
Littleton Gem and Mineral Club

February 2018 Newsletter.



The next Chapter meeting will be Friday, February 16th, same time and place as usual, 7:30PM, at the Columbine Hills church. Hope to see you there.

Details of the program are still being arranged, and your humble editor will e-mail those separately after they are finalized.



Letter from the President

It's already February and we all know what that means... the world's largest, oldest and most prestigious annual gem and mineral show is just days away from kicking off in Tuscon, Arizona! One of the many perks associated with being a member of the Littleton Gem and Mineral Club is getting to check out all the amazing specimens, stones, and treasures brought back each year by our fellow members that are lucky enough to attend the show. Attending the Tuscon show is on every geologist's, gem and mineral enthusiast's, rock hound's, and lapidary artist's bucket list, including mine. Thanks to all the members that bring Tucson to Littleton each year by sharing their new treasures with the club during our February general meeting!

As we approach spring it seems like all I can think about is the upcoming digging season. My pick and shovel have already been calling to me! Rock hounding is a fantastic way to get to know each other better, make friends, and to experience the sunshine, fresh air, and beauty of Colorado. Planning for our 2018 field trips is well underway. This year's schedule will have opportunities for everyone to get out and dig, including trips to our club's favorite localities and to some surprise new localities!

In case you've been living under a rock and haven't heard... the Littleton Gem and Mineral Club is officially on Facebook! I encourage everyone to like and follow the club's page, which helps us connect with other rock hounds and provides useful information about upcoming meetings and events. We are working to generate more traffic on our page, which helps to broaden our club's audience. Please help us with this effort by getting talking! Let's start using the club's Facebook page as another tool to communicate about our hobby by posting, starting a conversation, and sharing your gem and mineral photos. Social media is a great opportunity for club members to ask and answer questions about rock hounding, faceting and cabbing, and/or mineral studies. Furthermore, those of you on the professional social media site LinkedIn can now connect with the Littleton Gem and Mineral Club through our brand new club page. By doing so, you are able to officially connect our organization to any of your volunteer positions described on your personal page. We are full speed ahead into 2018 and well on our way to expanding our club's communication toolbox with the many digital opportunities now available to all of us!

Sincerely Yours, **Travis Leach**

Denver Gem & Mineral Show Mini Report - February 2018

The 50th Anniversary Denver Gem & Mineral Show is now history. We hope everyone enjoyed the show - the wonderful exhibits of gold and silver and all the extras of the 50th Anniversary. You are probably relaxing in that easy chair engrossed in the retrospective book about 50 years of the show. So now we start on the next 50 years of the show. The future 50 years will be just as amazing as the last 50 years you can bet on it. The 51st Denver Gem & Mineral Show will take place September 14 - 16, 2018. The venue is again the Denver Mart. The theme is "Minerals of Mexico". The show chair is Lesley Sebol. If you wish to contact Lesley about ideas for the show, she can be reached at lesleysebol@gmail.com or 720-999-1372.

Everyone knows that Mexico is a treasure trove of a wide variety of exceptional minerals. There have been many publications devoted solely to minerals of Mexico. Thus, the exhibits, which are always a highlight of the show for me, should again be splendid.

The Show Committee is hard at work to bring you another well-executed and fantastic show. Exhibits and speakers are being searched out. Dealers are being contracted. Posters for publicity are in progress. Plans are coming together.

The Show Committee consists of many individuals dedicated to the success of the show. Some have been on the committee for years while others are newer. There is always a need for new faces - to help with the show and bring fresh new ideas to the committee. At this time, there is a need for a Set-Up Chair and two Historians. The Set-Up Chair is responsible for the show set up on Wednesday preceding the show. This entails covering dealer tables with plastic and setting up the wood display cases. The main floor tables are the responsibility of the contract decorator. There are many experienced persons who help with this set up. The Historians photograph the exhibits and award winners and take other photographs to generate a history of the show. This is a two person position because time constraints do not allow for one person to photograph all the exhibits. It is important to fill these two positions. If you enjoy the show, perhaps you would like to become more involved. It is a very rewarding experience to help with the planning and operation of the show. The Show Committee meets at the Denver Museum of Nature & Science every month except December, February, and July. Meetings commence at 7:30 p.m. Every club has a representative to the committee. If you are interested in joining us, you may call Lesley or tag along with your club rep and come to a meeting. We will welcome you and you can serve as a Member At Large until you find the niche that fits your talents.

