

Colorado Mineral Society Mineral Minutes



April 2014

Volume 78, Issue 4

President's Message

by Bruce G. Sales

Greetings to everyone, spring has sprung in the lowlands, there is still a lot of snow in the high country, there may be a couple of late winter/early spring storms left, but I assure you that collecting season is here. In fact, the first field trip opportunity is in April.

At the April 4, 2014 Colorado Mineral Society (CSM) meeting, Paul Crowell and Bruce Sales are scheduled to display minerals from their collection. We will have "something from Paul's case and something from Bruce's case (maybe from his Jeep), most of which is from Colorado". At the May 2, 2014 meeting there will not be a display, as this meeting is the field trip meeting and there will not be room for a display case.

The meeting on April 4th will follow the regular schedule. Philip Persson is the speaker and he will discuss collecting minerals from Sweden.

I want to thank all of the members who help set up and tear down for the meeting, so that we could seat everyone. I also would like to ask for a volunteer or volunteers to take over the duties of Auction Chairperson. Rich Nelson and the Nelson Family have organized the silent auction for many years and Rich has informed the Board of Directors that this will be their last year. If you are interested in this position, please contact myself or any member of the CMS board. We also need volunteers for the auction.

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April Speaker Presentation Mineral Collecting and Important Mineral Localities in Sweden

by Philip Persson

While not a nation that jumps to the minds of most collectors when they think of mineral-endowed countries, the Scandinavian country of Sweden in fact is one of the most geologically and mineralogicallydiverse countries in Europe, with an important modern mining sector and diverse mineral collecting opportunities. From the historic Långban mines in central Sweden known for their hundreds of rare species and fluorescent minerals to the world-class golden calcite and green fluorite crystals of the Malmberget mine in the far north, Sweden has a long and rich history of mineral collecting and collectors. Geologically, Sweden is a complex terrane composed of rocks ranging from Pliocene to Archean in age, with most important mineral occurrences hosted in complex metamorphic and igneous rocks with unusual geochemical characteristics that make them especially rich in rare minerals. This talk is only a brief overview of some of the more famous mineral localities in Sweden, and modern collecting opportunities for the visiting collector. Important finds made at major operating mines over the past 50 years will also be summarized. With a warm, friendly culture, a rich scientific heritage, one of the highest standards of living in the world, and a majority whom speak at least some English, Sweden is great destination for a mineral-oriented trip abroad.

Speaker Bio: Philip Persson was born in Uppsala, Sweden, and his obsession with all things mineralrelated began as a small child hammering pyrite crystals out of the outcrop behind his parent's suburban Stockholm house. After moving to the U.S as a child, he ended up close to the rare mineral mecca of Franklin, New Jersey, and got involved in the mineral collecting community there, volunteering with 2 local museums and helping organize shows and club events. After receiving his geology degree from the University

Continued on Page 3

COLORADO MINERAL SOCIETY OFFICERS 2014

President: Bruce G. Sales First VP-Programs: Gary Rowe Second VP-Education: Debbie Kalscheur Secretary: Sandra Gonzales Treasurer: Eva Siemonsma

Appointed Board Members - Committee Chairpersons

Annual Auction: Richard Nelson Family Door Prizes-Guests: Jessica Blackburn and Donna Roberts Backup Door Prizes-Guests: OPEN Library: Kevin Atwater Exhibits Committee: Harold Taylor, Leslie Sebol, Dan Wray Membership: Cara Reynolds Field Trip Leader: Gary Rowe Nominations: Daryl Lamb Grab Bags: OPEN Editor: Amber Brenzikofer Historian: Amber Brenzikofer Youth Activities: Lewis Reynolds Hospitality: Star Edwards **Donations: Debbie Kalscheur** Web Master: Julio Edwards coloradomineralsociety@comcast.net



Representatives (Board Members) Denver Council Rep: Daryl Lamb Denver Show Rep: Bill Jones

COLORADO MINERAL SOCIETY (CMS) was founded in 1936 by a group of distinguished individuals within the mineralogical field. The organization was incorporated as a non-profit, educational organization in 1948. The Society is affiliated with the Colorado Federation of Gem and Mineral Societies, Rocky Mountain Federation of Mineralogical Societies, and the American Federation of Mineralogical Societies, a founding member of each group.

PURPOSE: To promote the study of minerals and other geologic materials, to encourage mineral collecting as a hobby and to conduct public meetings, lectures, and field trips, and to engage in all activities which relate to said purposes of the organization.

MEETINGS: General membership meetings start at 7:30 PM on the first Friday of each month, October through May, at St. Paul's Episcopal Church, at 10th and Garrison in Lakewood, CO. Displays are set up by members about one-half hour before meetings. Specimens may be available for sale and trade. VISITORS and GUESTS are welcome.

BOARD MEETINGS: The board members meet once a month to complete the executive business and affairs of the Society. Meetings will start at 7:00 PM usually the third Tuesday of each month. Additional meeting times, if necessary, may be called by the President or any three members of the board and will be announced at the general or board meetings.

