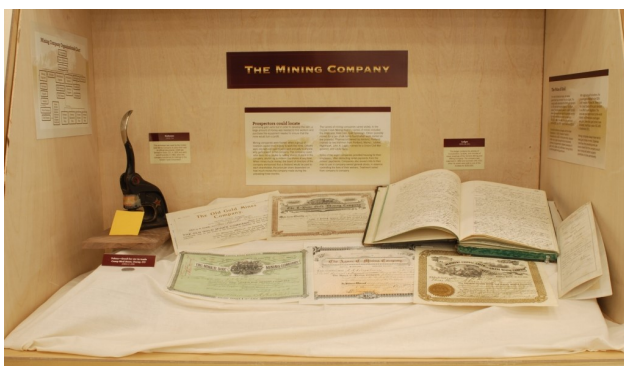
Two educational awards, for individual and institutional cases were awarded at the Denver Gem and Mineral Show. Virgil Lueth, Vice-President of Friends of Mineralogy fielded a team of judges, using principles based on rules first written in 1970 and elaborated on in an as yet unpublished article prepared by Si and Ann Frazer and Albert and Sue Liebetrau.

They chose for the individual award Anne M. Black's case of meteorites entitled "Worth More than Gold". The case provided historical details about each meteorite and its equivalent value. For example, the attractive pallasites of bright translucent olivine crystals intermixed with iron, Imilac, from Chile have been known since 1820. An end cut with a polished face of 487 grams is worth the same as its equivalent weight in gold. The L'Aigle chondrite meteorite of 1803 from France, at 3.78 grams, is worth 10 times its equivalent weight in gold.



Figure 1. A slice of the Imilac pallasite from Anne M. Black's exhibit

The institutional educational award was made to the Western Museum of Mining and Industry, Colorado Springs for their eleven cases with the theme of documenting the origin of gold in the ground, its historical extraction and processing to its final refined product using modern processes. Each case, demonstrated with memorabilia, models, minerals and photographs the mining processes.



Case 5: The mining company as illustrated by mining stocks, organizational structure, and log book.

The cases considered in the competition were fossil, mineral, meteorite and lapidary. Eighteen institutional and numerous individual cases were considered. The certificates were created, signed, and awarded in person to Rick Sauers, the Executive Director of the Western Museum of Mining and Industry and Anne Black at the Denver Gem and Mineral Saturday evening award ceremony.



## 2017 Denver Gem and Mineral Show

**By Mark Ivan Jacobson**

Lesley Sebol was again the Show Chairman for the 2017 Denver Gem and Mineral Show with “Gold and Silver” as its theme, commemorating that this show was the 50<sup>th</sup> show since 1968. The show was held at the Denver Merchandise Mart, September 15-17. The show program was a major departure from all previous years, being reduced to a folded map portfolio. On one of the map sides is a leaf gold

on quartz from the Smuggler Union mine, Telluride, San Miguel County, Colorado with a wire silver with acanthite from Aspen, Pitkin County, Colorado. The twenty-ninth annual show poster featured the same 4.5 cm tall, leaf gold on matrix from the Smuggler Union mine, Telluride, San Miguel County, Colorado from the Colorado School of Mines Geology Museum and photographed by Jeff Scovil.

The Denver mineral events started September 6<sup>th</sup>, with the opening of the Colorado Independent Warehouse show (on Quail Street, Denver), followed with the staggered opening of the other shows. By Saturday, September 9, most of the satellite shows were busy with visitors. Wednesday evening, the Colorado School of Mines Geology Museum in Golden, had its annual open-house at 6 PM.

The museum had numerous temporary exhibits. This year’s new exhibits included a recent donations case with many specimens including an amazonite on albite from Crystal Peak and an amethyst overgrowth on a milky quartz crystal from Little Badger Creek, Colorado, both donated by Rudy Kluiber from the former David Rotor collection and others from Eric D. Long, Martin Zinn and Nick Stolowitz. Exhibits of loaned specimens continued from the Chicago Field Museum of Natural history, self-collected specimens of Ian Merkel (scepter smoky quartz, Peterson Mountain, Nevada, azurite, Morenci mine, Arizona, and linarite, Blanchard mines, New Mexico) currently the geologist for the soon to re-open Pederneira pegmatite mine in Brazil, worldwide fluorite from Lou and Diana Conti and micro-mounts from the Lazard Cahn, Dorothy Atlee and Arnold Hampson collections.

