Pacific Northwest Chapter

FRIENDS OF MINERALOGY

NEWSLETTER

SEPTEMBER 1991

The 2nd Annual Friends of Mineralogy Field Trip

As in 1990, the members chose to spend a weekend (August 16-18) in the Washington Pass area. There was an excellent turnout with nineteen members and guests attending.

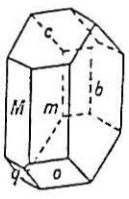
On Saturday, teams spread out along State Highway 20 from Rainy Pass to the Klipchuck campground to pick up trash from scenic pullouts and trail-heads. The team of Lanny Ream and Randy Becker get the prize for collecting the most garbage. They worked the steep slopes around the big switchback below Liberty Bell. Bob Boggs joined us and took on the task of assisting the U.S. Forest Service in preparing the interpretive display at Early Winters. Following our public service activities, collectors scoured the hill sides for those elusive crystals. Besides the usual assemblage found in arfedsonite granite, Lasmanis and Ream found zektzerite crystals, and Bill Smith found a very nice zircon crystal group at the Silver Star viewpoint. A great time was had by all.

17th Annual Symposium

Plans are crystallizing for our upcoming symposium. It appears that we will have about twenty five (25) displays this year. Don't forget to bring a specimen for the self collected case. Carl Harris will organize the competition.

Because of the Rocks and Minerals project, which the chapter supported financially, it is very important that quality specimens be donated for the auction. Bob Smith will be the auctioneer. We will also have for sale ($5.00 each), the Washington State issue of Rocks and Minerals. Each collector should purchase a copy. Some of the authors will be attending and will be happy to autograph their articles. We will also have T-shirts on sale designed by Lita Smith-Gharet.

ALBITE-



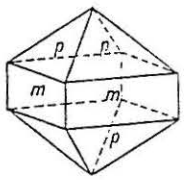
WASHINGTON PASS MINERALS

MINERAL SPECIES FOUND IN THE ALKALINE GRANITE OF THE GOLDEN HORN BATHOLITH, LOCALLY REFERRED TO AS THE "WASHINGTON PASS AREA". ALL SPECIES ARE FOUND AS FREE GROWING CRYSTALS IN MIAROLITIC CAVITIES EXCEPT THOSE MARKED <>, AND THOSE MARKED ** ARE ENDEMIC TO WASHINGTON PASS AND FOUND NOWHERE ELSE. SPECIES MARKED # ARE FOUND AS POLY-CRYSTALS INTERGROWN WITH ANOTHER SPECIES.

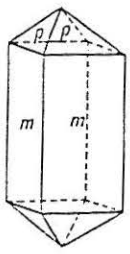
ACMITE	AENIGMATITE	AGARDITE-(Y)	ALBITE
ALLANITE-(Ce)	ANATASE	APATITE <>	ARFVEDSONITE
ASTROPHYLLITE	BASTNAESITE-(Ce)	BIOTITE	CALCIOHILAIRITE **
CALCITE	CALCIUM CATAPLEIITE	CERUSSITE	CHEVKINITE-(Ce)
CHLORITE (GROUP)	CHRYSOCOLLA <>	ELPIDITE	EPIDOTE
EUXENITE-(Y)	FAYALITE <>	FERGUSONITE-BETA(Y)	FERROFERRIWINCHITE
FERROHORNBLEND	FERRO-KATAPHORITE	FERRO-RICHTERITE	FLUORITE
GADOLINITE-(Y)	GAGARINITE-(Y)	GALENA	GOETHITE
HEMATITE	KAINOSITE	KAOLINITE <>	LAUMONTITE
LOELLINGITE	MAGNETITE	MALACHITE	MICROCLINE
MOLYBDENITE	MONAZITE-(Ce)	OKANOGANITE-(Y)**	OPAL <>
ORTHOCLASE	PARISITE-(Ce)	PHARMACOSIDERITE<>	PLAGIOCLACE
POLYLITHIONITE	PREHNITE	PYRITE	PYROCHLORE (GROUP)
QUARTZ	SCORODITE <>	SIDERITE	SOGDIANITE #
SPHALERITE <>	SPOINKOPITE <>	SYNCHYSITE-(Ce)#	THORIANITE
TITANITE	WULFENITE	XENOTIME-(Y)	ZEKTZERITE **
ZIRCON			