MEMBERSHIP: Open to all persons who agree to abide by Society rules and rules of the Federations. Annual fees: \$16.00 for a Family or Newsletter Membership, \$14.00 for a Single Membership, \$12.00 for a Senior Membership (single or family over 65), and \$12.00 for junior members under the age of 18 who are not included in a family. Name badges are available for a one-time fee of \$5.00.

ANNUAL EVENTS: Yearly activities include a silent auction of minerals, fossils, gems, jewelry, equipment and other items related to our interests; participation in the Colorado Contin-tail, the largest mineral swap show in Colorado; participation as a member of the Greater Denver Area Gem and Mineral Council in sponsoring the largest gem and mineral show in Colorado; and the Founder's Day dinner.

FIELD TRIPS: The Society sponsors several field trips from Spring through Fall for the purpose of collecting minerals, crystals, and fossils. These trips are one-day, twoday, and occasionally several-day adventures. A field trip guide is published each year in May.

NEWSLETTER GUIDELINES: CMS has a proud history of promoting the education and pure enjoyment of the mineralogical world. At the very heart of its existence are the many volunteers and contributors who spend their time and efforts in direct support of the club's mission. The CMS official newsletter MINERAL MINUTES is published monthly during the active meeting season (October through May) and a summer edition, and is the primary way the club's activities and mission are communicated to its members and prospective members. On that basis, the Board of Directors would like to offer the following content guidelines for CMS newsletter contributions:

- Formal announcements concerning club business and/or membership
- Information around mineral-related education opportunities or fundraising activities
- Stories or history that concentrate on the edifying aspects of mineral collection and education
- Sharing of personal mineral-related experience from field trips or other related adventures serving an educational purpose
- Announcements of volunteer/leadership opportunities for the club or club representation
- Worthy news events or discoveries related to mineralogy or geology that align to club's core interests
- Appropriate announcements regarding mineral shows, one-time mineral related events, mineral auctions, sale of private collections and/or equipment, etc.
- Information around relevant donations and/or gifts made available to the club or club members

Please note that the editor may correct spelling, syntax, or content to conserve space and is also entitled to bring contributions in compliance with newsletter guidelines

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Deadline for publication is the 24th of the month prior to publication. Correspondence to Mineral Minutes should be sent to Editor, P.O. Box 280755, Lakewood, Colorado 80228-0755 or by email to:

editor.coloradomineralsociety@gmail.com.

CMS Membership Reminder (Cut-off on April 11th)

A friendly reminder that your annual membership dues are due for 2014. <u>April 11, 2014</u> is the membership renewal cut-off to get your name in the membership directory and to get a <u>Field Trip Guide</u> at the May meeting. You can pay your dues in two ways:

1. Pay with cash or check at the April 4th general meeting. Look for the Membership Chairperson to obtain a receipt and membership card.

2. Send a check made out to "Colorado Mineral Society" or "CMS" to P.O. Box 280755, Lakewood, Colorado 80228-0755. Please do not send cash through the mail. Pick up your membership card at the next general meeting. Cards not picked up will be mailed to you. **Your payment must reach the P.O. Box by April 11th**.



CMS Membership Fees:

Family: \$16 per year Single: \$14 per year Senior 65+ (single or family): \$12 per year Junior (<12 years old): \$12 per year

Also, due to RMFMS insurance and liability purposes, we need to know the month and year of your children's birthdays, so please provide this information when you renew your membership. The children's information will not be published.

A new membership/renewal form is located on the CMS website at <u>www.coloradomineralsociety.com</u>. If you are renewing your membership, send in the form with your payment because it contains additional information that we are collecting, such as children's birthdays and volunteer interest.

Colorado Science and Engineering Fair

CMS continues its support of up and coming young Colorado scientists and engineers at the 59^{th} annual Colorado Science and Engineering Fair to be held **April 10 – 12, 2014** at Colorado State University. CMS gives awards through the Special Awards Program to the best student projects that relate to our club's mineral interests. CMS is the only organization that has participated in the Fair from its beginning 59 years ago.

So far there are four judges who have volunteered. We are looking for **one addition** club member to help with the judging on **Thursday, April 10th**. The requirements for judging are that you have an interest in seeing the projects these kids have done and deciding which ones you like the best. Contact Craig Hazelton at <u>paddlething@hotmail.com</u> if you are interested in volunteering.

Visit <u>http://www.csef.colostate.edu/</u> to find out more about the fair. *Submitted by Craig Hazelton, Director* CMS Items for Sale

CMS pins, patches, and mineral bags will be for sale at the April CMS meeting.

Patch \$2.50 Rocky Pin \$3.00 Mineral Bag \$.20 cents



April Presentation (continued from Page 1)

of Colorado, he worked in various places including Northern Nevada, Arizona, Idaho, and north of the Arctic Circle in Sweden for the mining industry as an exploration geologist. Since the fall of 2012, he has been working full-time on his own small business, Persson Rare Minerals, buying, selling, trading and researching rare minerals from Colorado and around the world. He is planning on returning to graduate school at the Colorado School of Mines for the Fall 2014 semester, and is thrilled to be finally getting involved with the CMS!

The Colorado Mineral Society's <u>Mineral Auction</u> Saturday - May 3, 2014

CMS is having its annual silent auction of minerals, fossils, faceted stones, lapidary pieces, books, jewelry, and florescent minerals.