The volunteer signup sheets will be coming to your club soon so watch for them. A descriptive list of jobs will be included. Be sure to sign up numerous times!

Respectfully submitted, **Judy Knoshaug**, Show Secretary

Greater Denver Area Gem and Mineral Council

2017 Approved Grant Requests

The Greater Denver Area Gem and Mineral Council receives, evaluates and approves grant requests each year in the months of March and September. This report is a summary of the grants awarded in 2017 and is being sent to all eight, member clubs of the GDAGMC. Newsletter editors are asked to publish this report in your next newsletter.

1. Friends of Dinosaur Ridge requested \$6,098.37 and received \$3000.00. \$1000.00 was awarded to offset expenses of Dinosaur Days. \$2000.00 is to be used to fund stabilization of sandstone above Quarry #5 to protect numerous fossils that are a major stop for bus and walking tours. The \$3,098.37 request was to update and reprint copies of the Dinosaur Ridge Field Guide. The committee felt that since this Guide is sold, sale proceeds should offset the cost of publication. Total approved for 2017 - \$3000.00
2. Western Interior Paleontological Society requested and received \$1000.00 in support of the WIPS Museum Assist Program at USU Eastern Prehistoric Museum in Price, Utah.
3. Colorado School of Mines Mineral Museum requested funding for XRD software for mineral identification. Because they had yet to identify the specific software program and its actual cost in the March grant submission, the Council requested a resubmission with firm costs. This request was resubmitted asking for \$7050.00 for the software and \$259.98 for an Ultra-wide Monitor. At the June meeting, the Council approved the grant to Mines for \$7,309.98.
4. The Fremont County Historical Society requested and received \$3,900.00 to fund the hauling and installation of geologically descriptive boulders along the Geology Time Trail of the Crossroads through Time – Heritage Park Project.
5. The Cripple Creek District Museum requested and received \$4000.00 to fund the installation of LED lighting in 6 mineral display cases, the funds to be used for the hardware and professional, electrical services.

Each of the eight clubs of the GDAGMC may receive \$250.00 each year to help defray the cost of its newsletter. Each club must have a representative present at all four Council meetings in the year to earn the full amount of the grant. A partial award is given should a club not be represented at all the meetings. The Newsletter Grant money paid to clubs for 2016 attendance in 2017 was \$2000.00.

Total grant money awarded in 2017 was **\$21,209.98**. All grants were funded by proceeds from the 2016 Denver Gem & Mineral Show put on by the 8 clubs. The entire show is put on by volunteers! Please step up and be one of your club's volunteers in 2018.

Council Officers for 2018

President pro-tem: Dale Gann Vice-president: vacant
Secretary: Larry Havens Treasurer: Maxine Sheel

Respectfully submitted, Larry Havens, Secretary

Selected upcoming LGMC and Earth Science Events

Fri Feb 16 **LGMC Chapter Meeting.** Speaker: TBD
7:30pm, Columbine Hills Church, 9700 Old Coal Mine Ave, Littleton CO

Tue Feb 20 **Faceters and Cabbers Meeting,** 7:30, Columbine Hills Church

NOTE: THIS MONTH THE THIRD TUESDAY IS AFTER THE CLUBS FRIDAY NIGHT GENERAL MEETING.

We will still meet at the church at 7:30 on February 20th. Bring a friend to see what we do, how we do it and enjoy your evening with us having good conversation and seeing stones, cabs and jewelry that have been made by members of Littleton Club. See you there!

