FRIENDS OF MINERALOGY, INC
MIDWEST CHAPTER

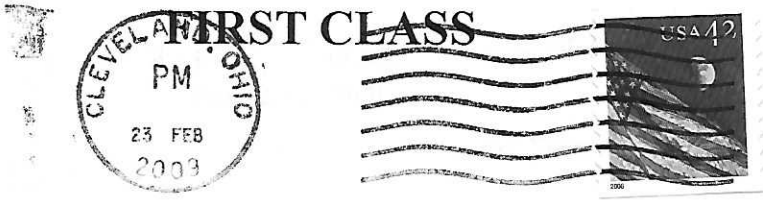
AFFILIATTIONS:

THE MINERALOGICAL RECORD
THE MINERALOGICAL SOCIETY OF AMERICA
AMERICAN GEOLOGICAL INSTITUTE
ROCKS & MINERALS MAGAZINE

NEXT MEETING
SUNDAY, MARCH 8, 2009, 1:00 PM
HOSTED BY EASTERN INDIANA GEM & GEOLOGICAL SOCIETY.
WAYNE COUNTY FAIRGROUNDS,
851 SALISBURY RD
RICHMOND, INDIANA

FRIENDS OF MINERALOGY, INC
MIDWEST CHAPTER
JOHN BLUE, EDITOR
16155 SHURMER RD
STRONGSVILLE, OH 44136-6113

FIRST CLASS



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AMERICAN GEOLOGICAL INSTITUTE
THE MINERALOGICAL RECORD
THE MINERALOGICAL SOCIETY OF AMERICA
ROCKS & MINERALS MAGAZINE

OFFICERS 2009

PRESIDENT	Robert Harman, 3209 St James Ct, Bloomington, IN 47401 bobannhar@aol.com	(812) 237-8994
VICE PRESIDENT PROGRAMS	Nelson Shaffer, 530 Cabot Ct, Bloomington, IN 47408 shaffern@indiana.edu	(812) 339-6623
VICE PRESIDENT FIELD TRIPS	Dr Ernie Carlson, PO BOX 11164, Brady Lake, OH 44211 ecarlson@kent.edu	(330) 678-8875
SECRETARY Ohio Mtgs	Anne Cook, 684 Quilliams Rd, Cleveland Hts, OH 44121 abcook6@juno.com	(216) 381-9003
SECRETARY Indiana Mtgs	VACANT	
TREASURER	Len Gritzer, 3333 Rex Dr, Indianapolis, IN 46222 leng@indy.net	(317) 923-4227

COMMITTEE CHAIRS

FUND RAISING	Paul Schwin, 38 W Washburn St, New London, OH 44851	(419) 929-9074
NEWSLETTER	John Blue, 16155 Shurmer Rd, Strongsville, OH 44136 Jblue@n2net.net	(440) 238-4412

PRESIDENT'S MESSAGE

Many of us rock collectors collect individually or with a small group of fellow collector friends. We accumulate, over the years, many pounds of specimens; some low quality and, hopefully, some high quality display specimens. Some specimens may even have true resale value as "quality mineral specimens". But, for most of us, collecting is primarily not about automatic resale and monetary value; it is about a hobby of preserving nature and beautiful crystal specimens.

So it has been with me. Until recently, I showed off my finds to my wife, family and a few collector friends. Gradually tho, after joining clubs and meeting other folks with similar interests, I have "come out of the closet". To be sure many of us are "closet collectors" and until recently I also was one. Last year I took the big steps of inviting other clubs members to view my collection at my house and of setting up 2 exhibits. Several members of the Dayton club came by to view the collection. Also, I had a small exhibit at my retail table at the Bloomington show and a bigger exhibit at the Cincinnati show. Last week I set up an even more impressive exhibit of Indiana Geodes at the Indiana State Museum in Indianapolis. It is there for all to see until about mid May and I am really proud of it. It can be viewed on the Indiana State Museum website.....www.in.gov/ism (download the 4 pix and go to the blog). I also encourage all of you reading this to, not only, try

(President's Msg Cont'd)

to see it when visiting Indy, but consider showing off your specimens and setting up exhibits of your finds at your local venues.....libraries, museums, schools etc. The public really enjoys seeing these and you will be proud of your accomplishments when you are done. Good hunting!!

