



PNWFM NEWSLETTER

Outgoing President's Message

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Dear fellow mineral collectors, it is with great pleasure that I turned my job as president over to Bruce Kelley at the last symposium. It is my feeling that he'll do an excellent job of leading our group, and I look forward with great anticipation to the direction in which he and our stellar slate of officers will take us.

While I am excited to see what the future will bring to PNWFM, it is reasonable at this point to reflect back a bit to see how we are doing. The mission of PNWFM is to promote the collection and diffusion of knowledge in the field of mineralogy, and to pursue a program of preserving mineralogical collecting sites, and at this I feel that our organization is doing a decent job. Our primary activities over the past several years have been our highly successful symposiums and our annual Washington Pass clean-up. Our primary means of disseminating information relating to our mission is through our excellent newsletter and website.

These activities align well with our mission, but I do challenge our current and future leadership to make changes and improvements with the aim of keeping our group relevant and successful.

As I served as president over the past four years, I occasionally wondered to myself if my necessarily close involvement with keeping things going in our group had given me a bit of tunnel-vision that overinflated in my mind the importance of PNWFM to its members. What I found was that I was not alone in caring about PNWFM or our mission as it relates to mineralogy and mineral collecting. Our members are not just dabblers, in actuality, mineral collectors are generally at the least highly dedicated to this interest, and for many collectors, it is a *raison d'être*.

For this reason, I appeal to our membership and to mineral collectors in the Pacific Northwest to please continue to support PNWFM, our symposium and activities, our mission, and our officers. Please let our leadership know that they have your support and help. It will make their jobs easier, and will make our group more successful.

In closing, my involvement in leading PNWFM over these past four years has been a richly rewarding experience. It has been a great pleasure to work with my fellow officers, the various committee members, our speakers, and the membership at large over this time.

Best Mineral Wishes,
Bob Meyer



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President's Message

Introduction ...

Greetings mineral lovers, and welcome to 2014! Since this is my first term as president of PNWFM, and many of you don't yet know me personally, an introduction is probably warranted. My father will attest to the fact that I have always liked rocks, as his back ached from having to carry so many of them home from our early camping trips. I was also fascinated by the crystallography sections in college chemistry, but it wasn't until my daughter and I went on one of Bob Jackson's crystal collecting trips some years back that I officially became a mineral collector. That trip ignited a spark in both of us to form a collection and learn more about mineralogy and naturally led us to join FM. Eight years later, we continue to develop our collection and build knowledge. Our collection is primarily built around the theme of Blue Minerals, but we each have a secondary specialty. For Fiona: garnets, and for me: photography of the amazing landscapes of micro-crystals. You will find a few of my photos elsewhere in this newsletter. Meanwhile, I've been sharing my interest and enthusiasm with local elementary school classes. If these kids are any indication, the next generation is going to LOVE minerals! By the way... that father who once carried packs full of his son's rocks? He just joined FM. Thanks Dad!



Thank You...

My first official order of business is to extend a huge THANK YOU to Bob Meyer for his most recent four years of service as our president, leader and the de facto friendly face of PNWFM. I think it is obvious to us all that PNWFM and mineral collecting in the Northwest in general is better off because of your efforts, Bob. Thank you.

Second, we have been very fortunate over the past two years to have an excellent newsletter produced by John Lindell. John has stepped down so that he can give more attention to the national FM newsletter and has passed the templates to our new editor, Beth Heesacker. Thank you, John, we really appreciate the quality and attention to detail you have given to the PNWFM newsletter.

Next, I would like to thank all the volunteers who made our "Minerals Galore" symposium such a successful and fun event:

- Wes Gannaway – Setup Coordinator, Symposium Packets
- George Gerhold – Symposium Chair, Flyers
- Karen and Gary Hinderman – Auctions
- Bob and Carole Jackson – Case Storage
- Bruce Kelley – Publicity, Facebook presence
- Al Liebetrau – Dealer Liaison, Fluorescent Display Coordinator
- Tom Menzel – Night Security
- Bob Meyer – Facilities Liaison, Display Coordinator, Contest Designer
- Linda Smith – Registration, Correspondence
- Michael Smith – Hospitality
- Allan Young – Master of Ceremonies, Speaker Liaison
- And our setup/teardown crew – Wolfgang Behrenbruch, Cynthia Campbell, Julian Campbell, Jim Etzwiler, Henrik Friis, Michael Smith, Fiona Kelley, Bob Meyer, Bruce Kelley, Al Liebetrau and probably half a dozen I'm forgetting...

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!

Goals for My Term

I have 3 general goals for my term as president.

- 1) Stay the course with what we already do well.
- 2) Improve our appeal to new members and newer collectors while maintaining what is working well for the long-term membership.
- 3) Increase and modernize our use of technology to reach our members and the public.

I will elaborate on these in a future newsletter.

Participate!

Here are some ways that you can participate in PNWFM in the coming year:

- Write an article or send in a few photos for the newsletter. Going 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.
- Add the Washington Pass Cleanup, Mineral Market and *Minerals of Colorado* to your calendar for 2014 (see calendar section below.)
- "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.
- Send me ideas for how PNWFM can better serve you and the mineral collecting community.