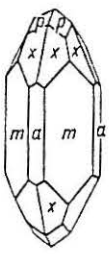
Unknowns: Either need more work or more and better material to classify.
3=Yellow hexagonal prism (possibly bastnaesite).
11=Dark blue tabular crystal, copper mineral?
13=Brown hexagonal, Amorphous (contains titanium and iron).
17=Tan blocky crystal (one only) Synchysite?
31=Dark brown lusterous needles.
36=White discs.
44=Yttium Calcium Silicate, Hellandite?
46=Pyrochlore group member.
47=White plates.
48=Diamond shaped cross section (blades).
49=Rosette of hexagonal plates.
52=Carbonate coating, fluorescent bright green.
55=Copper Sulfide?
57=Salmon colored plates, (zirconium silicate).
60=Minute black prisms, Thorite?
61=(Zirconium Silicate) near Wadeite but not the same.

ZIRCON.



LIST BY RUSS AND BOB BOGGS MARCH 25,1988



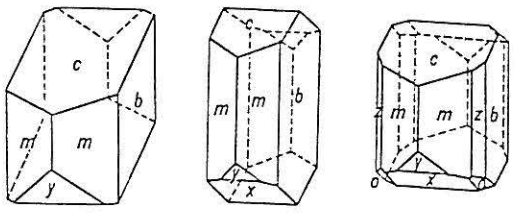


The 37th Annual Seattle Regional Gem and Mineral Show

The Pacific Northwest Chapter of Friends of Mineralogy was asked to participate in the Northwest Federation of Mineralogical Societies annual show. Members, Ray Lasmanis and Dan Ice, had placed displays in the Special Exhibit area. Also, FM members set up five display cases in the club area. Arlis Martin displayed beautiful 1" to 4" crystal groups from world wide localities including such rare minerals as Botryogen and Apsohnite from Mt. Isa, Queensland, Australia. From the Pacific Northwest, Bob Jackson had on display minerals from SE Alaska such as: geodes lined by stalactitic drusy quartz crystals, Rocky Pass; almandine crystals in mica schist, Stickine River, near Wrangell; and 2" pale green flourite crystals with chalcedony, Kiuiu Island. Robert Smith had a nice case which also included almandine crystals from Wrangell and up to 2" epidote crystals from the the Green Monster mine, Prince of Wales Island, Alaska. Dan and Susan Ice displayed an excellent collection of calcite. From the Northwest they had the following: 1" crystals from Marble Mtn., OR; 3/4" dogtooth crystals from Medford, OR; 4" to 5" scalenohedral xls (nicest specimen in the case) on 14" base from Gallatin Canyon, MT; and 3" orange brown stalactites from Carter County, MT. (I sure would like to know a more specific locality for these.)

Wesley and Deb Gannaway put in a case of Washington state minerals. On display were: hematite after epidote xls, Green Mtn., King County; stilponomelane, Blanchard Mtn., Skagit County; plumose muscovite, USK, Pend Oreille County; sulphides, Mystery mine, Monte Cristo dist., Snohomish County; actinolite crystals, Wenatchee Ridge, Chelan County; analcime xls, Lincoln Creek, Lewis County; orthoclase, Columbia Peak, Ferry County; gold, Liberty, Kittitas County; quartz xls on agate, Green Mtn., Clark County; 1" pyrite xl, McCoy Cr., Skamania County; 3/4" pale green beryl xls, Railway dike, Stevens County; 1 1/2" long arfedsonite xls, Washington Pass, Okanogan County; autunite, Daybreak mine, Spokane County; epidesmine, Skookumchuck Dam, Thurston County; natrolite, Robertson Pit, Mason County; orbicular jasper, Lake Crescent, Clallam County; and, 2 1/2" X 4" quartz xl. group, Yellow Astor Butte, Whatcom County.

ORTHOCLASE-



The Oslo Mineralogical Museum

On a recent trip to Oslo, I spent a few hours at the Mineralogical Museum. The Museum is located just two stops away (about a kilometer) from the central train station in the middle of the beautiful Botanic Gardens.

The building dates from early in the century and the collection is even older. You get some idea of the size and diversity of the collection in the entrance way when you see a single greenish Beryl crystal 5 inches in diameter and about 30 inches long.