All reasonably priced!

There will also be a children's silent auction, along with a Verbal auction that will be held at 1:00pm of museum quality specimens.

There will be great door prizes and refreshments. We are handicap accessible.

To register for your Buyer and Seller numbers/letters, call Leslie Osgood @ 303-986-4488 or get them at the auction



Any questions about the auction should be directed to Rich Nelson by phone @ 303-697-1574

Location: Holy Shepard Lutheran Church 920 Kipling St., Lakewood, Colorado (3 blocks north of 6th Ave.) From 11:00 AM to 3:00 pm.

Sellers can get extra copies of bidding slips in the May newsletter or on our club website at: <u>http://www.coloradomineralsociety.org.</u> Our auction committee reserves the right to screen materials sold and to limit sales to three flats of materials.

WE NEED YOU TO VOLUNTEER FOR THE AUCTION DAY

Please help us run our auction on the auction day; we'd love to have you there. This is the only fundraiser we have for the CMS.

We need all the help we can get.

- Like:
- * A set up team
- * Table clearers & movers
- * Verbal auction help
- * Cashiers
- * Back room help

- * Check-in help
- * Food service help
- * Clean up
- * General help
- * Raffle helper



Please make sure you sign the volunteer sheet at the next meeting or phone me (Rich). Whether you can help for an hour or the whole auction, we need all the help and FUN we can get.

Do you have any questions about volunteering? Please contact Rich Nelson at 303-697-1574.

CMS's Newest Life Member Bob Aussprung

CMS is proud to present a life membership to Bob Aussprung. It takes 25 consecutive years of paying CMS dues to become a life member.

('ongratulations!



Bob was born, raised, and schooled in Joliet, Illinois. He attended Illinois State University and received a degree in teaching in 1953. During this time, he enlisted in the Air Force 951-55 (Korean War). He completed his master's degree in 1967 and then 16 hours more from Purdue University. Bob taught high school science along with PE and coaching. He also taught Drivers Education for 22 years. One of the highlights of his life was in the late 1960's, he had the privilege of coaching a 3rd place Olympic finisher in men's track. He also had the honor of seeing several athletes go on to college education and some to professional sports.

While teaching science in high school, Bob taught basic geology, chemistry, and biology. The geology course allowed him to start up a group of pebble pups with the local rock shop. He started with 12 pebble pups and they really excelled with the class. This also got him interested with faceting stones and then making jewelry. Bob started faceting in 1972. He took lessons from the #1 and #2 faceters on the south side of Chicago. After a number of years, he graduated to the #3 spot. Bob retired from teaching in 1986 and moved to Colorado two days later.

Bob has been a member of CMS since 1988. He will never forget the time he spent in Colorado with CMS. He met a large number of excellent people and he remembers them all, including the field trips. His three favorite field trip areas were Mount Ida, Arkansas (the self-proclaimed Quartz Crystal Capital of the World); the Devil's Head, Colorado area; and the Salida, Colorado area.

After Bob's wife, Barbara, passed away, he moved to Arizona in March 2011. He is still rockhounding, faceting, playing golf, and now doing ceramic classes. He had hoped to attend a couple of field trips this past year, but seeing the doctor for his plasma cell cancer diagnosis got in the way.

If you would like to contact Bob and congratulate him, send him an email at <u>bandbaus@aol.com</u>.

New CMS Members

First Listing

- Dr. David and Jennifer Knies
- Craig and Lorie Kramer
- Kevin Lathrop
- Clint Lemmons
- Mike and Marlan Loeffler
- Michelle and Marvin Rahm
- A. Blake Sullivan
- Ed and Susan Wakefield

Second Listing

- Roger Brown and Christy Olberding
- Bill and Marchelle Carlton
- Authur Cook
- Jason Greenemeier
- Perry and Kathy Midgett
- Peter Modreski and Jane Dianich
- Will Nelson
- Phillip Spry

Per CMS Bylaws, comments concerning new, first listing members should be formally submitted to the President.

North Jeffco Gem & Mineral Club Silent Auction

Friday, April 11th, 2014 APEX Community Recreation Center 6842 Wadsworth Blvd, Arvada, CO 80003

<u>Setup at 5:30 PM</u> Seller limits on number of items to sell: Club Members – No limit Non-members – Maximum of 30 items

<u>Auction Begins 6:45 PM</u> Checkout Begins Immediately After Auction No Early Checkout Free Parking, Free Admission



April Field Trip Opportunity North Table Mountain*

CMS Members,

CMS schedules a number of joint trips with the Flatirons Mineral Club (FMC). This year, for their first field trip, FMC is planning a trip to North Table Mountain outside of Golden on **Saturday, April 19**. North Table Mountain is a world-renown site for collecting **zeolites**. Thomsonite, analcime, chabazite, mesolite, and calcite are quite common, plus a number of other zeolite minerals can also be found. The hike from the parking area is about a mile, climbing about 700 feet in elevation. There is a new trail to the site, so the hike is not as steep as the previous route. This is a great trip to take kids on, as everyone will find specimens to take home. Children must be accompanied by an adult and be properly outfitted with safety gear (safety glasses are a must at this site for kids and adults!).