Until Spring,

-- Bruce Kelley, President, PNWFM

Reprint of National "Northwest Chapter Update" Minerals Galore!

We held our 39th annual symposium and yearly main event in October with the classic theme: Minerals Galore! Alkaline Intrusive Complexes of the World. Many of you will read that and think... "Oh! Mont Saint-Hilaire!" Yes, but there are many more; famous localities include Ilimaussaq in Greenland, and more locally, Washington Pass in the Golden Horn Batholith, a favorite collecting site for PNWFM members seeking rare minerals. All three of these were covered by the excellent and knowledgeable speakers:

Henrik Friis gave an "Introduction to Alkaline Mineral Occurrences", and locality reports on the Ilimaussaq complex and the Ivigtut Cryolite deposit of West Greenland.

Randy Becker presented an information-packed slideshow of the minerals of The Golden Horn Batholith and gave us brand new information about some previous unknowns and corrected assumptions we have been making about some Washington Pass minerals.

David Joyce described collecting at Calcite Vein-Dykes of the Grenville Geological Province and finished up with a great slide-show of Mont Saint-Hilaire minerals.

Naturally, there were many opportunities to expand our collections, including a continuously running silent auc-



tion and spirited live auction at the banquet as well as a dealer floor featuring Rick Kennedy's *Earth's Treasures*, Jim and Yolanda McEwen's *Lehigh Minerals*, John Meek's *Pacific Rim Minerals* and Dennis Beals' *XTAL*. In addition, the deals, networking and tall tales continued in the satellite dealers' hotel rooms until the wee hours.

As always, we had a collection of very high quality display cases, mostly in line with the theme. There have perhaps never been so many fine zektzerite specimens displayed in one place!

The evening banquet featured the presentation to **Al and Sue Liebetrau** of a Noble Witt Award for outstanding contribution to the Friends of Mineralogy goals.

Add to that the **Bob Meyer's** mineral ID quiz, the competitions for "best self-collected macro specimen" and "best self-collected micro specimen," the excellent banquet and lunch service and all around fun and this was clearly a weekend not to be missed.

Mark your calendars for our 2014 Symposium: Minerals of Colorado! October 10-12, 2014 in Kelso, Washington.

Displays at the 2013 PNWFM Symposium, Minerals Galore, Alkaline Intrusive Complexes of the World By Bob Meyer



Doug Merson's exquisite display of minerals from Mont St-Hilaire. Consisting of specimens both micro and macro, many accompanied by superb photomicrographs. Putting together this outstanding display involved the work of many years in activities including obtaining these pieces and in developing expert skill in mineral photography. This case exemplifies the range of displays we were treated to this year, where the effort of actually putting the case together is dwarfed by the prodigious amount of effort the collector will go through for years to have such things to show. The cases this year collectively represented multiple life's work on the part of the exhibitors!

Attendees of the 39th Annual Symposium were blessed this year with 12 outstanding displays. The majority of the cases this year related to the symposium subject, but putting together a display of specimens from alkaline complexes can be challenging. Nevertheless, our exhibitors did an excellent job of representing these geological environments.

PNWFM member Ray Hill put together a case consisting of 30 specimens, many of which were thumbnails, but a number were larger, from world-wide localities. Of special interest were a sharp 1 cm gold crystal from the Bonanza Creek area, Yukon Territory, Canada; an outstanding twinned 2 cm cubanite crystal from the Henderson No. 2 mine, Chibougamau, Nord-du-Québec, Québec, Canada; a nice 1 cm crystal of Carletonite, from Mont Saint-Hilaire, Québec, Canada; and a doubly-terminated transparent golden 6 cm of Barite from Linwood Mine, Buffalo, Scott Co., Iowa.



A 6 cm long doubly-terminated crystal of barite with minor druzy quartz displayed by Ray Hill



**An ultra-fancy grouping of lemon-yellow sphalerite crystals on quartz. 9 cm across.
Displayed by Bill and Diana Dameron.**

Bill and Diana Dameron treated us to a display of 34 superb small cabinet to cabinet sized specimens of sphalerite, including one faceted stone. The topic of the case was "Future Smithsonian!" and included the following caption:

When groundwater (H₂O) with dissolved oxygen filters through a near-surface ore deposit containing sphalerite (ZnS) or other zinc-rich sulfide minerals it may oxidize some of them, putting zinc into solution. If

the solution also contains dissolved carbon dioxide (CO_2), or if it encounters limestone, the zinc carbonate mineral smithsonite (ZnCO_3) may form. For some of us this means more smithsonite to collect! —from *Minerals*, Robinson, George, Simon and Schuster, 1994, p. 120.