The collection room is perhaps 40 by 100 feet with two types of beautiful wood cases. The first type is perhaps 8 feet high with a waist high case in front and a "china cabinet" type back. The lower portion of the cases contain the smaller specimens - hand specimens and smaller. The upper portion contain larger specimens up to 2 by 2 feet. These cases are arranged around several U-shaped alcoves. In the center of each of the alcoves are two rows of waist high cases of smaller specimens.

This is a real Geological Museum, not just limited to minerals. It contains well over a thousand specimens illustrating nearly every concept of Mineralogy and Petrology you can imagine. Perhaps a hundred rock types and such unusual features as 4 inch miniature folds make the general collection interesting. It also houses a small Paleontology display. But on to the minerals.

The mineral specimens are organizes by composition - silicates, borates, oxides, sulfides, etc. Being a very old collection, it contains many fine specimens from classic localities, but is obviously being actively curated since it contains many recent finds also. I have tried to note here a number of Norwegian specimens as well as from other localities. Strangely, I must have overlooked the spectacular Cinnabar shown on page 69 of Bancroft's Minerals and Crystals.

One of the fine specimens I first noted was a 5 X 8 inch specimen of beautiful pink Rhodochrosite rosettes from Cavnic, Romania. Nearby was a 1 inch double terminated Anatase octohedron from Norway and two spectacular South African Sturmanites.

With my interest in Pseudomorphs, the next case of about 30 specimens was especially interesting. It contained the finest (or maybe second best after Chris and Dixie Check's fine educational case) display of pseudomorphs I have ever seen! But the case also illustrated the negative side of the museum for most Americans, namely that the labels and explanation are only written in Norwegian.

The next fine specimen I noted was a hand size chunk of matrix with four emeralds up to 1/2 by 1 inch from Russia. Nearby was a 3 X 5 inch Afghan Kunzite, followed by two cases of Norwegian Meteorite specimens exhibiting several different types.

A short distance further I came across what must be the largest Gadolinite crystals anywhere. A 2 X 5 inch single crystal was paired with a 4 X 4 X 5 inch group of Gadolinite crystals to 2 X 4 inches, all from a Norwegian location. Nearby was a Norwegian Vesuvianite crystal a full inch on a side.

American specimens were fairly common so it was not surprising to note a 10 inch complex Galena crystal and an 8 by 12 inch group of Calcite crystals from the famous Sweetwater mine in the New Lead District of Missouri. A 3/4 by 1 1/2 inch Franklin Willemite, a fine Daybreak Mine (Spokane area) Autunite, a 5 by 8 inch Hot Springs Quartz with large Ankerites, and a 10 inch "Bar" Pyrite from the famous Buick Mine find were some other examples from the U.S.A.

More Norwegian classics like a monstrous Thorite crystal of 2 by 3 inches, a 1 1/2 inch Zircon from Larvik, a 2 X 3 X 10 inch Apatite, several Uraninites to 1 1/2 inches, and massive single Columbite crystals of 3 X 3, 4 X 6, and 5 X 7 inches followed. Next came a 3/4 inch ruby in matrix, a 1 inch Betafite, a 6 X 6 inch single Ilmenite, a 1 inch Cobaltite, a portion of a 6 inch (that's right 6 inch) Ruby crystal, and a 6 inch Molybdenite rosette, all Norwegian specimens.

There were classics like a 1 1/2 inch Galena group from the Tri-State area, a 5 X 8 inch Portuguese Wolframite crystal, and another Wolframite of 2 1/2 by 5 inches from Czechoslovakia, several 1 inch Czech Cassiterites, and a 2 inch Franklinite octohedron from Franklin. And then I noted two spectacular 12 by 24 inch plates of Anatase in Quartz from Switzerland. A 3/4 inch beautiful blue Indian Cavansite, a 2 inch Afghan Lazurite, and a 2 X 5 inch Rutilated Quartz from Brazil were among the occupants of a case of recent acquisitions.

But I can't fail to describe the specimens from the most famous
Norwegian locality, Kongsberg! Most of us have seen or at least
heard of the spectacular Kongsberg Silvers, but here I saw other species as well. There were a couple of Silvers, a group of cubic
crystals to 1/2 inch on matrix and a 2 X 10 inch mass of wire Silver. There were also specimens of Pyrite with Calcite, and of
Pyrrhotite, as well as several Calcite groups one with 6 X 6 inch dogtooth crystals, another with rhombs to 5 inches, and a third with 2 inch diameter nailhead forms. Finally there were Kongsberg Fluorites including a group that contained a 2 X 3 X 3 inch lavender octohedron and another with a 1 inch clear crystal.