Dennis Gertenbach of FMC will be leading the trip. He plans to meet folks at **9:00 am at the RTD Park and Ride on Ward Road just north of I-70**. From there he will lead folks to the parking area at the base of the hiking trail. If you would like to come on this trip, please contact Gary Rowe (<u>glrowe@usgs.gov</u>) no <u>later than Monday, April 14</u>. I will then forward additional details provided by Dennis regarding the trip to everyone who signs up for the trip.



A fluorescent chabazite specimen from last year's Table Mountain field trip

*Note that a separate CMS trip to North Table Mountain will not be scheduled in 2014.

Submitted by Gary Rowe, Field Trip Leader

Newly Published!

Three new books documenting all the historic *Minerals of Colorado* species and locality listings from 1866 to 1893 by the major Colorado mineralogists before 1900. Each book contains all the Minerals of Colorado catalogs published by the individual and a biography of the individual.

Pioneer Colorado Minerals – The Colorado Mineral Catalogues of the Hayden Survey – Frederic Miller Endlich: 1873-1878, Albert Charles Peale: 1873-1875, and Persifor Frazer, Jr.: 1869, by Mark Ivan Jacobson and Jack A. Murphy. 133 p., 8-1/2 by 11 inch format, softcover, perfect binding, B&W. Each, tax included: \$25

Pioneer Colorado Minerals – Jesse Summers Randall and his Minerals of Colorado Catalogs: 1873 to 1893, by Mark Ivan Jacobson. 253 p., 8-1/2 by 11 inch format, softcover, perfect binding, Color. Each, tax included: \$40

Pioneer Colorado Minerals – J. Alden Smith and his Minerals of Colorado: 1866 to 1882, by Mark Ivan Jacobson. 165 p., 7 by 10 inch format, softcover, perfect binding, B&W. Each, tax included: \$ 20

Books can be purchased from Batuan Biru Production, LLC; 1714 S. Clarkson St., Denver, CO 80210. Prices shown, plus shipping costs of \$4.

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Colorado Mineral Society's Junior Rockhounds Program By Lewis Reynolds, Coordinator

April's Topic: Field Trips

Overview: It is tremendously exciting to discover and collect a beautiful mineral, gemstone, or fossil by yourself. CMS offers many field trips through the late spring, summer, and early fall that provide its club members opportunities to collect. Tonight the Junior Rockhounds will review laws and rules governing proper behavior for collectors and respecting private property. We will also discuss planning for a field trip and preparing the tools and supplies needed to collect and transport your finds home. Let's be prepared for fun and success!

Parents are invited to attend the Junior Rockhounds Program with their children. We need at least one other parent, guardian, or member to help supervise each meeting, so a sign-up sheet will be used to help organize the remaining meetings on the 2013-2014 CMS calendar. Although the youth do not need any supplies for this meeting, a pencil or pen and a notebook may be helpful for taking notes.

This topic motivates the *Field Trips* badge in the AFMS Future Rockhounds of America program. More information about these *optional* activities outside of our meetings can be found below. Lewis will be available after the Junior Rockhounds meeting to explain the badge requirements and to answer any questions you may have about this program. (Also review our goals in the Junior Rockhounds Program in the CMS Newsletter for August 2013 which can be found at <u>http://www.coloradomineralsociety.org/newsletters/August2013.pdf</u> on pages 7-8.)

AFMS Future Rockhounds of America Badge Requirements (Optional): http://www.amfed.org/fra/AFMS_FRA_Badge_Manual_Revised_2012.pdf

The *Field Trips* badge is discussed on pages 94-105 of the manual.

Parents or guardians: please print the sign-off sheet on page 95 and check-off, sign, and date each accomplishment as it is completed. Submit the completed form to Lewis Reynolds to process the badge award.

March 7th Raffle News

March's tickets sold amounted to \$199, with the retail value of \$135. Your continued support of this endeavor allows the proceeds to be spent on CMS education, the purchase of library materials, and the state science fair awards. The most popular specimen was the amazonite with white cap (\$71), it was donated by **Pinnacle 5 Minerals** and won by *Linda Anderson*. The next two specimens were equally popular with \$35 in raffle tickets each: the polished agate donated by **GEOdyssey** was won by *Nels Grevstad* and the microcline and smoky quartz cluster **anonymously** donated was won by *Jennifer Knies*. The calcite crystal (\$28) **anonymously** donated was won by *Mike Loeffler*. The calcite specimen (\$17) from the **Judith Holmes collection** was won by *Laura Johnston*. Last but not least the aragonite specimen (\$13) **anonymously** donated was won by the two time winner *Nels Grevstad*.

Thank you to those who donated these great specimens, it is fun to see the anticipation of the calling of the winning number!!!

Thanks to Rigen Reynolds and Amber Brenzikofer for helping with the raffle. Congratulations to all our lucky winners.

Submitted by Eva Siemonsma, CMS Raffle Manager



SOUTHERN ARIZONA GEODES

by Pat Tucci

This February, we had the luxury of spending more than three weeks in Tucson during the Gem & Mineral show. We spent much of that time shopping and hanging out at the various shows, as well as hiking and visiting with friends. One of our friends came across a reference to a spot to collect quartz geodes, and suggested that we also spend a day doing that.