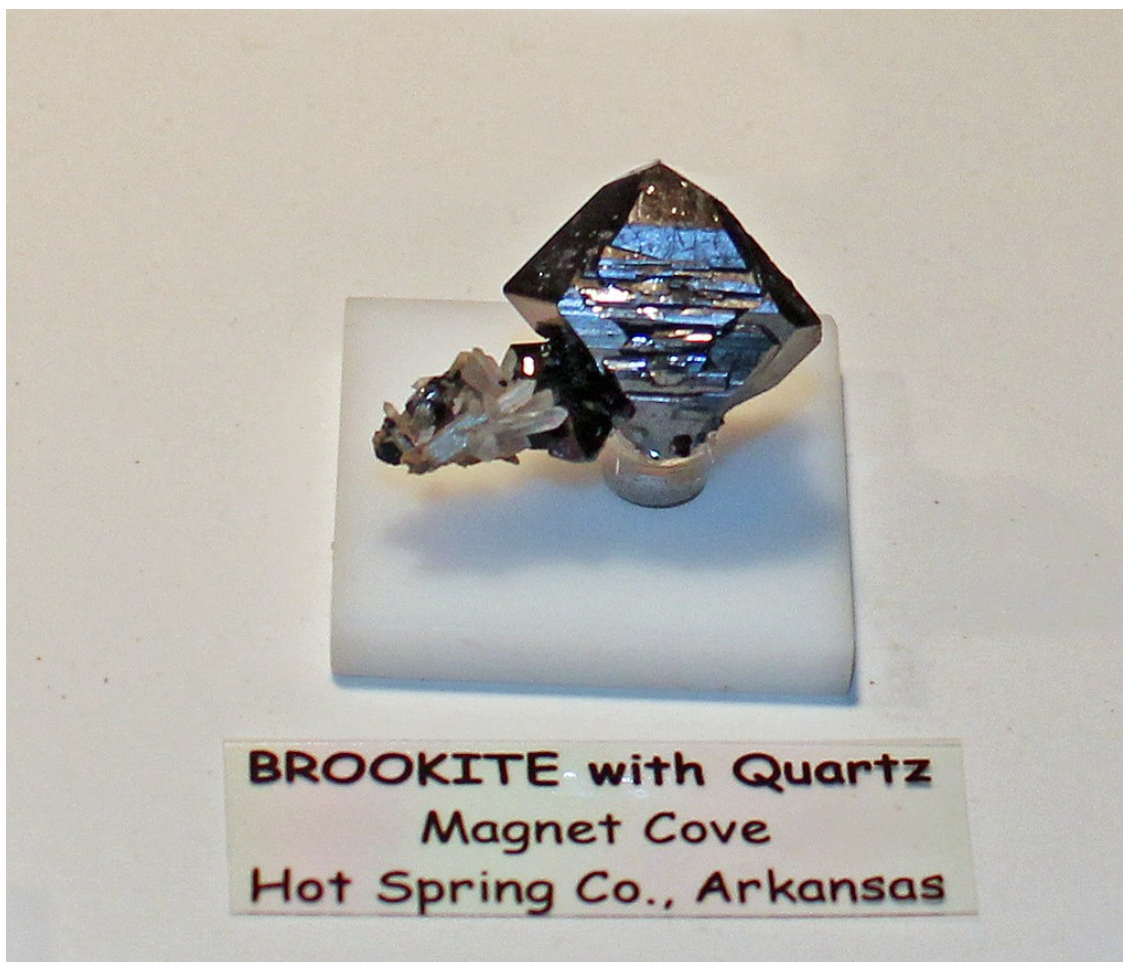
The somewhat tongue-in-cheek topic relates cleverly to Bill and Diana's well-known interest in smithsonite to serve as justification for imposing on us with this fabulous suite of sphalerite. The case, consisting of carefully chosen examples of one species, uniformly of first-rate quality, and all of similar size from world locales is an excellent example of the extensive investment in time, effort, and vision that the exhibitors this year evidenced.



Crystallized spheres of black sub-metallic sphalerite with pyrite and dolomite from Turț Mine (Ghezuri Mine), Turț, Satu Mare Co., Romania. 8.5 cm high.

Displayed by Diana and Bill Dameron.

Our symposium program chair and national FM president Allan Young displayed 32 exquisite thumbnail specimens with the theme, Minerals of Alkaline, Mafic, and Ultramafic Rocks. Especially noteworthy were a sharp cubic 1 cm crystal of platinum from the Konder alkaline-ultrabasic massif, Aldan shield, Ayan-Maya district, Khabarovskiy Kray, Far-Eastern Region, Russia; a flawless transparent 2 cm crystal of pale brown enstatite from Mogok Township, Pyin-Oo-Lwin District, Mandalay Division, Burma; and a superlative, unusually lustrous, and well-formed example of brookite, as a 1.5 cm crystal with quartz from Magnet Cove, Hot Spring Co., Arkansas.



The word “best” is used fairly freely among the mineral community, as are words such as “world-class,” but have you honestly ever seen a better example of brookite from Magnet Cove? 2 cm across. Displayed by Allan Young.

John Lindell assembled a case consisting of 55 excellent self-collected thumbnail to large cabinet specimens from the Golden Horn Batholith/Washington Pass area. This case represents the best of many years of collecting efforts from one of the area's most successful and long-term collectors. It should be deemed a real honor to symposium attendees to have had the chance to see such a collection of specimens from what is certainly one of the Northwest's most significant mineral localities.

