

News from the Littleton Gem and Mineral Club!

Picnic!

When: Sunday Aug 20th. We will plan to eat at 12:00 noon or so, after we set up. Arrive slightly earlier if you can help setup. Thank you!



Where: Sterne Park, **South** shelter. 5800 S Spotswood St, Littleton, CO 80120

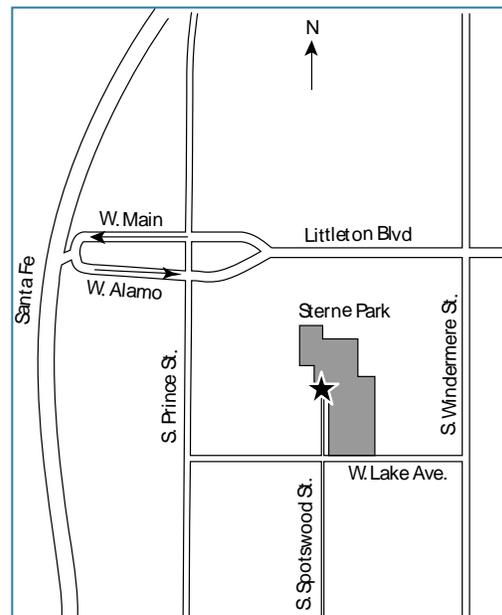
There is a shelter on the south side of the park. From the corner of W. Lake Ave and S. Spotswood St., go north on Spotswood until it makes a 90 degree turn to the left. The entrance to the parking lot is on the right and the shelter is on the north end of the parking lot. Be reassured, it is easy to find.

FOOD! The club will provide **fried chicken** for the main course and ice tea and lemonade for beverages.

Members! Please bring a dish that serves 10-12 people.

If your last name begins with **A-N**: Please bring salad or vegetable.
If your last name begins with **O-Z**: Please bring a dessert.

If your item requires a serving spoon, fork, etc., please bring it along (and label it!). If you don't want chicken, bring your own main dish. If you would like some other beverage, feel free bring it; **HOWEVER**, according to City of Littleton rules, **alcohol and glass containers are prohibited.**



Door Prize! **Keith Sheel** has kindly volunteered to create a jade pendant and earrings for a door prize. Tickets will be \$2 each, or 6 tickets for \$10.

Program: Stuff'n the [grab] bags

The club will again include grab bag stuffing with the picnic this year! After stuffing ourselves with great food we can stuff grab bags. You can stretch your legs while the picnic tables are reorganized for the grab bag stuffing. For those who do not make it into the grab bag stuffing line, there will be loose specimens and supplies for labeling specimens for inclusion in future grab bags.



While we do this, we will be visiting, swapping stories and laughing to aid our digestion. Do bring your helping hands and collecting stories as well as any bags and specimen donations for future years.

SPECIMENS: Everyone bring the best minerals you have collected since last fall, 9/30/2016, for the **Club Prospector Case** at the upcoming September Denver Mineral Show. **Jim Hooten** is putting the case together again this year. Jim will select top 3 specimens for judging, as well as additional specimens for display. You don't need to pre-judge your own specimen. If you think it's a good one, please bring it for Jim to inspect. He may need to borrow it for a month. You'll get it back!

Also, everyone is encouraged to bring any Club Trip specimens, regardless of quality, just for "show-and-tell", and to share with other members.

President's Message



Fellow rock gem and mineral enthusiasts, we are deep into the 2017 diggin'/collecting season. I'm sure some of you have found remarkable specimens and I am looking forward to seeing them and hearing the stories.

Personally I haven't found much but then I haven't been out much. As I used to tell my kids, "you can't catch fish if you aren't fishing". Shelley and I did pick up a few rocks while we were in Scotland in June. We did our research and knew where one should go to find very nice agates, but our schedule didn't allow us to spend much time in those locations. On the Island of Islay we spent some time walking pebbly beaches and we did pick up some interesting jaspers and possible small agates. Our next trip to Scotland should be focused on agate hunting!

The Denver, Gem, and Mineral show, [Sept 15 - 17, 2017](#), is just around the corner. For as much as I have been beating the drum to recruit volunteers for the show, it is time to ask again. This year is the show's 50th anniversary and the theme is Gold & Silver! How would you like free admission to the show (all three days!) in exchange for a four-hour volunteer commitment?