On my next trip I hope to visit the Museum at Kongsberg and will try to describe it also.

Ed Godsey

The Danish Royal Geological Museum

While on a recent business trip to Copenhagen, I had the opportunity to spend a Saturday afternoon at the Royal Geological Museum. The mineral specimens on display there are nothing short of spectacular and the fossils and other geologic exhibits are very good also.

The museum is a short distance (2 km.) from the DSB train station in the center of Copenhagen and sits on a corner of the Botanical Gardens (also a nice place to visit). The minerals and fossils occupy one wing of the Museum which is in a large 3 story brick structure built in 1893.

How many of you have ever seen a spacimen of native Iron? Probably only a couple of PNW chapter members own one. How many have seen crystallized Cryolite? You will see many such rarities at the Royal Museum. (Molten Cryolite is required for smelting Bauxite, the primary ore of Aluminum).

Even before you enter the building you get a hint of the unusual treasures that might be inside. Outside are giant specimens of native iron from Disco Island, Greenland. The larger is at least 1 meter in diameter and the smaller is 0.6 meter in diameter. Several large iron meteorites, including a 15 ton piece remaining from a 20+ ton monster are also out in the open. That particular visitor from space is the fifth largest known in the world and was found near Cape York, North Greenland in 1963.

As you enter the Museum, one of the first mineralogical displays is a well prepared fluorescent exhibit containing about 40 large specimens. Not suprisingly, about half are from the USA. Next comes the fossil rooms where you will drool over a huge Jurassic age dragonfly with a 15 cm. body and a wingspan of 18 to 20 cm. That specimen, like many specimens there, is from the Harz area of Germany. There are also spectacular single specimens, and huge groups, of crinoids (many from the USA), and a single 30 cm. Tertiary age Turetella from France. The fossil displays contain several hundred specimens in total.

But on to the minerals! Most classic locations are represented, but I could find only one Northwest specimen, a very nice hand specimen of Sphaerosiderite labelled "Estacada, Wa."(but probably
really from Estacada, Or.). (Reminded me of the fine Realgar specimen in the Califomia Minerals Display in the old Ferry Building in San Fran that was labelled "King County, California").

Although it was not the first cabinet in the room, the 1 x 2 meter cabinet of Kongsberg, Norway silvers immediately grabbed your attention. There were only 10 Silver specimen in that case, but what specimens!! The largest is a 20 x 25 cm. mass of wire Silver. Another had what appeared to be a single tangled wire that tapered from about 75 mm. at the base to a few mm. at the tip over a length of perhaps 60 or 80 cm.! Next to that cabinet was a large slab (0.6 by 1.5 meters) of Silver ore from Kongsberg that was mined in 1666. In a nearby cabinet were numerous smaller Kongsberg Silvers along with 20 Gold specimens (Calif., Colo., Australia), a couple specimens of Electrum, and examples of all the native elements.

Back by the door a beautiful 0.5 x 2 x 2 cm. gemmy light green Olivine crystal from the classic location at St. John's Island, Egypt caught my eye. Nearby was a 6 x 10 cm. Azurite group from Chessy, Lyon, France and a 10 x 12 cm. Ruby group from Greenland that sported a 2 x 2 x 7 cm. single crystal.

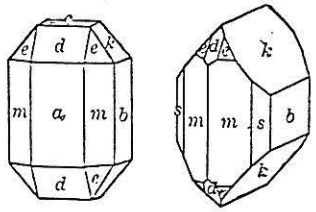
Other pieces that were especially fine included a 1 x 3 x 5 cm. clear light brownish yellow Sphalerite crystal from Mexico, a 25 cm. Japanese Stibnite, a 2 x 2 x 2 cm. Zircon from Greenland, and an Italian Hauerite of 2 x 2 x 2 cm. That's not all. How about Greenland Cryolite crystals up to 2 x 2 x 2 cm.; or a 1.5 cm. Swedish Magnetite; or a 2 cm. Russian octahedral Zircon; or a 1 x 3 x 4 cm. lavender Anhydrite crystal from the classic Simplon Tunnel location in Switzerland? There was a 1 x 1.5 x 20 cm. (yes, 20 cm. long) Cumberland Barite, and the largest Hedenbergite crystal I have ever seen. The latter was shiny black, 4 cm. on a side, and from Sweden.