Feb. 23-25 **Fri-Sat-Sun,** Denver Gem and Mineral Guild, **Jewelry, Gem, and Mineral Show.** Jefferson County Fairgrounds, Exhibits Building, 15200 W. 6th Ave. Golden CO; 10-6 Fri. & Sat., 10-5 Sun.; free parking and admission

Feb 28 **Mineral Study Group,** 7pm, at Leslie's house, looking at minerals from all remaining regions of Mexico not yet studied this year. Those regions would be: **Coahuila, San Luis Potosi, Guanajuato, Veracruz, Guerrero, Chiapas, Jalisco and Mexico.** All are welcome. If you have any minerals from those regions that you would be willing to show others, we will love to look at them with you. Or if you have none (like me!), everyone is delighted to let you look at theirs. You can contact Leslie at lesleysebol@gmail.com for more info.

Jun 20-22 Regional Convention of the Rocky Mountain Federation of Mineralogical Societies, Rapid City, SD

Club Announcements

Welcome to our new members:

Chris Mathisen, Dr. James Schactel, Dr. Christina J. Brown,
and **John** and **Lisa Watts**

Member News:

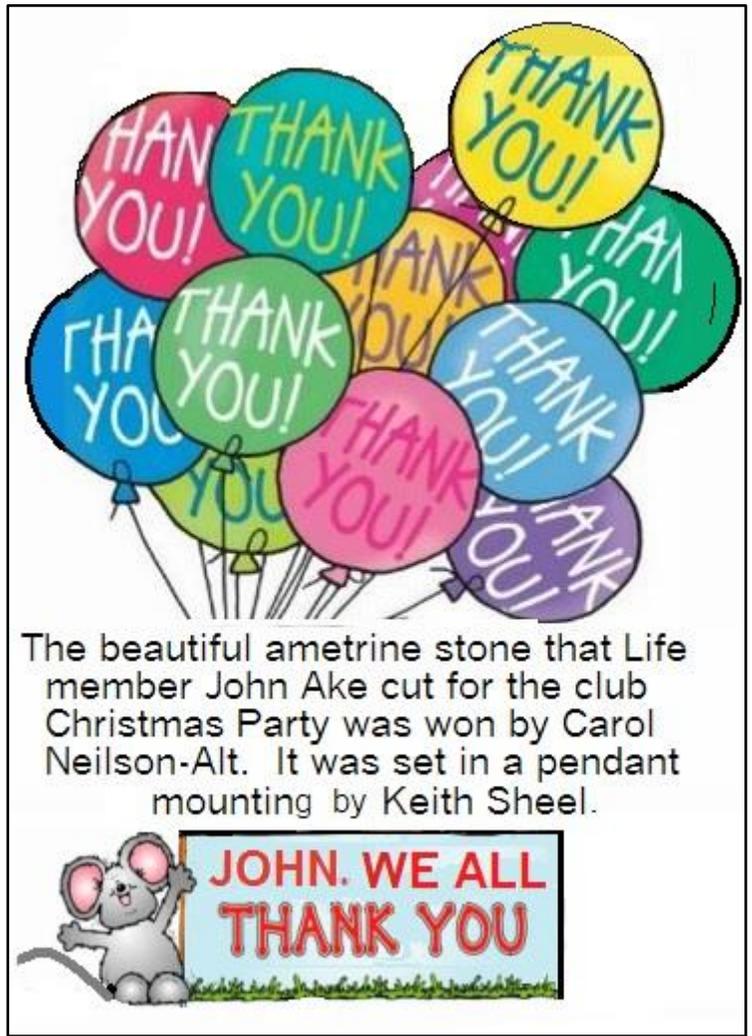
Congratulations to Jim Hooten!

In the latest newsletter from the AMFS (American Federation of Mineral Societies), they mentioned: The Littleton Gem and Mineral Club of Colorado announced that **Jim Hooten** is their AFMS Club Rockhound of the Year.