The display featured 15 excellent specimens of zektzerite; an outstanding feast for the eyes. Also noteworthy were specimen number 1944, a 3 cm aegirene on distorted quartz from Kangaroo Ridge; specimen number 4541, a excellent 20 cm specimen of somewhat iron-stained quartz and feldspar from the Early Winters Creek area collected on 8/2/09; specimen number 181, an outstanding 8 cm afrvedsonite crystal from Kangaroo Ridge collected on 10/6/1979; and specimen 4898, a 4 cm afrvedsonite hot dog in a bun of smoky quartz from Early Winters Creek collected on 9/15/2012.



The thinking person's zektzerite. For Washington Pass aficionados only, with the label telling the inside story. 12.5 cm across. John Lindell specimen number 386.

Elsa and László Horváth gifted symposium attendees this year with the fruits of 40 years of avidly collecting and studying the minerals of Mont St.-Hilaire. While impressive, this collective period of eighty years does not tell the story. One can do a thing for a long while without developing significant skill or accomplishment at that thing. This is not the case with László and Elsa Horváth, however. As their outstanding case this year hinted, the truth is that Elsa and László are leaders in mineralogy and mineral collecting, and have made great use of their tenure to become most esteemed friends of mineralogy, indeed.

The case contained 81 specimens from this most remarkable location, along with a placard with an introduction to Mont Saint-Hilaire, a map showing the geographical location and a plan of the locality, and two placards that listed Mont Saint-Hilaire's 59 type locality mineral species. It is difficult to properly enumerate the specimens in the case that were of note, but included in the case were sharp dark crystals of pyrophanite reaching a size of over 1 cm on a white crystallized matrix specimen that was 7 cm across; a superb square golden-yellow crystal of leucophanite 1.5 cm across impaled on a small aegirine crystal; an exceptional specimen of pink crystallized yofortierite 8 cm across; a lovely specimen of leucosphenite, featuring a well-formed pearly white crystal 2 cm long protruding from the matrix; an outrageous specimen of catapleiite, 11 cm across, consisting of sharp tan-white stout hexagonal plates to 6 cm in parallel growth; a rhodochrosite with magnesio-arfvedsonite 10 cm across, consisting of sharp brick-red crystals of up to 8 cm in size; never seen display-quality specimens



of things like adamsite-(Y) and ancylite-(Y); and two exquisite specimens featuring sharp, gemmy magenta-pink crystals of eudialyte of up to 3 cm in size.



**A remarkable exhibit of minerals from Mont Saint-Hilaire
from the collection of László and Elsa Horváth**

Ed and Randy Gage put in a display on the theme of topaz from Mason County, Texas. The exhibit featured numerous (too many to count) specimens, faceted stones, jewelry, and gem rough of Texas' state gemstone, topaz. The material was collected, dating back to the 1940's from two ranches that have pegmatites in Mason County, Texas. Collecting involves digging down 10-15 feet to reach bedrock. The largest pieces in the display were tumbled for preparation for faceting, and ranged up to 9 cm across in hues ranging from colorless to

sherry, yellow, and pale blue. The two most significant pieces were a sharp, complexly terminated, 4 cm tall, crystal of pale blue topaz, the "Spirit of Texas", and an exquisite pale-blue faceted stone 3 cm across, entitled "The Blue Star of Texas."



A portion of the treasure-trove of topaz crystals, gem rough, jewelry, and faceted stones from Mason County, Texas displayed by Ed and Randy Gage.

PNWFM members engaged in a grass roots effort at the 2012 symposium to change the original symposium topic for 2013 to one that is close to our hearts—minerals of alkaline intrusives. One reason for this is the presence, here in the northwest, of a premier location of this geological type. That locality is, of course, the Golden Horn Batholith in Okanogan County, Washington. Washington Pass is of special significance to members of PNWFM, due to the fact that most members have collected there, because of our annual clean-up, and due to the plethora of fine specimens our members have collected from the area. It is our favorite locale.

With those things being said, the single most impressive case displayed at the symposium this year was that of Randy Becker. The display featured 17 exceptional specimens all of which were collected by Randy over the course of many years. There were also three photographs in the display, one an overview of Washington Pass from Kangaroo Ridge, and photomicrographs of two of the type species from there, Okanoganite-(Y) and Calciolairite.