As usual, LGMC will have a booth in the club/outreach area of the show. We need volunteers to staff it! Beverages and snacks are available in the show hospitality room for volunteers and exhibitors. Volunteering for the club booth is fun, easy, and only takes two hours. And, just think, with the admission money you will save, you can purchase an extra pretty rock!

This year [Nancy Kimber](#), an LGMC club member, is organizing the daily and hourly schedule for the club booth. Please let her know if you can represent LGMC by staffing the club booth. Feel free to email her directly nkk9960@hotmail.com or you can contact me as well, charliewall@comcast.net. We will have to submit any new names to the Volunteers Committee so that when you check in, the attendant can find your name on the volunteer list and give you your pass, (ribbon to pin on your shirt/club vest). So if you would like free admission, and fun in exchange for a few hours of volunteering please contact one of us and help out your club.

I hope to see everyone at the club picnic, August 20th, at the Sterns Park, South Shelter in Littleton. We will assemble grab bags for the show, and there will be plenty of food. Annnnd, Keith Sheel has provided a Jade pendant and earrings for the drawing!
~[Charlie Wall](#), LGMC 2017 President

News from Nancy about the dinner Saturday night, Sept 16:

Not sure if this has been advertised (or will be)... There will be a buffet dinner Saturday evening after hours. I believe it is open to anyone. Tickets, at a cost of \$1.00 (yes one dollar!), will be sold in advance, on a first-come-first-serve basis, I think at the booth with promotional info (different from the booth with pins/posters). I think there will be 150 tickets available. The buffet happens every year, but this is the first I've known about it. This is when they announce the winners of the case competitions. In addition to the buffet, there will be an auction to benefit Mindat (ticket not required for the auction). In case you don't know, here's what Google says about Mindat (<https://www.mindat.org/>): Mindat.org is a non-commercial online mineralogical database, claiming to be the largest mineral database and mineralogical reference website on the internet. It is used by professional mineralogists and amateur mineral collectors alike. [Wikipedia](#) ~[Nancy Kimber](#)



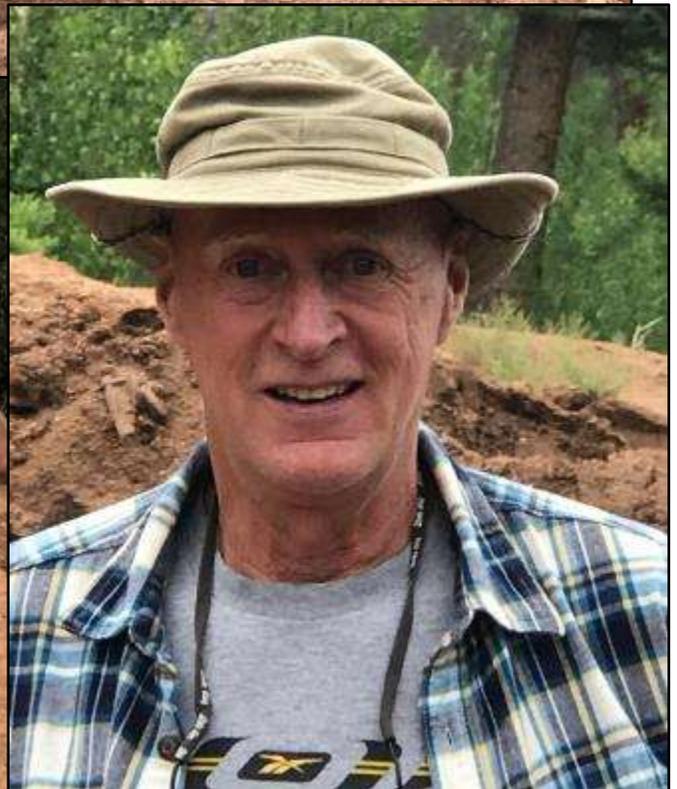
Pictures! Some pictures from recent club events in the newsletter below. If your pictures are not included in this edition, send them along, and I can add them to the next edition.



Also, LGMC member, Carol Nielsen-Alt is compiling our pictures for a Shutterfly album. You can send pictures to Carole and I at cjcomputer@aol.com, and stevecableisthinkingofyou@gmail.com

Pictures from the Topaz Mtn trip, including Maxine, Ron, and Jim.

Sent by [Lynette Warren](#).