The new exhibits this year in the main room were minerals from the Nchanga Mine, Zambia on loan from Richard Le Sueur, and an assortment of Colorado quartz specimens from various local collectors.

The Betty H. Llewellyn Special Exhibits Room housed specimens from the recently donated Gerald and Hilja K. Herfurth Estate collection. The exhibit included a three inch long emerald from Hiddenite, NC, an amazing suite of Brazilian topaz, phenakite from Brazil, pocket petalite from Afghanistan, variscite from Utah, and polished agate slabs from various localities. There were two loaned exhibits. Frederick Wilda’s loan, entitled “Nature’s Art hidden in stone – Handcut cabochons and uncut specimens,” featured polished slabs and cabochons of jasper, opal, turquoise, prehnite, and agate with rough and a few of Wilda’s watercolors, drawn of the polished material or other specimens. The second exhibit was of the incredible intarsia boxes by Nicolai Medvedev, which featured banded material such as malachite and rhodochrosite with opal, sugillite, gold, petrified wood, and turquoise.

The multi-year exhibits were Leadville mining district minerals, and gold and silver from the Allison-Boettcher collection.

The critical materials exhibit continued on the lower level displayed mostly rare-earth minerals with some minor tellurides and lithium minerals. This display was organized and created by Mandi Hutchinson in 2016 (M.S. Geological Engineering ‘16).

The museum provided free hors d’oeuvres and cash bar for the event, all to the accompaniment of a Colorado School of Mines String three-some. The Open House was excessively well attended with worldwide visiting dealers, collectors and curators, probably more than 300. The gathering has continued as a place to make new friends and become reacquainted with old friends who have arrived for the show. Some visitors even brought their new discoveries to show off at the open house!

On Thursday evening, the Friends of Mineralogy, Colorado Chapter again converted their regular second Thursday of the Month public meeting at the Denver Museum of Nature and Science into a social event for members and museum curators who were attending the Denver Gem and Mineral Show. Geology Curator James Hagadorn led the curators and members for a behind-the-scenes museum tour, showing off the new combined storage area that has finally brought all the scattered storage specimens into one monitored central area with bright lights. For the first time one can compare for examples, topazes from Colorado with all the worldwide topazes within the collection including two exceptional, etched moderate blue topazes from the 1926 Fisher quarry pocket, Topsham, Maine. It was also an opportunity for FM society members to socialize with the curators from around the world.

The displays at the show were exceptional this year as befits a gold and silver theme. There were 92 cases that included 6 club cases, and 29 museum cases representing 18 museums. There were 138 retail mineral, book, and jewelry dealers. There were also 18 public sector booths such as the USGS, Junior Museum of Pennsylvania and 8 club booths. This year continued with utilizing all the possible dealer space in the Mart Expo hall, including the southeast corner of the building. The fluorescent room with 10 display cases and gold panning area continued as before. The total attendance was approximately 8,000 with approximately 5,000 paid attendees. Mr. Bones, the popular walking dinosaur skeleton, continued as a feature in the halls of the Denver Gem and Mineral Show. The School groups continued to arrive and fill the exhibition hall on Friday morning. Grab bags still were sold, numbering in the thousands.

A unique feature this year was the addition of \$5,000 worth of gold nuggets to be given away free to gold panners who searched for a small special token in the wet gravels and sands. If a panner found a token, the booth caretakers, dressed as 59ers, would holler off Eureka!, loud enough for everyone in the exhibition hall wing to hear it. This token was turned in at a nearby booth for the actual gold nuggets. More than 800 nuggets were given away, most of them varied in weight between 0.0007 to 0.045 troy ounces. Forty nuggets exceeded 0.045 troy ounces with the largest gold nugget that was given away at 0.515 troy ounces.

Organizational meetings this year was only the Society of Mineral Museum Professionals having their board and general society meeting on Friday morning and a combined social meeting of the National and Colorado Chapter Friends of Mineralogy on Saturday.