Jim has been a member since 1988, that's 29 years! Jim is the Field Trip chairman for our club, and he has been organizing and leading all the field trips all over Colorado for our club. Jim has the experience and contacts to keep our club busy all Spring, Summer, and Fall. He is an expert on Colorado mineral identification.

Jim has earned the prestigious Odior award from the LGMC that recognized the best field collected specimen every year.

From high on Pikes Peak at Glen Cove, to our on the plains digging for Barite, you can find Jim leading the club on day trips or overnight camp out in search of Colorado's minerals.



The beautiful ametrine stone that Life member John Ake cut for the club Christmas Party was won by Carol Neilson-Alt. It was set in a pendant mounting by Keith Sheel.

Moving? Change of Address, Email or Phone Number? Ready to go paperless?

Please notify **Ian Duncanson** of any changes at jdunc@g.com or 303-798-9174.

Do you know someone who could use some sunshine? Send a note to our sunshine coordinator and let her know, **Lynette Warren**, flywithle123@comcast.net.

Hazardous Weather Policy

If driving conditions are perceived as dangerous, a decision will be made by 5:30 pm on the night of the meeting by the club President as to whether to cancel or not. The President will notify the trustees and officers. If you have any questions about a meeting, taking place, please contact one of the officers or trustees listed on the last page of this newsletter

LGMC dues for 2018

Please bring the following form to the next meeting with your \$20 check:

Name(s) _____

Dues payment (\$20) _____ **Renewal**

Email address: _____

LGMC Summary Minutes, Board Meeting

January 20, 2018

Location: The Wall's home (The annual Old Board/New Board dinner and meeting)

Called to order at 1:10 pm

In Attendance: **Charlie** and **Shelley Wall, Larry Havens, Travis Leach, Stacey Lestina, Lesley Sebol, Jim Hooten, Nick North, Ian Duncanson, Dan Lovitt** and **Ron Wankner**.

Minutes of the November meeting were approved with motion from Havens and second by Jim Hooten.

Treasurer's Report: Lesley presented the detailed summary report for 2017. Take-aways from summary indicate drop in auction revenue and marginal positive balance for the year with potential negative balance having been offset by the windfall sale of donated equipment.

For the period 12/1/17 to 12/31/17 – Income from dues received, and holiday party pendant receipts; expenses: checks payable to auction sellers.

Lesley noted that a check request without receipts for expenses for the party centerpieces had been submitted. Charlie W. moved to pay the request, and Ian seconded; motion carried.

Motion to accept treasurer's report by Nick North; second by Charlie Wall; motion carried.

Falling auction attendance and revenue prompted extensive discussion about what changes might reverse the trend. Lesley initially proposed moving the auction to the first Saturday of November, raising the bid increments to \$1.00., and better advertising – Facebook, fliers to clubs, etc. Eventually, it was agreed that issues like forms of advertising and bid increments could be finalized at a later date, but that setting a date for the auction was the crucial matter, to which end a motion was offered by Jim Hooten to change the auction date to Saturday October 20, 2018, pending church availability. Nick N. provided the second, and motion carried.

Reminder: Any club member may ask the Secretary to see the treasurer's report at any regular club meeting.

Old Business

- At the April Board meeting **Dale Gann** asked the Board to consider purchasing 1 or 2 corded microphones for the church. Charlie Wall has talked with Dale Gann, and action is still pending Dale's research into models and prices.
- Sale of donated digital Leica camera: It was agreed that it should be advertised to the membership before using alternative routes – eBay for instance.
- Recruitment for open club positions: Program chair – Stacey Lestina has volunteered for this position (several speaker suggestions were offered for Stacey to contact); News Letter editor – still need to find a volunteer; Field trip leaders still needed (some regular trip attendees have said they could lead trips they are familiar with.). Concerns about membership not being fully aware of what our various positions entail were raised. At least one version of our membership application lists and explains these positions on the back.