Greenstones, greenstones and green stones

Geological terminology is difficult for beginners. It does not help when the same term is used for different things. During a recent club meeting, the term greenstone came up. Ely, Minnesota is the site of a famous formation called the Ely Greenstone. Greenstone is also a term used for something different - the official gemstone of Michigan. When a club member asked "Is jade a greenstone?" I knew we were in for trouble. Jade is indeed often a green stone. So are malachite and emerald. But these aren't greenstones. See what I mean by confusing?

Let's start with the Ely Greenstone. Call it greenstone 1. This greenstone term is used by geologist for rocks that have been metamorphosed so that green minerals such as chlorite, epidote, actinolite, prehnite and pumpellyite grow. Many of these rocks start out as basalt lava flows, but were deeply buried in a volcanic pile or suffered mountain building forces. Due to these metamorphic minerals, the rocks take on a distinct, but usually drab, green color. The metamorphic mineral grains themselves are often quite small. In the Ely, Minnesota area there are outcrops of lava flows which were extruded under water about 2.7 billion years ago. They are metamorphosed, and mapped as the "Ely greenstone".

The greenstone gems of Michigan - which we'll call greenstone 2, are nodules of the mineral pumpellyite. Usually pumpellyite is in tiny fibers scattered through a rock. In the basaltic volcanic rocks of Michigan's Keweenaw Peninsula, however, pumpellyite can form rather solid nodules of coarsely fibrous material filling in old volcanic gas bubbles (which geologist call amygdules). This dark green mineral has a Mohs hardness of 6, and takes on a good polish, showing interesting mottled patterns and chatoyancy. It weathers out of the volcanic rock and may be stream or wave polished, showing up on nearby shores or stream beds. The variety name of this material is chlorastrolite, meaning "green star stone". Since this is hard to spell, and not all that easy to pronounce, folks began to call this stuff simply greenstone. Or, for the purposes of this article, greenstone 2.

So, to recap, greenstone 1 is rock that may (or may not) have pumpellyite in it, and doesn't usually have much lapidary value. Greenstone 2 refers to a particular type of pumpellyite found in Michigan that does have lapidary value.

At the risk of confounding the issue still more, the volcanic rock in which the chlorastrolite - greenstone 2 - is found has been metamorphosed by being buried deep in a volcanic pile. In addition to pumpellyite, the green minerals chlorite, epidote and prehnite have formed. That means the rock is now greenstone 1. So we have greenstone (2) nodules in greenstone (1) rock. Let's just stick to pumpellyite or chlorastrolite for the mineral. O.K.?

As a closing story, I was on an old mine dump on the Keweenaw one Sunday afternoon. A group of obvious novices drove in and stated walking around the dump in sandals. One guy brought over a sample for me to look at. "Look at this green stuff. Is this copper?" he asked. The rock was full of beautiful pumpellyite nodules. "No", I said, eyes bugging out a bit, "they're greenstones!" "Oh" he said, and tossed the rock on the ground before I could explain that it was a good find. "Let's go," he shouted and they all left. That specimen is now in my collection, labeled, clearly, "pumpellyite in metamorphosed basalt".

- **Dr. Bill Cordua**, University of Wisconsin-River Falls

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Denver Gem & Mineral Show Mini Report

50th Anniversary Show

August 2017

The Denver Gem & Mineral Show will be here before you know it. The dates are September 15 - 17, 2017. The location is the usual Denver Mart, 451 E. 58th Avenue (exit 215 on I-25). REMEMBER THIS IS THE 50TH ANNIVERSARY SHOW AND THE THEME IS GOLD AND SILVER! The Show Chair is **Lesley Sebol**, 720-999-1372 or lesleysebol@gmail.com.