The location is called "Corral Nuevo" and it is located near the ghost town of Ruby in the very southern part of Arizona, about 55 miles south of Tucson and about 15 miles north of the Mexican border. To get to the site, you take I-19 south to exit 12, then go west about 9.5 miles on Highway 289 towards Pena Blanca Lake. Forest Service Road 39 intersects 289 on the left, and you take that for about 11.5 miles to Forest Service Road 4186 on the right. Follow that about 2.3 miles until you see a wooden corral, which is where you park. GPS coordinates for the site are 31° 28.85' North, 111°19.57' West. Hike about a quarter mile along the wash that exits the canyon to the east. The wash will make a sharp left-hand turn to the north and the geode area is about 50 yards farther along. You should start seeing quartz-filled vugs in some of the rocks along the wash at this point.

The vugs are lithophysae, or former gas pockets within the rhyolite. These have been partially or entirely filled with quartz, agate, or common opal after the rhyolite was erupted forming dikes that are exposed along the canyon. The geodes range from marble- to grapefruit-size. Most of the dikes contain the geodes, which are either broken open and exposed within the bedrock or are seen as rounded nodules within the rock. Fragments with small, clear quartz crystals have weathered out of some of the bedrock and can be found along the hills on either side of the canyon. I had my best luck collecting larger specimens along the top of the canyon wall on the east side. We stayed for a few hours, and between the two of us, collected several flats of specimens.

Most of the specimens that I collected were already opened, and were not too difficult to get out with a rock hammer and chisel. Of course, the ones that were more difficult to extract were left behind. I did collect a couple of whole geodes, but when I opened them at home, they were only partially hollow. They all needed cleaning when I got home. I soaked them in soapy water for a day to get the dirt and clay off them, power-washed some of them (the small quartz crystals didn't like the power washing), and then cleaned away some of the iron staining with Iron Out.





The "corral nuevo" with abandoned water tank and windmill at the parking area. (Photo by Cortney Stewart)

Finding a baseball-sized open geode. (Photo by Cortney Stewart)

One of the quartz geodes that we collected at Corral Nuevo. This one is about 3.5 inches



After a few hours, we headed back to town, continuing west on route 39, past Ruby (about 12 miles from the intersection with road 4186) and to the town of Arivaca in the Altar Valley. From there we continued northeast back to Interstate 19. The drive is scenic, with volcanic mountains and high grassy plains. We encountered very

The town of Ruby is one of the best preserved ghost towns in Arizona. Mining in the area began about 1870, below Montana Peak, and the town was originally known as Montana Camp. The town was abandoned in 1941, when the Montana mine closed. You can visit the town, but you have to actually work there in support of the town's preservation in order to stay and visit. For

few cars between Pena Blanca Lake and Arivaca.

Colorado Mineral Society

Tucson Gem & Mineral Show Update

by Sandra Gonzales and Viola Padilla

The Tucson gem and mineral show is truly one of our favorite shows to participate in as dealers and as spectators. You feel as if you walked into another world that encompasses all types of minerals, meteorites, agates, fossils, jewelry, and just about everything you can think of that you didn't know existed.

We saw numerous Colorado club members walking around in a daze, so of course we knew what they were going through, so between the Colorado dealers we felt we needed to assist our fellow club members and offer them a chair, water, and support. We felt they just needed a quick break so they could head out and meet the challenges of the day!

After a much needed break, they walk out of the room talking to themselves, "What to buy?" "How am I going to get this home?" "Do I really need another Fluorite?" Do I have enough money in the bank?" "Do I really have an addiction?" "I can't live without this rock, I need it!"

The main show had some incredible displays. Collectors Edge was celebrating their 30th anniversary, and had an amazing display. Although the main show featured diamonds this year, we somehow missed seeing the diamonds, because we could not take our eyes off the beautiful mineral displays. Oh Well!

We felt fortunate to see Bob Aussprung, our fellow club member who is doing well in the activities department. Bob has been busy golfing, pottery classes, rockhounding, faceting, and volunteering. If you have a moment reach out to Bob just to say hello, he would love to hear from you because he cherishes all the friendship he made at CMS. Tucson is a place to meet up with old friends, make new friends, and occasionally see a few celebrities.

Till next year!



Dan & Brenda Wray showing off what he purchased.



Superbowl Bronco Party Bob Chavez, Viola Padilla, Hamza Belmaati, Ron Anderson, & Seattle fans.



Casting crew from "Ice Cold Gold" Where is John Self?



Collector's Edge display - 30 Years

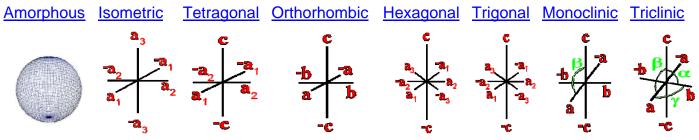


Jeff and Donna selling minerals in their room.