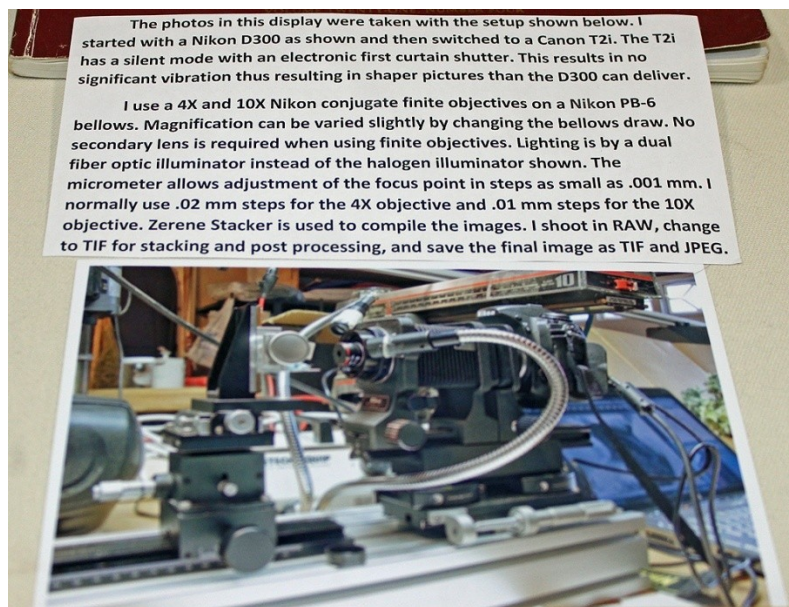
Randy Becker's display of minerals from the Golden Horn Batholith.

Especially noteworthy in Randy's case were a 1.5 cm zektzerite crystal perched on the side of an 8 cm long terminated afvedsonite crystal; an impressive gemmy lustrous pink 3.5 cm single crystal of zektzerite; an exquisite specimen of 4 major zektzerite crystals on microcline measuring 9 cm across; and an 18 cm long parallel grouping of lustrous smoky quartz crystals.

Displays of minerals typically fall short in being able to communicate aspects of mineralogy that are not readily apparent with the naked eye. This is particularly true in the realm of alkaline intrusives. The appreciation and study of the mineralogy of these deposits often takes one into the micro mineral arena. Doug Merson's display this year paid homage to the micro minerals of one significant alkaline complex, Mont Saint-Hilaire, and took us also into the area of micro mineral photography.

Doug's display did an excellent job of communicating the micro mineralogical aspects of Mont Saint-Hilaire, featuring 10 micromounts, each linked to a superb photomicrograph of the specimen in question. In addition,

Doug's case featured 10 miniature to small cabinet specimens from Mont Saint-Hilaire, four additional large size photomicrographic prints, the Mineralogical Record issue dedicated to Mont Saint Hilaire, and a section describing the equipment he used to take the photographs. Significant specimens included a 7 cm perfectly terminated aegirine, a 3 cm specimen of pyrite with sharp cube-octahedral crystals, and a micro specimen of McKelveyite-(Y) featuring nice yellow rosettes.



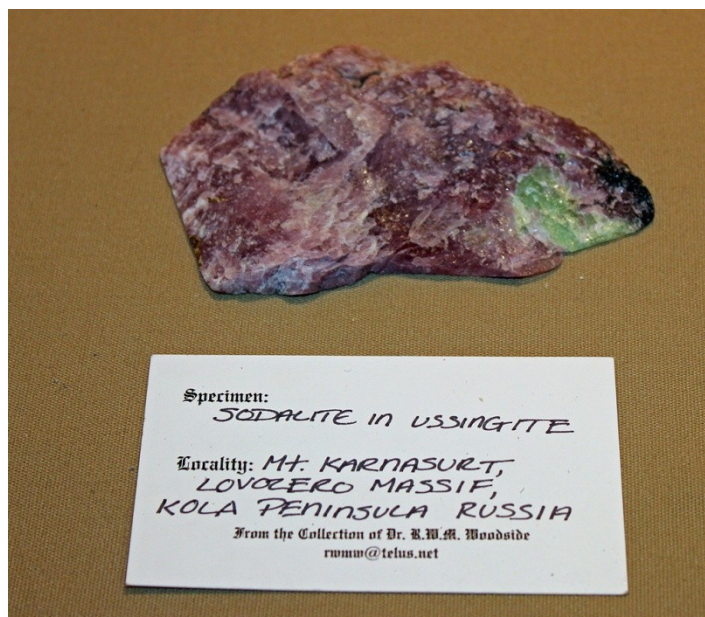
Description and photograph describing the equipment and method used by Doug Merson for capturing his impressive group of micro mineral photographs.

Rick Kennedy of Earth's Treasures put in an exhibit of specimens from the Benitoite Gem Mine, San Benito County, California. The display consisted of 10 specimens, all of excellent quality, of benitoite, neptunite, and joaquinite on natrolite and crossite matrix. The specimens ranged from a superb 1.3 cm trilling of benitoite to a combination piece over 6" across.



Excellent combination specimen of benitoite with neptunite and joaquinite 6" across displayed by Rick Kennedy.

Rob W. M. Woodside, Ph.D. assembled an impressive suite of 23 cabinet to large cabinet sized specimens from various Alkaline Intrusive complexes around the world, being especially strong in specimens from Canadian localities. Standing out were such chunks o' love as a 20 cm incredibly rich example of lemon-yellow cancrinite with sodalite from the Princess Sodalite Quarry, Dungannon Township, Hastings Co., Ontario, Canada and a 25 cm specimen of coarse bladed pink Charoite from the Murunskii Massif, Eastern-Siberian Region, Russia.