In the past couple weeks there has been tragic and significant events affecting the show. Our dear and valuable committee member, **Sharon Hannu**, passed away due to complications from back surgery. As a result, her husband, Martin, has resigned from the committee. This leaves the committee with two important vacancies, Buildings and Grounds and Volunteer Check-In, and the show is only one and a half months from now. Per Show Chair **Lesley Sebol**, **Ron Snelling** and **Mike Dempsey** have graciously volunteered to help out with Buildings and Grounds. There were already a few other open positions on the committee. These are Signs, Take Down, Pin Design, and Database. SO THE SHOW NEEDS HELP FROM THE CLUBS TO FILL THESE POSITIONS ON THE COMMITTEE ON A RELIABLE BASIS. I cannot emphasize this enough! Come on club members! Let's fill these positions so the show will go on. If you love and appreciate the show, then think about helping out. Think about all the events, opportunities, excitement, and experiences the show provides. Think about all the fantastic exhibits, about all the beautiful mineral and fossil specimens on the dealers' shelves, about all the educational possibilities, about the fascinating fluorescent room displays, about the mysterious geodes waiting to be opened for the first time in millions of years, about that mineral or fossil specimen you had been dreaming about but never hoped to find, about all the school children wide-eyed seeing minerals and fossils they never saw before, and about possible exploratory discussions with other mineral and fossil enthusiasts. These are only some of the reasons so many work to support the show. PLEASE JOIN US! The open positions are not that difficult, each has a job description, and other members to help you. Please think about it, contact your club representative (each club has one), and volunteer for one of these positions. We are counting on you!

We hope the clubs and individuals are readying their exhibits for the show. There are many categories possible as well as any individual's subject of interest. In the Species competition, an individual may enter only one specimen in each size or type category - thumbnail, toenail, miniature, cabinet, oversize cabinet, self-collected, best of Colorado, and lapidary/jewelry. For the Species competition, the specimens must be gold or silver specimens (minerals containing gold or silver as major constituents are eligible) in agreement with the show theme. The Pearl Trophy is awarded to the exhibitor of the best crystallized mineral specimen. The competition is open to all exhibitors, and exhibitors are limited to three entries in a given year. Entries may be any crystallized mineral, thumbnail or larger, from any locality; the exhibitor must own the specimens. The Prospector Trophy is awarded to the best field collected mineral specimen found during the year preceding the opening date of the 2017 show. The specimen must have been personally and actively collected by the exhibitor (limited to amateur status) and may be any species, from any locality and any size. An exhibitor may enter up to three specimens. There is likewise a Best Fossil Trophy with the additional requirement that the fossil must be labeled following AFMS fossil labeling rules as modified for the Denver Show. There is also a Junior Prospector Trophy for children ages 6 through 14. Finally, there is the Club Prospector Trophy for Council clubs. In this competition, a club enters a display in a standard Denver showcase and may include three specimens found on a club field trip since the 2016 show. One third of the case score is on showmanship as defined in the AFMS Rules. Of course, non-competitive exhibits are welcome as well at the show. For further information regarding exhibits or these competitions, refer to the application forms or contact Exhibits Chair **Larry Havens** at lwrnchavens@comcast.net. The exhibit forms are on the website:

www.denvermineralshow.com.

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

DENVER GEM AND MINERAL SHOW JOBS

We need help!! The following is a list of jobs that need volunteers. Read them over and sign up for the job(s) that you would like to do. This show is all volunteers. No one is paid. Please come by and join us. You can meet new people and receive free admission by volunteering. Sign-up sheets will be available at your club meetings. The chair person for each committee is listed. Call or email if you have questions about the job.

WORK ANYWHERE: Check this box if you want to volunteer but are not sure what you want to do. The different committee chairpersons will contact you to talk about how you can help.

CLUB BOOTH: Your own club will have a booth and will need to have someone demonstrating or answering questions. You can recruit new members this way. See your club chairman for details of what your club is planning.

SECURITY: Chair Bruce Sales 303-775-2808 or oscar51686@yahoo.com. The main job is to patrol the show floor and the parking lots. Orange security vests and walkie-talkies are provided. Security volunteers do not attempt to apprehend suspected shoplifters, but radio back to the security head. Volunteers are asked for 4-hour shifts at a time. Other security at the show is provided by the Mart and contracted by the Show Committee.

CLERKS TO ASSIST JUDGING: Chair Larry Havens 303-757-6577 or lghavens4@gmail.net. Clerks are needed to assist with judging during the show. These individuals must be willing to work with a team of judges throughout Friday and be able to neatly and accurately record judge's comments. This is a good place to learn first-hand the rules and protocol of judging.

HOSPITALITY: Chairs Kevin and KC Larsen 303-429-6976 or mail@klarsens.net. Need volunteers every day to serve coffee and tea, donuts and snacks to the volunteers and dealers.