The magazines represented at the show were *Rocks & Minerals*, *Mineralogical Almanac*, *Australian Journal of Mineralogy*, *The Mineralogical Record*, *Mineralien Welt*, *Lithographie*, and *Rock and Gem*.

The July-August issue of *Rock & Minerals* heralded gold articles in support of the Denver Gem and Mineral Show. The magazine published three articles supporting the Denver show theme of gold and silver. These were *A Rare find: Good luck prevails and a spectacular crystallized gold emerges* by Wayne Leicht; *The occurrence and characteristics of gold nuggets and masses* by Robert B. Cook, Carl Francis and Mark Mauthner, and *Connoisseurs Choice: Wire Silver, Kongberg, Norway and wire gold, Ground Hog Mine, Gilman, Colorado* by Calvin Anderson and John Rakovan. The September-October issue featured the article *Gold crystals from the Lena Goldfields, Bodaibo area, Eastern Siberia, Russia: Exceptional hopped octahedral and pseudomorphs after pyrite* by John Rakovan, Volker Lüders, Andreas Massanek and Gert Nolze.

The presentations this year were at the same high level as the previous year with excellent, well-known speakers who are considered experts in their areas of interest. The talks started with Jeff Scovil, the well-known mineral photographer, presenting "An Album of Worldwide Gold and Silver." Mark Ivan Jacobson, who had prepared a text documenting the fifty year history of the Denver Gem and Mineral Show, spoke on "The Denver Gem and Mineral Show: A 50 year Retrospective." Terry Wallace, Principal Directory for Global Security at Los Alamos National Laboratory, spoke on "Colorado Silver." Wayne Leicht, co-owner of Krystalle, a dealership specializing in gold specimens and a gold collector, on "Gold!" Gene Meieran, materials scientist and an Intel Fellow, spoke on "The Magic of Silver." Virgil Lueth, Senior Mineralogist and Director of the New Mexico Bureau of Geology & Mineral Resources Mineral Museum, spoke on "New Mexico Gold." Bryan Lees, president and owner of the Collectors' Edge, described the geology, discovery and preparation at the Colorado Quartz Mine, California of the "Gold Dragon" specimen. Scott Werschky, owner of the Mineral Lunchbox mineral dealership, spoke on

"The Fire Creek Mine, Nevada: A new locality for exceptional gold specimens." Les Presmyk, owner of De Natura and prolific Arizona collector, spoke on "Silver and Gold in Arizona: History and Specimens." Mel King, President of Big Blue Wreck Salvage, spoke on "Shipwreck Treasure – Pieces of 8 and Gold Doubloons." Penny Williamson, Geology Curator at the University of Wollongong, Australia, spoke on "Australian Gold." Bruce Geller, Director of the Colorado School of Mines Geology Museum and specialist in gold tellurides, spoke on "Tellurides."

Non-theme talks were led by John Warn, a petroleum geologist and paleontologist, who gave a presentation entitled "In the Pink, Himalaya Mine Tourmaline." Peter Modreski, a geochemist responsible for educational outreach at the U. S. Geological Survey, followed with "How to Start a Mineral Collection," a talk geared to beginning mineral collectors. Richard Hauck, operator-owner of the Sterling Hill Mining Museum, spoke on Fluorescent minerals."

As in the previous three years, Steven Veatch, leader and mentor to the Pikes Peak Pebble Pups and Earth Science Scholars programs, brought four students to give twenty-minute presentations at the show. Evan Walsh spoke on "The Evolution of the Theropod Dinosaurs Through the Late Cretaceous. Ben Elick spoke on "High Grade Gold Ore from Cripple Creek." Quentin Stanley spoke on "Copper." Jack Shimon spoke on "Seismology: A Whole Lot of Shaking Going On." The innovation this year was that every student speaker was awarded \$50 for presenting by the New Mexico Bureau of Geology & Mineral Resources. This financial grant will be continued in future years to encourage student speakers.

Upon entering the show, the visitor was greeted with the delights from the Jim and Gail Spann collection. Their large fish tank glass case was packed with silver and silver-bearing minerals from worldwide localities. The specimens ranged from miniatures such as pyrargyrite from the San Genaro Mine, Peru to a museum-sized silver sheet from the Imiter Mine, Morocco. The silver wire tentacles from the Himmelsfurst Mine, Freiberg, Germany was only one treat.