Lime-green sodalite in magenta ussingite 10 cm across displayed by Rob Woodside.



Rich crystals of bright blue carletonite from Mont Saint-Hilaire in a specimen 15 cm across, displayed by Rob Woodside

Also noteworthy in Rob's case were a 15 cm specimen of carletonite from Mont Saint-Hilaire featuring crude crystals of up to 5 cm in length; a 10 cm specimen of violet/magenta ussingite with a nicely contrasting zone of apple-green sodalite from Karnasurt Mt, Lovozero Massif, Kola Peninsula, Murmanskaja Oblast', Northern Region, Russia; a very nice 8 cm specimen of astrophyllite, occurring as rich bundles of stout reddish needles in matrix from Mont Saint-Hilaire; a superb group of stout terminated silver-gray elpidite crystals in a branching tree-like growth 12 cm across from Mont Saint-Hilaire; and a 7 cm specimen consisting of a zone of pale yellow vlasovite, surrounded by a zone of white gittinsite, in a matrix of bright raspberry colored eudialyte from the Kipawa alkaline complex, Les Lacs-du-Témiscamingue, Témiscamingue RCM, Abitibi-Témiscamingue, Québec, Canada.

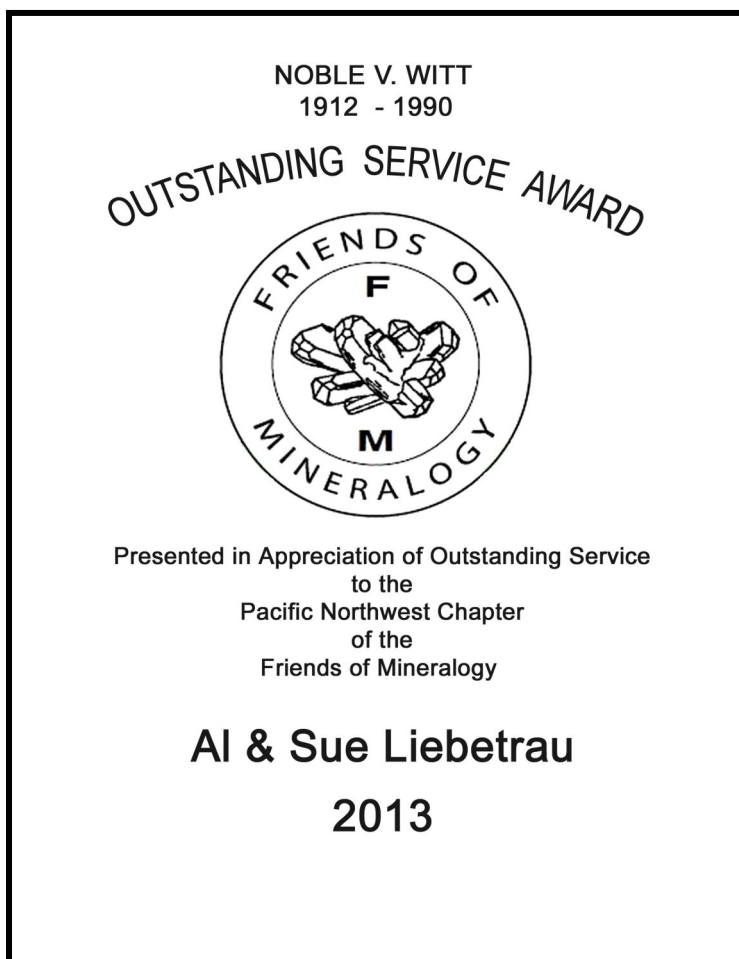


The Rice NW Museum's display of Minerals from Alkaline Intrusive Complexes of the World

The Rice NW Museum of Rocks & Minerals put in an educational display of minerals and information with the topic Minerals from Alkaline Intrusive Complexes of the World. The display consisted of nine large specimens, five loose crystals of zektzerite, and educational information on the topics of Mont Saint-Hilaire, the Golden Horn Batholith, the Ilimassaq complex, and Fluorescence in Minerals.

Noteworthy specimens in the Rice display included a 28 cm plate of microcline that hosted a number of extremely large crystals of zektzerite measuring up to 3.5 cm in length from Washington Pass, and from Mont Saint-Hilaire, two fine specimens of analcime, one with a sharp 10 cm crystal on an 18 cm matrix, and a nice group of analcime crystals of up to 4.5 cm with stout natrolite crystals on a specimen measuring 12 cm across.

The final display was a special one, exhibited by Al and Sue Liebetrau, and consisted of specimens from the Ilimassaq complex, Narsaq, Kitaa Province (West Greenland), Greenland, many self-collected, and viewed under short wave and long wave ultraviolet light. The case was very beautiful, consisting of 25 specimens, from cabinet to large cabinet in size, and with fluorescent colors ranging from pink, red, peach, yellow, and green.