That is about it so be well BOB

NEXT MEETING

The next meeting of the Midwest Chapter, Friends of Mineralogy will be Sunday, March 8, 2009 at Richmond, Indiana at 1:00 PM. Meeting will be held at the annual show of the Eastern Indiana Gem & Geological Society at the Wayne County Fairgrounds, 851 Salisbury Rd. Program will be presented by Terry Huizing, Cincinnati, OH..

Coincidently, the spring meeting of the Executive Committee of the Midwest Federation of Mineralogical & Geological Societies will be held at 9:00 AM on March 7, 2009 in Eastern Indiana's club house at 5199 National Rd West (US Hwy 40). You are invited to attend that meeting as a guest. Many FoM members are also members of clubs that belong to the Midwest Federation.

NEW TREASURER

Mr Len Gritzer from Indianapolis has agreed to accept the duties of FoM, Midwest Chapter Treasurer after Lorraine Wright asked to be relieved of that responsibility. Our thanks to Lorraine for her long and devoted service as Treasurer of the Midwest Chapter.

LAST CALL

Membership dues for FoM are past due. If you have not done so, please renew your membership immediately. We regret that this will be your last issue of the newsletter if your dues are not current. You also will not be eligible to participate in field trips unless current. WE VALUE YOUR MEMBERSHIP1

BEST WISHES

We hear that Dee Slater, Indianapolis, IN and Dr Ernie Carlson, Buckeye Lake, OH have been a little under the weather recently. We wish both a speedy recovery.

RHODOCHROSITE

By Dr David Hess, Macomb, IL

Rhodochrosite is a mineral that warms the cockles of the mineralogist's and collector's heart. The beautiful specimens recently coming from Colorado, Peru, and South Africa have made this one of the most popular minerals for collectors. Rhodochrosite is in the rhombohedral (also called trigonal) crystal system, that is a subsystem of the hexagonal crystal system. It most commonly occurs as unit rhombohedral cryhstals, either smooth or striated parallel to the edge (calcite may be striated diagonally). Scalenohedral crystals and modified rhombohedral crystals, rarely with triangular basal pinacoid, are less common. Rhodochrosite also occurs as cleavable or granular masses, platy incrustations, columnar masses, globular and botryoidal masses (Peru, Europe); and stalactitic masses (Argentina). It is brittle, with perfect rhombohedral cleavage and possesses a hardness on the Mohs scale of 3.5-4.5. The luster is vitreous (Glassy). Colors are most commonly pink, rose-red, and raspberry-red, but can be white, yellow-gray, light tan, dark red, or brown. The streak (powder) is white.

Chemically, rhodochrosite is a manganese carbonate ($MnCO_3$). The divalent (+2 charge) molecule of iron can apparently substitute completely for the manganese. Zinc, calcium, magnesium, and/or cobalt can also be present. The powder dissolves with effervescence in heated hydrochloric acid.

(Rhodochrosite Cont'd)

The most common occurrence of rhodochrosite and locale of the best-developed crystals is a primary gangue (associate) mineral is hydrothermal veins of ore deposits, especially complex silver-lead-zinc-copper-manganese ores. It is also known in sedimentary iron-manganese deposits and in metamorphosed iron-manganese deposits as at Franklin, New Jersey, and in upper Michigan and Minnesota. Locally, it is abundant enough to be a minor ore of manganese along with the oxides and hydrous oxides of manganese.