The Institutional displays from eighteen museums continued the visual feast of gold and silver. The Denver Museum of Nature and Science displayed a handful of their famous Champion leaf golds from Farncomb Hill, Summit County, the iconic Ram's Horn wire gold from the Groundhog mine, Eagle, County, and a wire silver from the Smuggler Mine, Pitkin county. The Cranbrook Institute of Science Mineral Museum displayed two native silvers, a mass of euhedral, branching silver mass from Houghton, Michigan and stick-like wire silver from Kongsberg, Norway. The University of Wollongong had an interesting case of **four!** of the world's largest gold nuggets, all Australian with the description of their discoveries. The surprise was that three of them were replicas but the fourth, "Ausrox" was real. Could you tell the difference? The California Academy of Sciences, San Francisco, presented examples of gold crystals, leaves and nuggets to clarify their definitions. Harvard Mineralogical Museum displayed nine leaf and wire golds mostly from Summit County. Colorado School of Mines Geology Museum had two cases exhibiting Colorado gold and silver as well as the famous Creede-sourced silver platter and pitcher. Big Blue Wreck Salvage, Inc. has three cases to provide examples of Spanish gold coins, silver and gold bars, and gold masses recovered shipwrecks off the Florida Keys as well as some pre-Columbian gold artifacts.

The New Mexico Bureau of Geology and Mineral Resources Mineral Museum showed gold, silver and some new acquisitions (azurite, scrutinyite, hemimorphite) from New Mexico localities. The exhibit contained what is believed to be the largest known New Mexican gold nugget from Lincoln County.

Individual collections provided a personal perspective on gold and silver minerals. For **the first time, anywhere**, Gene Meieran of Arizona displayed his complete collection of native silver from worldwide localities. Wayne and Dona Leicht exhibited some of their native silvers and golds from worldwide localities. Terry Szenics for Scott Rudolph shepherded a case of superb native silver, and acanthite specimens, mostly from Kongsberg, Norway but also from Mexico, Morocco, Michigan, and Germany. The three euhedral acanthite spears from the Imiter Mine, Morocco were a delight. Pyrite because of its color similarity to gold became a subset of displays. The Rice Museum of Rocks and Minerals exhibited gold and pyrite with the theme of "Don't Be Fooled Gold/Pyrite - Physical Properties." The Cincinnati Museum Center exhibited pyrite and marcasite from the American Midwest. Bruce Brown exhibited pyrite in all its many forms and localities. Larry Havens also showed pyrites entitled "Pyrite (All That Glitters . . .)."

Other non-theme mineral cases were also abundant. The Mineral Association of Dallas exhibit included some of the member's favorites which included exceptional specimens of topaz from China, a colorless-gem drill-bit twinned phenakite from Burma; a giant blue Shattuckite from the Tantara Mine, Katanga, Dem. Republic of Congo; leaf gold from the Eagles' Nest Mine, CA; and larger terminated green elbaite from the 1972 Dunton pegmatite pocket, Newry, Maine. Marty Zinn exhibited a case of minerals from India, with all the expected and desired delights of colorful and large well formed zeolites crystals. Lou Conti had an entire case of exceptional well formed salt crystals in white, blue and the various shades in between. The Sherman Dugan Museum of Geology at San Juan College, Farmington, NM displayed golden fluorite from the Minerva Mine, Illinois. The American Museum of Natural History exhibited worldwide minerals from the Arthur J. Boucot collection. The specimens shown included a green elbaite cluster from the Gillette quarry, Haddam, Connecticut, smithsonite from the Kelly mine, New Mexico, and precious opal from Andamooka, South Australia.

Local displays have always been significant at the Denver show. The Saratoga Museum, Saratoga, Wyoming displayed carved jade objects made from Wyoming jade. Scott Luers from Wyoming has exhibited at the Denver Gem and Mineral show several times before as well as in local Wyoming and Colorado shows. He exhibited self-collected minerals from Wyoming including calcite, schorl, lepidolite, barite and other minerals. Randall, Laura & Hunter Kokkinen exhibited the best of what they have found during the last four years. Bill Hutchinson exhibited the best discoveries his family had made during the past year of aquamarine, amethyst and other minerals.