New Memberships

The following applications were processed and approved: Chris Mathisen, Dr. James Schactel, Dr. Christina J. Brown, and John and Lisa Watts.

New Business

Travis had several suggestions for improving membership growth and community awareness of our activities. He would like to develop a system for tracking new members to determine how they heard of us. He also challenged the Board to come up with new ideas and different things we can do to serve the club. Lesley initiated suggestions for expanded publicity. Others chimed in with outreach sources like the Littleton and Columbine Couriers, Thursday HUBS, and the various "Next door Neighborhood" web sites. Lesley suggested that we could have a club members' garage sale, open to the community as buyers.

- Extensive discussion was held on the disposition of the 50 Retrospective books on the Denver Gem and Mineral Show that were purchased at the special rate of \$3. With a motion from Ian Duncanson and second from Jim H., it was decided to develop a list of club volunteers to the show and members who have served the club in various capacities to receive a free copy of the book. Club members who hold current positions with the Show Committee and Council have already received copies.

Programs: January – Dan Wray on Meteorites

Field Trips: Jim Hooten asked the Board for their opinions regarding a trip to the Cripple Creek/Victor Gold Mine and possible overnight, camping trips to collect.

Mineral Study: February 28 at Lesley Sebol's home (Mexican Minerals from Coahuila, San Luis Potosi, Guanajuato, Veracruz, Guerrero, Chiapas, Jalisco and Mexico).

Next Board Meeting: Monday, 2/19/18 at the church.

Adjourned 3:35 pm.

Respectfully submitted,

~Larry Havens, Secretary

Are Carbonado Diamonds Out of This World?

Carbonado diamonds are shiny, gray to black, rounded, relatively porous masses of fine-grained diamond, mixed with graphite and other rare minerals. They were first found in 1843 in placer deposits in Bahia, Brazil. Amazingly, these aggregates of interlocking grains are slightly harder than coarser diamond crystals. So, although not at all gemmy, they became prized for their use as an abrasive. Although most are from Brazil, carbonado finds have also been made in widely scattered localities such as Venezuela, Borneo, the Central African Republic and Russia. The carbonados from these locations also have a lot of chemical similarities, such as their carbon and nitrogen isotopes, suggesting a common origin. They are also quite different from ordinary coarse dark diamonds, generally referred to as "bort". Carbonado has never been found in kimberlites and lamproites, which are the usual host rocks for diamonds. It is only found in sediments or sedimentary rocks that are made of fragments brought in from elsewhere and reworked and redeposited by rivers and other surface processes. What could be the source of this strange material?

One clue to carbonado's origin is the presence in these rocks of very odd minerals such as silicon carbide, pure titanium metal, pure silicon metal and iron-chromium alloy. Such materials form only under extremely reducing conditions. Such conditions may occur very deep in the earth but carbonado has never been found in the rocks that originate at those depths. A second way to get such environments on earth is around certain very acidic volcanic vents. But carbonados have never been found in regions with such environments either.

The other possible source for carbonado involves meteors. Impact of such large asteroid-size impactors can produce the pressure necessary to convert terrestrial carbon to diamond. This has occurred in several places, including the famous Popigai crater in Russia. Here an enormous impact about 35 million years ago produced jillions of microscopic diamonds scattered in the rock. Impact diamonds are very tiny, but carbonado fragments can weigh more than a pound. In addition, some high-pressure features expected in impact rocks are missing in carbonado.