2013 NOBLE WITT AWARD WINNERS**AL & SUE LIEBETRAU**

Al and Sue Liebetrau were recognized at our 2013 symposium as this year's Nobel Witt Awards winners. Al and Sue are long-term members of PNWFM, and more than that, they have been involved, active, and are leaders among mineral enthusiasts in the Northwest. They exemplify traits typical of other Nobel Witt award winners in being both supportive of Friends of Mineralogy, and also in having accomplishments relating to mineralogy and mineral collecting.

Al and Sue Liebetrau both grew up in Wisconsin. Al is a retired statistician and teacher with degrees in math (U. Wisconsin, Oregon State U.) and statistics (Ph.D. U. Michigan). Sue is similarly retired from teaching and technical editing; her degrees are in communications (U. Wisconsin, Oregon State) and American Culture (Ph.D. U. Michigan). They have collected rocks, minerals and fossils for all 53 years of their marriage—indeed, Sue started collecting as a child and “corrupted” Al. They have lived—and collected—in many areas of the U.S. and also in Europe. They have been quite active in FOM: Al is currently in charge of floor and satellite dealers for the Northwest chapter, and Sue is a board member in the national FOM. Al is also currently president of the international Fluorescent Mineral Society. They have written articles for *Rocks and Minerals* magazine and *Lithographie* publications, and Sue works as an editor for *Lithographie*. Sue and Al enjoy showing their large collection to visitors and at exhibitions and have won many awards at Tucson, Denver, and at American and Northwest Federation shows. They are scheduled to be the featured collectors at the Tucson Westward Look show in February 2014.

A Collecting Trip to the Tonopah-Belmont Mine in Arizona

By Wes Gannaway

My wife Deb and I have been spending a short time in Arizona to escape the dreary winters here in NW Washington. We usually go around the time that the Tucson Show is happening. On the way down we attend the Southern California Mineralogical Association meeting. It is a great meeting as I get to meet some of the premier mineral collectors on the West Coast. I am also fortunate to go with a group of collectors to Otto Mountain near Baker, California, where I have collected some of the rare Te species, many of which were unknown at the time. I have made several trips to that locality and the nearby Blue Bell Mine. I didn't do much collecting in Arizona the first time as most of our trip was spent visiting the shows at Tucson.

This last winter (2013) we drove down earlier than usual so that I could collect in Arizona. However, the weather was just as wet and cold there as it is at our home in the NW. There were floods, high winds, and freezing temperatures for the first two weeks. We did collect at the Anderson Mine near Wickenburg, but the rain made us leery of trying to drive in the washes for fear of flash floods.

I made a weekend trip to the SCMA meeting and had a great time. One significant event was the introduction of seven members of the SCMA that have minerals named after them.



Belmont Mountain is honeycombed with the tunnels and shafts of the Tonopah-Belmont Mine

Finally, around the first of February, I met with a couple of fellow collectors in the area of the Red Cloud Mine north of Yuma, and spent two days there, finding some very nice wulfenites, vanadinates, and superb cerussites.

A few days later, I met with Jerry Baird, a collector that I have gone on field trips with for several years, and we travelled to the Tonopah-Belmont Mine located on Belmont Mountain in Maricopa County, north of Tonopah, Arizona. This mine was a significant producer of copper, lead, silver, and gold for several decades. The list of minerals that have been found is quite extensive, containing around seventy different species.

The T-B millsite and dumps

The big find for the trip was collecting several very nice specimens of bechererite. The Tonopah-Belmont Mine is the type locality for this sulfate mineral. The underground is closed but the dumps are quite extensive. The road to the mine is passable by high clearance vehicles. You enter the area from the north and pass through several gullies that would be impassable during a rain storm. We collected along the waste rock dump on the south side of the mill foundations. Most of the better specimens are in the quartz although some minerals could be in the gossan. I also collected specimens of

The big find for the trip was collecting several very nice

acanthite, gold, saponite, caledonite, linarite, gypsum, shannonite, ashburtonite, molybdoferite, leadhillite, pyromorphite, azurite, malachite, aurichalcite, brochantite, rosasite, and mimetite. Photos of these minerals can be seen on mindat.org, as well as a photo of Belmont Mountain.

We stay in an RV park at Goodyear, Arizona, which is about an hour from the parking spot at the mine, so I will be making more trips to the Tonopah-Belmont Mine. There are several more mines in the Osborn District, including the Black Vulture, Evening Star, Iron Gap, Lost Spaniard, and the Moon Anchor Mine. All of these mines have produced nice micro minerals.

Hopefully the weather this winter will be better than last winter, although if it rains then there are the shows in Tucson.



Top of the main dump of the Tonopah-Belmont Mine.



A Message from Your New Editor

By Beth Heesacker

Some of you may recognize my name and/or face since I am also the editor of the Northwest Federation of Mineralogical Societies (NFMS) Newsletter and our rock club bulletin, the Clackamette Gem. I also get around to many rock shows and rockhounding trips. For those whom I have not met yet, my hubby of 47 years and I are avid rockhounds. Just recently I have been drawn to minerals. I have collected some but mostly I have purchased to add to my collection. I have designed my own database (using my old-time software engineer and computer manager skills) for cataloging my micros.