Common associates of rhodochrosite in sedimentary iron-manganese deposits are quartz, hydrous oxides, and oxides of manganese and barite. As a rule, in ore veins, spalerite, pyrite, tetrahedrite, silver minerals, green or purple fluorite, quartz, and rarely, gold are associated and locally other manganese minerals.

There are many locations of rhodochrosite; only the best and/or most interesting can be mentioned. Only a few locations grace the eastern United States and Canada, but these few have great interest. Massive rhodochrosite is known from the classic Dana location of Branchville, Connecticut, but specimens are not common. Still availabe today from Franklin and Sterling Hill, New Jersey, is white, gray-yellow, and pink-white granular, platy rhodochrosite noted for its cream SW fluorescence. It usually occurs as veins in the calcite-franklinite-willemite-zincite ore and is associated with serpentine and other manganese minerals such as bementite. Fine, single, raspberry-red crystals with triangular basal pinacoid faces have recently come from Mt. St. Hilaire near Montreal, Quebec.

The Midwest locations are restricted chiefly to metamorphosed iron-manganese formations in the Great Lakes District. Here, the rhodochrosite occurs as small rhombic crystals, druses, and botryoidal crusts on hydrous manganese oxides and is commonly associated with barite. Known locations are Negaunee, Michigan; Hurley, Wisconsin; Watseca River, Michigan; and near Ely, Minnesota. A few small occurrences of massive rhodochrosite are associated with unusual manganese rich lenses of the Cretaceous Pierre shale in central South Dakota.

The most magnificent locations for world class crystal specimens are in Colorado. There are so many locations that not all can be mentioned. The premiere location for numbers of perfect red crystals and crystal clusters is, of course, Sweet Home Mine, west of Alma, Colorado, which is billed as the highest incorporated town in the U.S. (over 10,000 ft.) - nearby Leadville is the highest incorporated city. Recent (1990-2002) mining by Collector's Edge and their resulting 1-½ hour documentary called "Rhodochrosite - Red Treasure of the Rockies" describes the hard work, temporary disappointments, and romance of their endeavors. Raspberry-red rhombohedrons of up to 12.5 cm were located in cavities, most of which were present at certain intersections of veins or nearby raises. Distinction has been made between bright red rhodochrosite in higher temperature veins and cavities (usually with tetrahedrite) and pinkish rhodochrosite in lower tempeerature veins by means of liquid inclusion temperature formation studies (temperature at which present fluid fills cavities when heated, assuming no previous loss) Presumably, by extrapolation, many of the Colorado locations with red rhodochrosite would have higher temperature formation and those with pink, lower to moderate temperature formation. Minerals associated with the rhodochrosite here include tetrahedrite, pyrite, purple fluorite, and needle quartz. Huebnerite is also present nearby in some higher temperature veins. The writer has a piece from the Hedgehog Pocket, one of many opened up by Collector's Edge, with clusters of red crystals on needle quartz. Collectors should see the reconstructed pocket at the Denver Museum of Natural History (along with the amazonestone-smoky quartz pegmatite pocket and the gold pocket).

Similar crystals, but in smaller numbers, have come from the Russia Mine, up the gulch to the west of Sweet Home (originally Home Sweet Home) Mine and towards Leadville. Two other famous locations for red rhodochrosite nearby are the John Reed Mine, Alicante, Colorado, in association with delicate blue cubes of fluorite and the Climax Mine, Climax, Colorado, also famed for its molybdenite, large cubes of pyrite, and purple fluorite crystals. The Moose Mine in Gilpin County, Colorado, and several locations near Idaho Springs have also yielded red, clear rhombohedra of rhodochrosite, some quite large at the latter location.

The Champion Mine near Lake City in the San Juan Range has also offered up excellent red rhombohedra, but these are not often seen on the market. Excellent pink crystals have come from Ouray County at Silverton, notably the American Tunnel and Sunnyside Mine, but also some other mines nearby. These are usually associated with quartz, sulfides, and local, gree fluorite octahedra and even gold. They make very aesthetic specimens! From the Grizzly Bear Mine come tufts of light pink rhodochrosite and pink rhombohedra associated with pyrite.