GRAB BAGS, PINS, POSTERS SALES AREA: Chair George Daggett, geoddaggett@hotmail.com. This job is sales of grab bags, posters, and pins and is fun because you work mostly with kids. Many volunteers are needed on Friday morning when the school children are at the show.

ADMISSIONS: Chair Kathy Honda 303-556-4498 or email katherine.honda@ucdenver.edu. These are sitting jobs for hand-stampers, ticket-takers and ticket-sellers (need cash handling experience making change and working fast when the crowds arrive).

EXHIBITS: Chair Larry Havens 303-757-6577 or lghavens4@gmail.net. Volunteers are needed Thursday to assist the exhibitors as they register and set up their cases. Help is needed in cleaning the glass window in cases each day for fingerprints, etc.

DEALER CHECK IN: Regina Aumente 505-867-0423 or raumente@aol.com Workers needed Thursday through Sunday. Minimal Typing required.

VOLUNTEER CHECK IN: Contact... Judy Knoshaug 303-423-2923 or jrknoshaug@comcast.net, as Sharon Hannu is missed. Job is Wednesday through Sunday, keeping track of the volunteers and giving out badges. This is a sitting job.

SHOW SET UP: Chair Lee Brown 303-280-2544 or email lwbrkn2@comcast.net. Volunteers are needed to set up Wednesday from about 9:00 a.m. until the setup is finished. We will be cutting plastic, skirting tables, assembling exhibit cases, etc.

SHOW TAKE DOWN: Chair Martin Hannu, 303-550-4936 or icd55mph@centurylink.net . Volunteers are needed Sunday after 5 p.m. Strip tables, take down cases, pack away risers, cases, etc.

SCHOOLS: Chair Judy Knoshaug 303-423-2923 or jrknoshaug@comcast.net. Help with the kids, give them a brief talk about the show, and guide them into the show entrance. Friday morning from about 8:30 a.m. to noon.

[Editor's tip: The sooner you contact your area leader, the more choices you have!]

Selected upcoming LGMC and Earth Science Events

Tue, Aug 15 **Faceters and Cabbers:** at the Columbine Hills Church, 7:30pm.

See announcement =====>

Sun Aug 20 LGMC Summer Picnic, 12 noon.
Sterne Park, South shelter. Don't miss it!
For more info, see Page 1.

Fri Sep 23 First **LGMC Chapter Meeting** of the fall. We believe the program will be on Pyrites of Spain. Please note, the meeting this month only is the **4th Friday**, so that we can go to the Denver show the week before.



For more info about our field trip, see our website, <http://littletongemandmineralclub.com/>

LGMC Summary Minutes, Board Meeting

July 30, 2017

Location: at the home of Charlie and Shelley Wall

Called to order at 2:47 pm

In Attendance: **Charlie Wall, Larry Havens, Travis Leach, Ian Duncanson, Steve Cable, Nick North, Bill Jones, Lesley Sebol, Maxine Sheel**



Minutes of the March meeting were approved with motion from Charlie Wall and second by Bill Jones.

Treasurer's Report: For the period 4/1/17 to 6/30/17 – Income from dues received, 2 small donations and proceeds from Christmas necklace drawing; expenses: included newsletter mailing, club RMFMS insurance, purchase of minerals for door prizes, refreshment expenses, and one memorial tree.

Motion to accept treasurer's report by Bill Jones; second by Ian Duncanson; motion carried.

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

Old Business

- Club case (donated by Dan Lovitt) – Still needs to be picked up from Dan. The search for a permanent/semi-permanent home for the case continues.
- Discussion about role of Historian: Maxine asked if she should continue to create yearly albums of pictures and other memorabilia in light of Carol Nielsen-Alt's project to develop Shutterfly digital albums for people to view and/or purchase. It was decided that until the membership has been properly coached in the use of Shutterfly, Maxine should finish an album for all of 2017. Both she and Carol therefore need all the pictures members can contribute from all club activities/functions. Carol will be asked to write an instruction "manual" for publication in the *Highlites*.
- Nick still needs to deliver (to Jim Hooten) the door prize minerals he acquired from Dan Unruh's sale.

New Business

Membership: Ian distributed list of non-renewing members, some of which are expected to re-up eventually. Maxine volunteered to call some of the likelies.

New members: Ian D. presented applications from new members: **Sam Hays, Harmina Prins, Nancy Caras, Rachael Kaiser, Doris Wright, Cindy Hoaglund,** and **Angela Clark.** Motion to accept carried.