Recent research suggests that the carbonado samples may not be formed by a meteorite impact - they may BE fragments of a meteorite. This work, done by a scientific team lead by Jozsef Garai of Florida International University, was a thorough infrared analysis of carbonado. They found distinct geochemical features widespread in carbonado that do not resemble natural earth materials at all, even those formed deep in the earth's mantle. The findings pointed to formation in a very hot region dominated by abundant hydrogen. They propose such a place is an "interstellar environment" - a star or planet outside our solar system. Carbonado most resembled pre-solar diamonds found in meteorites as well as synthetic diamonds produced on earth by carbon vapor transport. Some of the hydrocarbon impurities in carbonado resemble those seen in spectral studies of stars and nebula. An intriguing possibility is that diamonds could be formed as part of the last stage of common star's life, when the star has used up most of its hydrogen and helium and is cool enough for some of the components to condense and crystallize. This would be a natural analog for industrial diamond growth by carbon vapor transport. These are part of the so-called "crystalline white dwarf stars" that astronomers are just beginning to study. Were these to break up, fragments would disperse and some could wind up on earth. Being so refractory, they would survive coming through our atmosphere, and if the fragments were small, their impact on the surface would not involve the high-pressure stresses experienced by larger objects.

While the origin of carbonado is still not proven, it's neat to think that fragments of a cooled star could survive, find their way across billions of miles to earth and be preserved for us to find. These would truly be "falling stars."

Dr. Bill Cordua, University of Wisconsin-River Falls

Used with credit to the author, <https://minds.wisconsin.edu/handle/1793/11510>

References:

- Garai, J.; Haggerty, S.; Rekihi, S. and Chance, M., 2006, "Infrared absorption investigations confirm the extraterrestrial origin of carbonado-diamonds" The Astrophysical Journal Letters, 653, L153, 7 p.
- Heaney, Peter; Vicenzi, E. and Subarnarekha, De, 2005, "Strange diamonds: the Mysterious Origins of Carbonado and Framesite", Elements, vol. 1, p. 85-89.
- Kawaler, Steve and Dahlstrom, M., 2000, "White Dwarf Stars", American Scientist, vol. 88 #6, p. 498-508.

I need to stop being the newsletter editor now. Would you be interested to help the club as the next newsletter editor? If so, you can let me know.

Thank you to everyone who contributed to the newsletter!

~Steve

P.O. Box 283, Littleton, CO 80160
<http://www.littleongemandmineralclub.com/>

Established 1960

2018 Board of Trustees

2018 Board of Trustees		
President	<i>Travis Leach</i>	303-887-9787
Vice President and Membership Chairman	<i>Ian Duncanson</i>	303-798-9174
Secretary	<i>Larry Havens</i>	303-757-6577
Treasurer	<i>Lesley Sebol</i>	720-999-1372
President elect	<i>Ron Wankner</i>	303-973-3364
Program Chairman	<i>Bill Jones</i>	303-503-6288
Field Trip Chairman	<i>Jim Hooten</i>	303-770-7177
Highlites Newsletter Editor	<i>Open</i>	
Trustee (Year of 2018 as past President)	<i>Charlie Wall</i>	303-933-0368
Trustee (2 year term 2018 & 2019)	<i>Dan Lovitt</i>	303-791-3112
Trustee (2 year term 2017 & 2018)	<i>Nick North</i>	303-840-1177
Chairpersons & Appointed Officers		
Trustee-at-Large	<i>Dale Gann</i>	720-981-5526
Sunshine Chairperson	<i>Lynette Warren</i>	303-956-4634
Refreshments	<i>Anne Jenkins</i>	303-730-7696
Historian	<i>Maxine Sheel</i>	720-532-0784
Hospitality	<i>Nick North</i>	303-840-1177
Grab Bags	<i>John Kleber</i>	720-851-8510
Web Administrator	<i>Gus Hanson</i>	
RMFMS & AFMS Representative	<i>Open</i>	Open
Denver Council Representative	<i>Nick North</i>	303-840-1177
Cabbers & Faceters Group	<i>Keith Sheel</i>	720-532-0784
“ “	<i>Mike Snively</i>	720-981-0752
“ “	<i>John Kleber</i>	720-851-8510
Mineral Study Group	<i>Bob Zartman & Nick North</i>	303-973-0405

Meetings: The Littleton Gem & Mineral Club meets the third Friday of each month, September through May, at the Columbine Hills Church, 9700 Old Coal Mine Avenue, Littleton, CO 80123. Doors open at 7:00 p.m. and the meetings begin at 7:30 p.m. All meetings are open to the public. Club and section meetings may deviate from their regular schedules due to holidays, shows, inclement weather, etc.