I have a lot to learn, coming into this portion of the hobby so late in life so I am trying to be as active as I can. I have recently been elected as President of the Micro-Mineral Study Group and now am editor of this newsletter. I hope that some of the knowledge that the members of this group have will rub off as we brush shoulders at various shows and meetings.

I look forward to seeing you all at the various functions of this group and also look forward to the support that you will give me by contributing articles and ideas for this newsletter. Thank you in advance.

Additional Pictures from the 2013 Symposium

By Al Liebetrau



Featured Speaker Randy Becker



Featured Speaker David Joyce



Featured Speaker Henrik Friis



David Joyce demonstrating one of his other talents



Sean Finneson and Noel DeDora



Laszlo and Else Horvath



From a display case, owner unknown



A slide from David Joyce's presentation



Two beauties from Mt St Hilaire

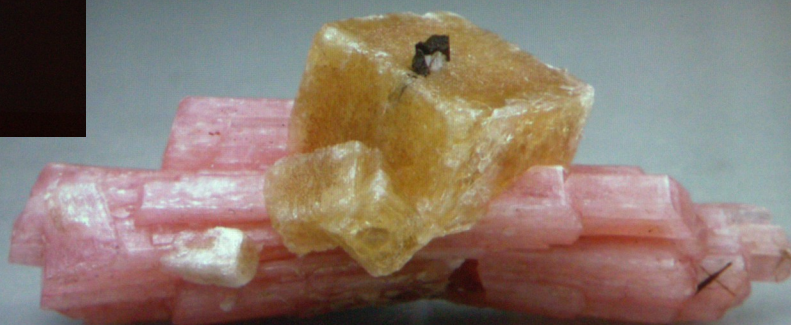
Catapleiite from Mt St Hilaire -
Does it fluoresce!



More from Mt St Hilaire



Rhodochrosite 7x5.5cm

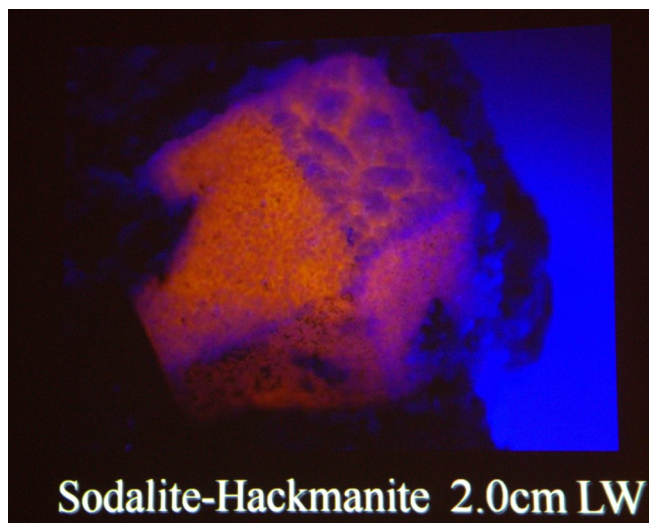


Leucophanite, Sérandite 3.7x1.5cm



1991 Catapleiite xl 15x9cm

A fluorescent Sodalite-Hackmanite specimen from Mt St Hilaire



Business meeting blues!
ErmaDeanne Rantz, Don Newsome, Mike Betsch,
Bob Meyer, Marty Betsch

Cynthia Campbell, Bob Meyer,
Wolfgang Behrenbruch



Laszlo Horvath, Russell Boggs



Julian
Campbell
checking out some
thumbnails!

Recent Photomicrographs

By Bruce Kelley

One of my greatest interests in the mineral world is capturing the micro-landscapes that we find under the microscope. Here are a few images I've made in the past year.



Chrysocolla

*Fireball Ridge prospects,
Truckee Dist.,
Churchill Co., NV*
FOV: 2.14 x 1.66 mm



Yugawaralite

*Baird Creek Quarry,
Wolf Point, Cowlitz Co., WA,*
FOV: 2.75 x 1.95 mm



Clinoptilolite-Ca
*Tunnel Beach, Oceanside,
Tillamook Co., OR*
FOV: 1.11 x 1.00 cm



Ruizite & Apophyllite
*Christmas Mine, Banner District, Drip-
ping Spring Mts, Gila Co., AZ*
FOV: 1.00 x 1.02 mm



Henmilite

*Fuka mine,
Takahashi City, Okayama Prefecture,
Chugoku Region, Honshu Island, Japan*
FOV: 1.58 x 1.58 cm



Tyuyamunite

*Marie Mine,
Pryor Mts,
Carbon Co., MT*
FOV: 3.1 x 3.6 mm



Unknown and Hemimorphite

*Silver Coin Mine,
Iron Point District,
Humboldt Co., NV*
FOV: 1.40 x 1.30 mm



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PNWFM CALENDAR

Seattle Mineral Market — May
exact dates and location TBD

Micro-Mineral Study Group — May 3, 2014, 9-4
Clark County P. U. D. Building
1200 Fort Vancouver Way
Vancouver, Washington

Washington Pass Cleanup — August 8-10, 2014

40th Annual Symposium, Minerals of Colorado —
October 10-12, 2014