Reminder to the Board:

At the April Board meeting **Dale Gann** asked the Board to consider purchasing 1 or 2 corded microphones for the church. This would be a donation. Cost figures and need not as yet determined, this discussion was tabled until the next meeting. *This issue was not taken from the table at this meeting and needs to be addressed in September.*

- Club Picnic: Jim H. will be asked to get the fried chicken; the Sheels volunteered to bring lemonade and water; Ian D. will check with **Anne Jenkins** about supplies.
- Keith said he has a jade pendant and earrings ready for the picnic drawing.
- Club Claim: Charlie W. will be renewing the club claims in near future.
- Periodic Report for LGMC with the Secretary of State (an annual process) is due in September – Charlie was assured it was a simple process.
- With **Lou Conti**'s stepping down from his post as a trustee-at-large, discussion ensued regarding the need to replace him. These "at-large" positions are essentially honorary and used to maintain continuity of tradition and the offer-holder's expertise/experience. These positions are not described in the club By-Laws and require that a retiree be replaced unless the Board so desires for cause.
- Steve Cable verified that he would be stepping down as *Highlites* editor at the end of December. Replacement will be sought.
- At this year's Denver Show, ID/advertising cards will be put in all the grab bags donated by each club.
- The club tri-fold advertising brochure needs to be republished; Maxine reminded us to make sure the description of one of the specimen photos be corrected.
- The family currently housing the 24," club rock saw reports that it needs oil. It was noted that replacement oil should be their responsibility since they use the saw extensively. It was suggested that the family might designate a monthly club weekend when members could arrange to cut rocks for a nominal fee. Charlie will discuss this with them.

Programs: Bill Jones reported that the October speaker will be **James Hagadorn.** He is still working on **Joe Doris** for Sept. Alas, Bill Jones also intends to relinquish his post as Program chair. Volunteers, please step up.

Field Trips: No updates.

Faceters and Cabbers: Next meeting: August 15.

Mineral Study: Probably resume in October – 4th Wednesday – likely at Nick North's.

Next Board Meeting: Monday, 9/25/17 at the church
Adjourned 4:11 pm.

Respectfully submitted,
Larry Havens, Secretary

Agate Hunters Point Way to an Impact Crater

Recognition that some agates can form in rocks produced from the impact of an asteroid on the earth has lead Finnish geologists to the site of a previously unrecognized impact crater. This is one example of how observations made by rock hounds can lead to a major scientific discovery. Finland is a bit like Minnesota and Wisconsin in that much of it is covered by glacial sediments, with little bedrock exposed. In the 1960's rockhounds began finding agates in the gravel pits north of Helsinki. These were attractive banded nodules up to 2 inches across. Their color bands ranged from white to red to brown to reddish orange. Chlorite and various zeolites minerals, particularly mordenite were associated. Unlike Minnesota and Wisconsin, the bedrock of Finland was not volcanic, consisting mostly of schist, gneiss and granite which do not bear agates. The bedrock source of these agates was unknown, and constituted a major mystery.

A Finnish geologist, H Papunen, noted that the agates were found with chunks of other rocks that were typical of those found in craters formed by asteroid impact with the earth. Rocks melted by such a powerful event would form gas bubbles just like those in conventionally formed lava flows. These gas bubbles could then easily be filled later on by agate-forming solutions. The agates, being so hard and chemically resistant were much more likely to survive weathering and erosion than the typical rocks formed by such impact. Consequently the agates would be widely dispersed by the glacier that scraped through the older crater. Papunen (1969) began plotting the location of the pits in which rockhounds were finding agates. Those pits formed a distinct trail leading north. Using the known direction of glacial movement in that area, he was able to trace the agates back to what he thought was the buried site of the crater. Drilling and geophysical work verified that there was in fact a buried crater there. This crater came to be called the Lake Saaksjarvi crater, and turned out to be 5 kilometers across. None of it outcropped at the surface.

A recent study by Karla Kinnunen and Krisitan Lindqvist (1998) of the Finnish Geological Survey investigated whether these agates were different from agates formed in other environments. They found that the impact agates were similar in all measured physical, chemical and structural aspects to those agates formed in sedimentary or volcanic environments. Consequently, the presence of agates in an area such as ours, where agates from other sources are widely distributed in the glacial drift will not be useful in identifying the location of buried asteroid impact sites. In other areas, where agates aren't ordinarily found in the bedrock, agates may form a useful "path-finder" mineral pointing the way to the discovery of more impact structures.