The Littleton Gem and Mineral Club is affiliated with the American Federation of Mineralogical Societies, The Rocky Mountain Federation of Mineralogical Societies, The Colorado Federation of Gem and Mineral Societies, and the Greater Denver Area Gem and Mineral Council.

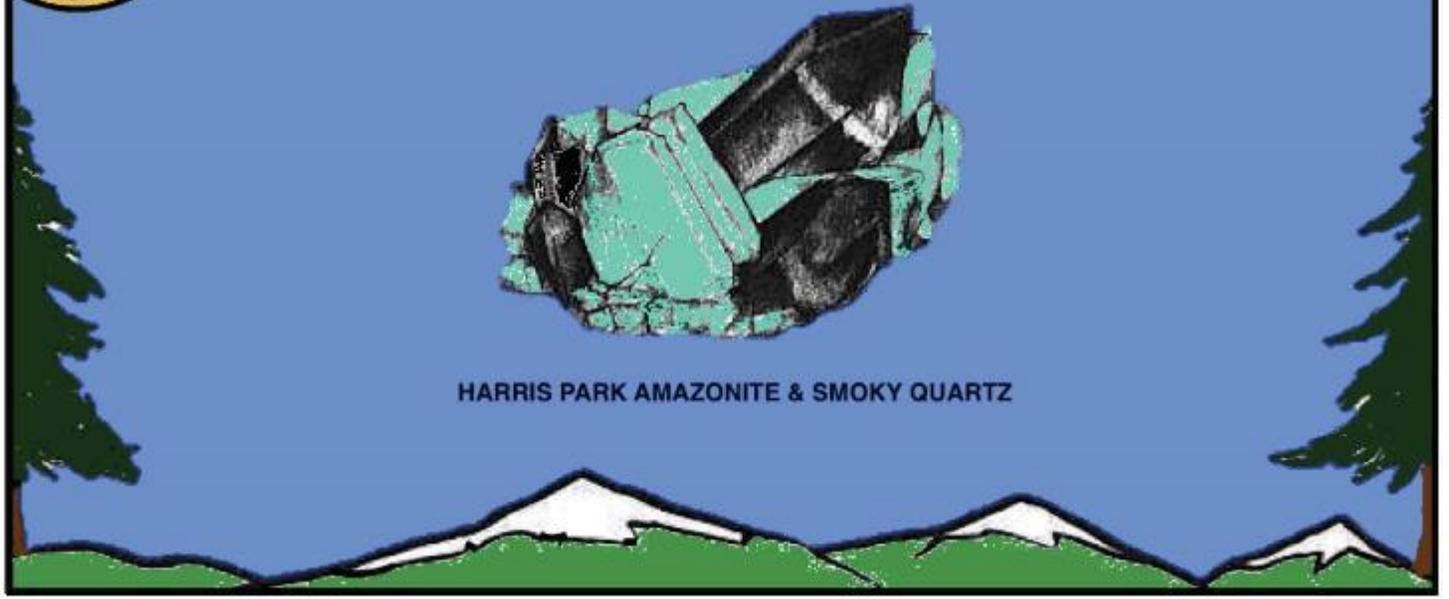
Any material contained in the HIGHLITES may be reproduced, as long as credit is given, unless otherwise indicated. Contribution articles are welcome. ****The deadline for submissions is the 1st Friday of each month.** Please send your material by email to stevecableisthinkingofyou@gmail.com.

Advertising Rates: \$50 / Full Page. \$30 / Half Page. \$20 / Quarter Page.



Highlites

LITTLETON GEM & MINERAL CLUB



HARRIS PARK AMAZONITE & SMOKY QUARTZ

LITTLETON GEM and MINERAL CLUB
P.O. Box 283
Littleton, CO 80160

FIRST CLASS MAIL
Return Service Requested