The Junior Museum of Central PA, sponsored by Andrew Sicree, had his hands-on exhibit of "Minerals That Do Things," located in the far northeast corner of the hall with the clubs and gold panning. This is a popular exhibit that Dr. Sicree has been bringing to the show for a number of years.

Fossil exhibits were continued by Steven Jorgensen with three personally-collected ammonites from Wyoming.

The lapidary arts continued as part of the show. Keith Sheel exhibited faceted gemstones with their rough material and Ron Snelling with fantasy carved-faceted gemstones done by several different gem artists. Francisco Sotomayor, known for his life-size American Woman on a piano of Yule marble, exhibited several carvings of black obsidian. David and Karen DeBruin exhibited layered intarsias as little miniature photos in frames. The Lizzadro Museum of Lapidary Art exhibited cameos carved from Shell Italia (conch) displaying Christ's Stations of the Cross ordeal.

Meteorite popularity continued but with a gold slant. The Maine Mineral and Gem Museum displayed meteorites with a Maine gold nugget using the approach of the "Cosmic Origin of Gold." Anne M. Black case of meteorites was entitled "Worth More than Gold. The case provided historical details about each meteorite and its equivalent value in gold.

Several new discoveries appeared at the show. Tom Miller was showing off but not-selling-yet a flat of gemmy clear topaz from the Tarryall Mountains. Troy Hamilton, another Tarryall Mountain topaz digger, was marketing a 3.25 inch tall scepter topaz that weighted 2860 carats. His friend, Stephen Renner was also marketing a topaz on smoky quartz from the Tarryall Mountains. All three of these finds were impressive.



An almost flawless blue topaz about 2 inches tall from the Tarryall Mountains, found in 2017 by Tom Miller.





A sceptered topaz from the Tarryall Mountains found by Troy Hamilton in 2017. The crystal is 3.25 inches tall and weighs 2860 carats.

The Saturday evening activities, in the giant Merchandise Mart atrium, this year morphed with several changes. The evening speaker program was abandoned and replaced by a silent auction of donated specimens, books, jewelry and other earth science materials to benefit Mindat, a 501(c)(3) charity. This was followed by a short awards ceremony. The evening started at 6:30 PM with a cash bar, a western beef and barbeque chicken dinner, vegetables, salad, bread and deserts. After dinner, the awards ceremony included the American Federation of Mineral Societies Awards, as well as the Denver show awards. The Richard Pearl Trophy was awarded to Phil Gregory for his miniature rhodochrosite from the Sweet Home Mine, Alma, Colorado.

The best fossil trophy was awarded to Jim Hooten for his matrix specimen containing two *Paurorhyncha endlichii* brachiopods from the Devonian Dyer Member of the Chaffee Formation, Garfield County, Colorado. This species was named by Fielding Bradford Meek for Frederic Miller Endlich, geologist-mineralogist with the Hayden Survey.

The Prospector Trophy was awarded to Randy Kokkinen for his amazonite and smoky quartz from Crystal Peak, Colorado. The Junior Prospector Trophy was awarded to Hunter Kokkinen, Randy Kokkinen's son, for his Smoky quartz and amazonite, Crystal Peak, Colorado. The Club Prospector trophy was awarded to the Colorado Mineral Society.

The Carroll Everett "Shorty" Withers Trophy, for the overall best exhibit was awarded to John Warn for his "In the Pink: Elbaite Tourmaline Crystals from the Himalaya Mine, Gem Hill, Mesa Grande District, San Diego County, CA." The Donna Chirnside Memorial Museum Trophy was awarded to the Western Museum of Mining and Industry, Colorado Springs, for their eleven cases with the theme of documenting the origin of gold in the ground, its historical extraction and processing to its final refined product using modern processes. Each case, demonstrated with memorabilia, models, minerals and photographs the mining processes. These exhibits also received the National Friends of Mineralogy Educational display award by an institution. Similarly, Anne M. Black's case of meteorites, entitled "Worth More than Gold" received the National Friends of Mineralogy Educational display award by an individual. The National Friends of Mineralogy Educational awards are given annually at the Denver Gem and Mineral Show and the Tucson Gem and Mineral Show for the best institutional and individual educational exhibits.