~ **Dr. Bill Cordua**, University of Wisconsin-River Falls

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References:

Kinnunen, K and Lindqvist, K., 1998, "Agate as an indicator of impact structures: an example from Saaksjarvi, Finland," *Meteoritics and Planetary Sciences*, vol. 33, #1, p. 7-12.

Papunen, H. ,1969, "Possible impact metamorphic textures in the erratics of the Lake Saaksjarvi area, Finland," *Bull. Geol. Soc. Finland*, vol. 41, p. 151-155.

Club Announcements



Welcome to our new members:

Sam Hays, Harmina Prins, Nancy Caras, Rachael Kaiser, Doris Wright, Cindy Hoaglund, and Angela Clark

Moving? Change of Address, Email or Phone Number? Ready to go paperless?
Please notify **Ian Duncanson** of any changes at idunc@q.com or 303-798-9174.

Club Vests Show your club support at the meetings and other events! **Ian Duncanson** has club vests available for sale. Price includes vest, sewed on club patch (on back) and a club pin

\$18 for small and medium sizes

\$19 for large and X-large sizes

\$20 for XX-large and XXX-large

Do you know someone who could use some sunshine? Nobody knows everybody. If you know of a club member or family who is having a health problem or other problem, and who could be encouraged by receiving a thinking-of-you card, please let us know so that we may encourage them. Send a note to our sunshine coordinator and let her know, **Lynette Warren**, flywithle123@comcast.net.

Thank you to everyone who contributed to the newsletter!

~Steve

🌀 2017 Board of Trustees 🌀

President	<i>Charlie Wall</i>	303-933-0368
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>Travis Leach</i>	303-887-9787
Program Chairman	<i>Bill Jones</i>	303-503-6288
Field Trip Chairman	<i>Jim Hooten</i>	303-770-7177
Highlites Newsletter Editor	<i>Steve Cable</i>	303-868-9931
Trustee (Year of 2017 as past President)	<i>John Smith</i>	720-981-1368
Trustee (2 year term 2017 & 2018)	<i>Nick North</i>	303-840-1177
Trustee (2 year term 2016 & 2017)	<i>Bill Jones</i>	303-503-6288

🌀 Chairpersons & Appointed Officers 🌀

Trustee-at-Large	<i>Lou Conti</i>	303-797-3205
Trustee-at-Large	<i>Dale Gann</i>	720-981-5526
Trustee-at-Large	<i>Jim Hurlbut</i>	303-757-0283
Sunshine Chairperson	<i>Lynette Warren</i>	303-956-4634
Refreshments	<i>Anne Jenkins</i>	303-730-7696
Librarian	<i>Mary Davis</i>	303-680-5112
Historian	<i>Maxine Sheel</i>	720-532-0784
Junior Historian	<i>Chloe Lovitt</i>	303-791-3112
Photographer	<i>Bob Zartman</i>	303-973-0405
"	<i>Mike Snively</i>	720-981-0752
Junior Photographer	<i>Hunter Kokkinen</i>	720-922-1096
Hospitality	<i>Nick North</i>	303-840-1177
Grab Bags	<i>John Kleber</i>	720-851-8510
Web Administrator	<i>Gus Hanson</i>	
Show Committee Representative	<i>Open</i>	Open
RMFMS & AFMS Representative	<i>Jim Hurlbut</i>	303-757-0283
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.

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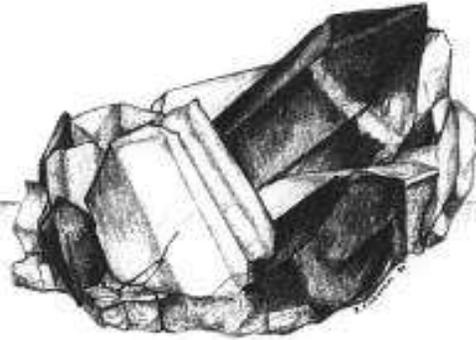
****The deadline for submissions is the 1st Friday of each month.** Please send your material by email to stevecableisthinkingofyou@gmail.com.

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



HighLites

LITTLETON GEM & MINERAL CLUB



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