Crystallography 101

by Bruce G. Sales

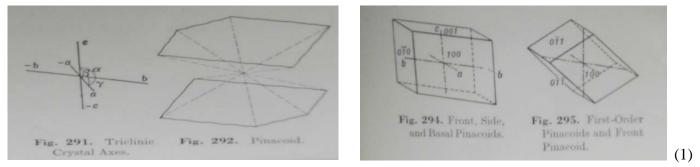
All minerals fall within one of the crystal systems depicted below. This month we will examine some of the properties of the Triclinic System.



(1)

THE TRICLINIC SYSTEM

In the triclinic system, the crystal forms are referred to three crystallographic axes of unequal lengths that make oblique angles with each other (Figure 291).



There are three basic rules for orienting a triclinic crystal:

- 1) The most pronounced zone should be set vertical. The axis of this zone then becomes the c axis.
- 2) The basil pinacoid should slope forward and to the right.
- 3) Two forms in the vertical zone should be selected: one as the front pinacoid, the other as the side pinacoid.

The directions of the *a* and *b* axes are determined respectively by the intersections of the side and front pinacoids with the basal pinacoid. The *b* axis should be longer than the *a* axis. The convention that should be followed is c < a < b.

The symmetry of the Triclinic System consists of a 1-fold axis of rotary inversion which is equivalent to a symmetry center. The general form, a pinacoid is shown in Figure 292. Figures 294 and 295 show the Front, Side and Basal Pinacoids in relationship to the crystallographic axes.

Some of the minerals that crystallize in the Triclinic System are: Albite, Chalcanthite, Plagioclase Feldspars, Kyanite, Rhodenite, Turquoise, and Wollastonite. Many of these minerals can be found in Colorado.

(1) Illustrations borrowed from: Dana's Manual of Mineralogy, Seventeenth Edition, Revised by Cornelius S. Hurlbut, Jr., January, 1965

(2) Paraphrased and condensed from: Dana's Manual of Mineralogy, Seventeenth Edition, Revised by Cornelius S. Hurlbut, Jr., January, 1965

Online Resources: http://webmineral.com http://www.mindat.org http://www.minsocam.org

CMS Meeting - March 7, 2014

Bruce Sales: President

- Thanks the Hatfield's for putting together a nice display on for the club
- Special thanks to Leslie Osgood for her animal display last month
- Dale Mong's wife has donated his mineral collection to be sold at the May action. 50% of the sales will benefit CMS
- Grab Bag Chair position available, please contact Bruce or Eva if interested, sign-up sheet provided
- Special thank you to Gloria, with Lithography for giving attendees a calendar

Craig Hazelton: Committee Chair for the Science Fair

• Needing 3 more judges for the science fair for April 10th

• Fun event to be involved with such creative students

Amber Brenzikofer: Newsletter Editor

- Presentation material available by email on February's Mineral Photography presentation – contact Amber
- Any articles that you want published in the newsletter, please forward to Amber

Eva Siemonsma: Treasurer

- Announced that she has obtained several copies of the book," Roadside Geology" that are available for sale for \$12.87
- Announced minerals for raffle and thanked the individuals that donated them

Cara Reynolds: Membership Chairperson

- Announced new CMS members names
- Announced a new format for the membership sign-up form to include a place to sign up for volunteering

Leslie Osgood: May Auction Buyer/Seller Coordinator

• To obtain a buyer/seller numbers/letters, please see her at the meeting or contact Leslie by email or phone

Star Edwards: Hospitality

• Has encouraged trip leaders and members to send in photos for CMS trips for 2013 to put on website

Gary Rowe: 2nd VP, Field Trip Coordinator

• We are still working on Field Trips for 2014. Anyone who wants to lead a field trip, contact Gary

Guest Speaker: Mark Jacobson presentation on "Mount Antero – Minerals, History, and Geology"

Door prize winners:

Eva Siemonsma	Phil Kummer
Jane Haddock	Mike Loeffler
Forest W	Gayle Dubas
James Knoll	John Schmidt
Kevin Lathrop	Marcus Lieberman

Notes taken by Sandra Gonzales

Announcing nother fabulous Book Sale (& Garage Sale) CSM Museum

1310 Maple Street, Golden, CO

April 18+19, 2014 9 A.M. - 4 P.M.



and April 20, 2014 1-4 P.M.

Hundreds of books, maps, journals, U.S.G.S. folios, minerals, fossils, etc.

Prices vary by item or box. Most prices will drop throughout the event.

Information: 303-273-3815

Denver Gem & Mineral Show Mini Report April 2014

Spring is here and field trip season will start soon! Many club members are itching to get out and start the hunt for those elusive minerals! The Denver Gem & Mineral Show comes at the near end of collecting season and is an opportunity to show off the finds from the summer. Don't forget the dates -September 12-14, 2014. The show is always the second weekend following Labor Day. The theme this year is Agate, which opens up a new world for exhibits and the show. Of course, exhibits not involving agates are welcome also. The show has always had a wide variety of exhibits and variety is encouraged to interest club members and the public.

Barb Melby is the new Chair for the 2014 show. Barb has much experience with the show, having served as the chair for 5 years previously. Barb volunteered to complete the 2014 year following Jeff Goldsberry's resignation. Barb is a member of the North Jeffco Gem & Mineral Club, Inc. She can be reached at 303-423-5876 or bjmelby@q.com and is always open to hearing from club members about issues concerning the show.