Nine satellite shows continued, with the addition of a new 10<sup>th</sup> show. The 12-day wholesale-only Independent Warehouse Show at 810 Quail Street, started the Denver show events off on September 6. The warehouse units A, B, C, H and N represented the efforts of four dealers. The next two shows to open was the Denver Expo Gem Show at the National Western Complex, Level 2, 4655 Humboldt St. and the Colorado Mineral and Fossil Show on September 8. The Colorado Mineral and Fossil Show at the Ramada Plaza Hotel in 2016 was owned by Martin Zinn but after September 2016, the show was sold to Rocky Mountain Gem & Minerals, owned by Sandra Gonzales, and moved to the Crown Plaza Hotel at East 40<sup>th</sup> Ave.

The 9-day Denver Coliseum Gem Show and the Miner's Cooperative Mineral Show opened September 9, along with the JG&M Expo Denver at the Quality Inn – Denver Central Hotel and the new Denver Mineral Show at the National Western Complex, Level 3, 4655 Humboldt St., just north of the Coliseum. The Denver Mineral Show is owned by the same promoter, Eons Expos, as the Coliseum Show. The 4-day Denver Fine Minerals Show at the Marriott Denver West opened September 13. The 4-day Intergem Denver Gem & Jewelry wholesale Show, Inc. in the Pavilion building, Denver Merchandise Mart and the Bead Renaissance show in the Merchandise Mart Plaza both opened on Thursday, September 14.

All these activities ended Sunday evening with more than 400 exhausted show volunteers having completed another successful show. This show completed 50 years of joint shows by local area clubs, purely volunteer with no paid workers. But the minerals and lapidary arts that were exhibited are rarely seen elsewhere.

## PACIFIC NORTHWEST CHAPTER UPDATE



The Pacific Northwest Chapter of the Friends of Mineralogy  
will host its

### 43rd Annual Symposium and Mineral Show

October 13-15, 2017

Red Lion Inn, Kelso, Washington

**Theme: Minerals of the Pacific Northwest**

#### -- Featured Symposium Speakers --

Ray Lasmanis: "Introduction to Geology of the Northwest"  
Rick Dillhoff: "The Purple Hope Claims, Green Ridge, King County, Washington"  
Tony Potucek: "Two Intertwined Owyhee County Idaho Mining Districts: Silver City and De Lamar"  
Doug Toland: "Green Monster Mountain: A Long-lived and Storied Locale That Still Has Promise"  
Julian Gray: "Pacific Northwest Treasures at the Rice Museum of Rocks and Minerals"  
John Cornish: "Rat's Nest, Summer Storm and New Beginnings, Custer County, Idaho:  
High Desert Treasure Chests!"  
Bob Jackson: "Big Amethyst at Little Gem"  
Allan Young: "Belshazzar's Gold"

#### -- Featured Show Room Dealers --

Pacific Rim Gems & Minerals: John Meek  
Lehigh Minerals: Jim and Yolanda McEwen  
Earth's Treasures: Rick Kennedy  
XTAL: Dennis Beals

Additional dealers will be selling minerals from Pacific Northwest and  
worldwide locations in rooms adjacent to the Main Show Room.  
Exhibits in the Main Show Room will include a number that are world-class,  
including one from the Rice Museum of Rocks and Minerals.

**Admission to all Dealers and Show Room Exhibits is Free**  
**A Registration Fee is required to Attend the Symposium**

For general inquiries or information about the Symposium, including registration  
deadlines and costs, please visit [www.pnwfm.org](http://www.pnwfm.org) or contact one of the Symposium  
Chairpersons:

John Lindell ([lindell4@aol.com](mailto:lindell4@aol.com)) or Bruce Kelley ([bruce.kelley@gmail.com](mailto:bruce.kelley@gmail.com))

Room reservations should be made directly with the Red Lion Inn at (360) 578-4017.  
Mention that you are with the PNWFM to obtain a special symposium rate. The special rate  
applies from July 13 through September 5: Regular rates apply thereafter.

Rooms on the ground floor of the North wing are traditionally reserved for our satellite  
dealers. Therefore, if at all possible, we ask that you please refrain from requesting one  
of these rooms unless you plan to sell.