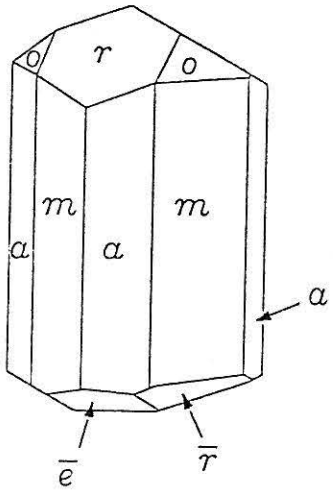
One room was devoted to Iceland and Greenland. Most of the 75 species found at Ivigtut, Greenland were shown and there was a display on the Gardnier Plateau district of Greenland that included a 2 cm. Perovskite crystal. Another set of displays covered the Narsarsuk, Greenland localities, but by then I was so tired that I forgot to write notes!

Other rooms contain displays on crystallography, general geology, salt mines, etc. and there is a small museum store that had several reasonably priced thumbnail and miniature specimens. I found it intresting also the the Audio-Visual room was showing a very good tape of Mount Saint Helens, narrated in Danish of course.

For those who might make it to Copenhagen, the Museum is quite near the Norreport train station. A train stops every 10 or 15 minutes and costs 7 Danish Crowns (about $1.25). The Museum hours are 1300 - 1600 daily, it's free, and well worth your time.
Ed Godsey

OLIVINE

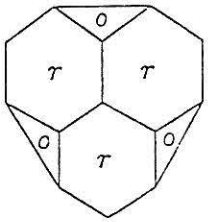


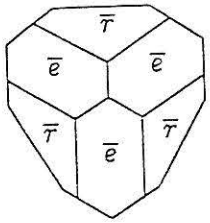


TOURMALINE GROUP

Trigonal borosilicates of the general formula $WX_3Y_6(BO_3)_3Si_6O_{18}(O,OH,F)_4$, where W = Ca, K, Na; X = Al, Fe^{+2}, Fe^{+3}, Li, Mg, Mn^{+2}; Y = Al, Cr^{+3}, Fe^{+3}, V^{+3}

Buergerite	Ferridravite
Chromdravite	Liddicoatite
Dravite	Schorl
Elbaite	Uvite





THE 17th ANNUAL MINERAL SYMPOSIUM

Featuring: Tourmaline

SEPTEMBER 27, 28, & 29, 1991
AT THE SHERWOOD INN
TACOMA, WA
(206) 535-2800

BALLOT

The following candidates, recommended by the election committee, have agreed to run for office. please return this ballot by september 22 to:

R. Lasmanis
Suite 155,
800 Sleater Kinney SE,
Lacey, WA 98503

PRESIDENT	JOHN LINDELL	☐
	..... WRITE-IN CANDIDATE	☐
VICE PRESIDENT	MIKE GROBEN	☐
	..... WRITE-IN CANDIDATE	☐
SECRETARY	RAY LASMANIS	☐
	..... WRITE-IN CANDIDATE	☐
TREASURER	CHERYL STEWART	☐
	..... WRITE-IN CANDIDATE	☐

REGISTRATION FORM

NAME _____

ADDRESS _____

_____

☐ I plan to bring specimens for display, please allow room for _____ cases.

Member registration cost: (includes banquet)		
Before Sept. 10	$30.00	$ _____
After Sept. 10	$35.00	$ _____
Non-member registration: (includes banquet)		
Before Sept. 10	$45.00	$ _____
After Sept. 10	$50.00	$ _____
Saturday Breakfast	$6.00	$ _____
☐ Eggs benedict		
☐ Ham & cheese omelet		
Saturday Lunch	$8.00	$ _____
Saturday dinner only	$19.00	$ _____
Satellite dealer's donation	$15.00	$ _____
	Total enclosed	$ _____

Mail to:
Cheryl Stewart
511 Choker Ct. S.E.
Lacey, WA 98503

Make checks payable to: Friends of Mineralogy 1991 symposium.

Non-Member registration fee includes 1 year membership in the Pacific Northwest Chapter.

PACIFIC NORTHWEST CHAPTER

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