The posters, rack cards and postcards are completed. Your club representative should have them for your use to publicize the show. They all display pictures of lovely agates!

Be sure to sign up and volunteer to help at the show so you won't miss a thing. The volunteer sheets are currently being circulated at the club meetings. There are many easy jobs to be filled. Remember volunteers receive free admission all three days of the show, refreshments in the Hospitality Room, a scrumptious breakfast for \$1 on Sunday morning, and the satisfaction that you have helped to put on this wonderful show. Looking forward to seeing you in September.

Respectfully submitted, Judy Knoshaug, Show Secretary

CMS Board Meeting - March 18, 2014

Attendees: Bruce Sales, Gary Rowe, Debbie Kalscheur, Eva Siemonsma, Cara Reynolds, Daryl Lamb, Leslie Osgood, and Amber Brenzikofer

Meeting called to order by Bruce Sales, President **Old Business:**

1. Bruce Sales is preparing the certificate and Cara Reynolds has ordered the name badge for new life member Bob Aussprung. Cara confirmed another life member has qualified, Ken Porter.

2. Rewording of the By-Laws was discussed and family membership definition tabled until the State of Colorado changes their definition of marriage.

3. New grab bag volunteers – Six volunteers signed up at the March 7^{th} meeting. Leslie Osgood will coordinate.

4. Eva Siemonsma purchased 12 copies of "Colorado in Stone" book for Science Fair awards for the next 3 years.

New Business:

- 1. Treasurer's report from Eva Siemonsma. Board reviewed and approved the Treasurer's report. The Treasurer will report to the Board monthly and will publish a summary in the next newsletter.
- 2. Cara Reynolds read the new members and reported that only about half of the regular members have renewed their membership for 2014. Membership cut-off will be April 11, 2014 to be included in the membership directory and to get a field trip guide at the May meeting. Payment needs to be received by April 11th.
- 3. Gary Rowe summarized draft field trips that have been set up. A meeting with the volunteer field trip coordinators will be held next week to solidify further. Also, Philip Persson has confirmed his presentation on Sweden minerals for the April general meeting.
- 4. .Bill Jones was unable to attend the meeting, but emailed an update to the Board. The Denver Show Committee has named Barb Melby as the new show chair as Jeff Goldsberry has resigned. Also, there will be two cases set aside at the Show for individuals to display 1 or 2 agates. Thus, people can display their agates that don't have enough to fill an entire case. Dale Gann is the contact person for these cases.
- 5. Daryl Lamb will be attending the Denver Show Council meeting tomorrow.
- 6. Leslie Osgood has the auction notebook with bidders/sellers numbers/letters. She will have the notebook at the meetings.
- 7. Meeting adjourned. Next CMS Board meeting is April 15th.

Notes Taken by Amber Brenzikofer

February 2014 Treasurer Report

CMS Expenses 10/1/13 - 2/28/13	\$3,277.50
CMS Income 10/1/13 - 2/28/13	\$2,382.38
Net Diff:	(\$895.12)
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See treasurers detail at the next meeting.

Rocky Mountain Federation News



The Rocky Mountain Federation of Mineralogical Societies (RMFMS) is made up of 78 clubs representing 13 Western states. The Rocky Mountain Federation News is published monthly and is located at www.rmfms.org.

The April 2014 issue has a summary of the 2014 Tucson Gem and Mineral Show with some great photographs representing the theme of *Diamonds, Gems, Silver, and Gold.* In addition, there is information on the fifth annual world rock tumbling contest.

A.F.M.S Newsletter

The American Federation of

Mineralogical Societies (AFMS) serves seven regional federations, including RMFMS. The A.F.M.S Newsletter is published monthly and is located at

http://www.amfed.org/news/default.htm

The April 2014 issue contains informative articles and news items including conservation and legislation issues and what AFMS does for the seven regional federations.

Information of the AFMS Endowment Fund drawing can be found on the next page.

Chris Hayward Tribute

Below is the tribute that Maxine Sheel wrote for the Littleton Gem and Mineral Club newsletter that might be of interest to CMS members too:

Chris Hayward was diagnosed with Aden carcinoma in August 2013 and passed away the 25th of February 2014. He had celebrated his 56th birthday in January, much younger than so many of the Rockhounds leaving us these days.

Chris joined LGMC in 1979. Knowing his love for minerals & how they always brightened his day, his sister, Claire, brought a large piece of petrified wood to the hospital on a two-wheeler. They went outside to a sunny area so he could see the colors. The following day Chris went outside, by himself, as he had seen a wild garden in front of the hospital. There he found a nice sized piece of petrified wood (not golden Parker type), which Claire was able to get polished and he was able to see it on Saturday before his passing on Monday. Chris was a true Rockhound until the end! Many of our hearts fell when we heard of his death.

AFMS Endowment Fund

Submitted by DeLane Cox, Past President of RMFMS

One of the featured events of the American Federation meeting each year is the drawing for the Endowment Fund donations. The AmFed annual meeting is coming to Tulsa in July, and the Rocky Mountain Federation is the host federation. The Endowment Fund needs some help.