Delicate pink blades of rhodochrosite overlie sphalerite and galena at the Julia Fisk Mine near Leadville, Colorado. Larger pink to pink-brown blades, some in attractive globular arrangement, occur at Eagle Mine, Gilman, Colorado, investing sphalerite and other minerals. It was once thought that the pink-brown crystals were closer to siderite, but studies proved them to be fairly pure rhodochrosite. Siderite and ankerite also occur there and at other mines in the area in darker tan crystals.

Montana is also known for two good locations. One is the Emma Mine at Butte, Montana where excellent, striated pink rhodochrosite and large deep pink cleavage masses are notable. Associates include sphalerite, quartz and other low-temperature minerals typical of the outer part of the zoned Butte deposit. The second is Phillipsburg, Montana; here, smaller pink crystals and botryoidal tufts occur with uartz, sulfides and other manganese minerals.

(Rhodochrosite Cont'd)

Formerly, rhodochrosite was abundant at the silver mines at Austin, Lander County, Nevada, but specimens from there are rarely available now.

From Mexico, small modified red to pink, clear rhombohedra are found at mines near Cananea; these are in cavities associated with other manganese minerals. Peru is noted for fine rhodochrosite specimens including beautiful pink botryoidal masses associated with sphalerite, pyrite, and quartz at Huanaca, Peru, and other locations in the Andes nearby. Pale pink, modified, clear rhombohedral crystals come from the tongue-twisting location of Uehucchaqua, Lima Dept. Peru. The red to pink stalactites of rhodochrosite from Argentina have well-developed, aesthetic internal concentric structure, which has made this variety a favorite of the lapidariests. Unfortunately, less of this material is seen today, due to a reduction of supply from the source.

Fine red scalenohedral crystals from the Kalahari Manganese Field in Africa are well-known; beautiful dark red clusters have come from this area, associated with manganese oxides and hydrous oxides. Fewer specimens are on the market now than a few years ago.

Classic old Dana locations in Europe have been cited in Rumania at Nagy-Ag and Kapnik-(banya); Saxony, Germany at Freiburg; Hessen-Nassau at Hainbach, Germany (botryoidal); and elsewhere. Some brownish, iron-rich material ("ponite") is present as well. Only the material from Kapnik is currently fairly common among dealers as pink rhombohedrons, delicate tufts, and botryoids. Most others would have to be located in old European collections for sale. Rhodochrosite has been noted in Cornwall, England, at St Just. A zinciferous variety is noted from Rosseto on Elba.

A very few specimens have recently come from China (Xiang Xi), but material appears scarce, thus far.

Hopefully, this account will whet your appetite in appreciation of this very beautiful mineral and enhance your enjoyment while collecting it.

REFERENCES:

Collector's Edge Documentary, 2004, "Rhodochrosite-Red Treasure of the Rockies," VCR-VHS & DVD
"Dana's A Textbook of Mineralogy, 1949" by William E. Ford, John Wiley & Sons, Inc., New York, 851 pp.

Published in MWF Newsletter, February 2006

By Erston Barnhart
Rock Buster News
Central PA Rock & Mineral Club

This space saved for your article, newsitem, photo, announcement, whatever!

PAGE FILLERS

More Church Notices from Diane Horneber

Barbara remains in the hospital and needs blood for more transfusions. She is also having trouble sleeping and requests tapes of Pastor Jack's sermons.

Please place your donations in the envelope along with the deceased person(s) you want remembered.

From MGAGS Quarterly Newsletter, Fall 2002

If ignorance is bliss, why aren't more people happy?

Ever notice that the people who are late are often much jollier than the people who have to wait for them?

Once over the hill you pick up speed.

CALCITE CRYSTAL FORMS