Please note that the Pacific North West Micro-Mineral Study Group will also have a room with microscopes for visitors to use, a presentation on micro-mineral photography on Friday evening, ongoing slide shows of micro-minerals, demonstrations and a give-away table during the Symposium on Friday evening and Saturday. This room and its activities are free to all visitors.



## **PENNSYLVANIA CHAPTER UPDATE**

### **BARITE FROM THE PERKIOMEN MINE IN THE CHARLES WHEATLEY COLLECTION**

**Ronald A. Sloto, P.G.  
West Chester University**

The precise date that lead ore was discovered on the Mill Grove property in Audubon, Montgomery County, Pennsylvania, has not been firmly established. Several versions of the ore discovery exist. A lead mine on the property was noted in Philadelphia and New York newspapers in 1804; the mine was only about 12 deep at that time. In 1820, over 100 tons of lead ore were extracted from the mine by miners who had emigrated from England. As the mines became deeper, the quantity of lead ore decreased, and the quantity of copper ore increased. In the 1820s, a number of shafts were sunk to mine copper ore. Little mining was done between about 1830 and 1848.

The mines in Audubon had a second life as copper mines. In January 1848, the Perkiomen Mining Association was formed for the purpose of mining copper ore. By the

end of 1849, they had sent 1,400 tons of copper ore to market. The Ecton Consolidated Mining Company was active at the same time.

Charles Moore Wheatley was appointed manager of the Ecton Consolidated Mining Company in 1848 or 1849. In 1851, a new corporation, the Perkiomen Consolidated Mining Company, bought out both the Perkiomen Mining Association and the Ecton Consolidated Mining Company. Wheatley continued as manager of the new company. While managing the Perkiomen mines, Wheatley explored the surrounding area for lead and copper ore. Across the Schuylkill River in Chester County, Wheatley found a rich lead vein on the John Williams farm. In the spring of 1850, he leased 46 acres of the Williams farm and formed his own mining company. In January 1852, Wheatley resigned as manager of the Perkiomen mines to work full-time at his own mine. The Perkiomen mines closed in 1858.

Charles Wheatley was an avid mineral collector and assembled a large collection of 6,000 specimens. In January 1858, Wheatley's mineral and shell collections were purchased by Edward C. Delavan, who donated them to Union College in Schenectady, N.Y., where they are preserved. The Wheatley collection contains several impressive barite crystal groups from the Perkiomen mine. Six of them are pictured below. Wheatley likely collected or obtained them when he was the mine manager.

The author thanks Union College for access to the Wheatley collection and permission to photograph specimens and Dr. George H. Shaw of the Union College Geology Department for his assistance with the collection.

Barite from the Perkiomen Mine in the Wheatley Collection



Figure 1. Barite in radiating, prismatic to acicular crystals, 9 cm with crystals to 4.5 cm, Union College 25.4.14-36.



Figure 2. Barite in prismatic to acicular crystals, 4 cm, Wheatley Collection 4701, Union College 25.4.14-45.



Figure 3. Barite in radiating, flattened, prismatic crystals, 10 cm with crystals to 3.5 cm, Wheatley Collection 2106, Union College 25.4.14-29.



Figure 4. Barite in tabular, prismatic crystals on quartz, 10 cm, Union College 25.4.14-26.



Figure 5. Barite in radiating aggregates of thin plates on limonite, 8 cm, Union College 25.4.14-37.



Figure 6. Barite in radiating, prismatic to acicular crystals, Wheatley Collection 2143, Union College 25.4.14-57.

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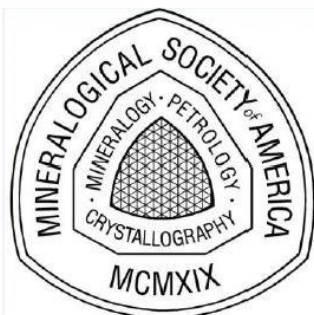


The Friends of Mineralogy is a long-time affiliate of The Mineralogical Record magazine. The magazine was founded in 1970 by John White, who was at that time a curator in the Mineral Sciences Department of the Smithsonian Institution. With the initial help of a financial backer, Arthur Montgomery, White 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](http://www.MineralogicalRecord.com).

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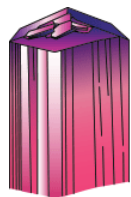
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