What can you do to help this year? Well, there are two things that need to be done right away. First is to purchase tickets. Second is to donate a prize.

Right now we are running behind because there was no one in the Rocky Mountain Federation to sell the tickets. So, I have volunteered to get information out to all of our clubs and members about this great program. But, the AmFed auction chair is also in need of donations of prizes. Things have been a bit slow this year in coming in, and I am asking everyone to consider what they might have to donate to the drawing. Needed are lapidary or earth science-centered items that people would like to have. The item needs to have a value of \$50 or over, and be able to ship or transport to Tulsa for the July Show.

If you have looked at the donations in the past few years, there have been a wide variety of items up for new ownership, from beautiful framed mineral photograph posters to fossil fish to excellent specimen stones to handmade jewelry.

And we need our members to purchase tickets, which go for \$5 each or five for \$20, with every ticket going into the drawing at the AmFed meeting. As in the past, each Federation will have their tickets kept separate, and one prize will be drawn from each federation first. Then all tickets are put together and the remainder of the prizes will be drawn from the amalgamated group of tickets.

I'm sure you are now asking why you should contribute, and what the proceeds go for. The Endowment Fund, a separate fund from the General Fund of the AmFed, goes primarily for three things. The first is to make and recondition all of the old slide programs into DVD productions for circulation among federations. Another thing the funds go toward is the Juniors programs, helping finance the program's awards and badges. The third thing the funds support is the AmFed Judges Training seminars. This is where our judges are trained in what must be considered when judging the wonderful competition display cases at Shows, from local club shows to Regional Federation shows, the American Federation Show each year.

All these funded areas are very important to future growth of the Federations and to our hobby. It is important to every member of our federations to keep these important projects going and growing.

For CMS, let Amber Brenzikofer know if you are interested in purchasing tickets and she will coordinate with me to purchase tickets (five tickets for \$20 is the best buy!!!). All orders need to be in before July 1 in order to get them returned to the club. Any orders received after that, I will be sure the tickets get to the Tulsa meeting and into the drawings.

And, if you have something you can donate to the drawing, please let me know as soon as possible. We will need a picture of the item to put into the AmFed newsletter (lets people know what is being offered in the drawing). Then get the item to the Show in July, and include your name and address and a brief technical description of the item for records. And so the person who wins the item also knows what it is and where it came from.

If you have further questions, I can be reached through email at <u>delanec3@earthlink.net</u>. Please give this very deserving program your consideration. And buy a few tickets!









Additional donations are shown in the April 2014 AFMS newsletter at: http://www.amfed.org/ news/default.htm



Fossil Fish, donated by Richard Jaeger, \$100 Mosasar Tooth, donated by Dennis Westman, \$50 Page of Mineral Stamps, donated by Barbara Sky, \$40 Montana Limb Cast Agate, donated by Jim & Sharon Marburger, \$75 Calcite Cluster, donated by Jim & Sharon Marburger, \$20 Two 2-Ib. Float Copper tags and stock certificate, donated by Pam Hecht, \$65 Spinel and Crystal Sterling Necklace, donated by Bob Miller, \$75

We would love to add your donation to the list!



Colorado Mineral Society PO Box 280755 Lakewood, CO 80228

FIRST CLASS MAIL



Important News Items!

Pay your 2014 dues by **April 11th** to get your name in the membership directory and to get a CMS field trip guide at the May 2nd meeting. That means that the check needs to be in the CMS mailbox by April 11th.

The first field trip opportunity this season will occur on **April 19, 2014** in conjunction with FMC. More info inside.

Upcoming Meetings Regular CMS Meeting - April

Date: April 4, 2014 Time: 7:30pm Place: St. Paul's Church, Lakewood

Regular CMS Meeting – May (Field Trip Meeting)

Date: May 2, 2014 Time: 7:30pm Place: St. Paul's Church, Lakewood

Looking ahead to coming months:

Apr. 10, Flatirons Mineral Club Annual Silent Auction (West Boulder Senior Center) Apr. 11, North Jeffco Gem and Mineral Club Silent Auction (6842 Wadsworth Blvd, Arvada) Apr. 18-20, Colorado Mineral & Fossil Show (Ramada Plaza-Denver Central) Apr. 18-20, Colorado School of Mines Geology Museum Used Book Sale/Garage Sale, Golden, CO May 3, Colorado Mineral Society Silent Auction, Holy Shepherd Lutheran Church, 920 Kipling St., Lakewood CO May 10, FM Colorado Chapter, Silent Auction, Clements Community Center, 1580 Yarrow St., Lakewood CO Jun. 6-8, Pikes Peak Gem and Mineral Show (Western Museum of Mining & Industry) Aug. 7-10, Contin-Tail Rock Show, Buena Vista Rodeo Grounds Aug. 15-17, Lake George Gem and Mineral Show, Lake George, CO Sept. 7-14, Colorado Mineral & Fossil Show, Ramada Plaza Hotel (formerly Holiday Inn), Denver Sept. 10, Colorado School of Mines Geology Museum Reception and Open House (Golden, CO) Sept. 12-14, Denver Gem and Mineral Show, Denver Mart (formerly the Denver Merchandise Mart)

http://www.coloradomineralsociety.org