

THE PICK & SHOVEL



In association with

The Official Publication of the
Lincoln Gem &
Mineral Club, Inc.



The Midwest Federation
of Mineralogical and
Geological Societies



The American
Federation of
Mineralogical Societies

The purpose of this corporation shall be to study, promote an interest in, and disseminate knowledge of lapidary and various Earth Sciences including but not necessarily limited to Geology, Paleontology and Mineralogy. It shall be a particular purpose of the corporation to provide education in these fields to its members and the general public, especially to youth and student groups.

Please keep an eye on the next issues of the Pick & Shovel and the website, for news about upcoming meetings. As COVID-19 numbers continue to rise, there could be more cancellations and changes to our meeting location. We are looking into setting up Zoom meetings if we can't meet in person.

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- 3 years: Jim Atkins
Open

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Sharon Marburger
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DEADLINE:

Date of Board Meeting, usually 1st Wednesday of the month.

STANDING COMMITTEES**Audio/Visual:**

Jayne Beer

Audit:

Ed Dvorak, Jayne Beer
James Marburger

Christmas Party:

Edward Ridge

Door Prizes:

Corey Beer, Brett Jurgens, Charles Wooldridge

Facebook:

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Membership Record:

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MWF Liaison:

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Charles Wooldridge, Brett Jurgens

Property:

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Recognition/Awards:

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Refreshments:

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Show—2021:**Swap—2021:**

Brett Jurgens

Website:

Jim & Sharon Marburger

Youth Activities:

Brett Jurgens, Corey Beer, Sampson Bayer

ADVERTISING INFORMATION

Advertising by rock / hobby business or interest is permitted with the approval of the Board of Directors. Contact the Editor with your proposed ad. The rate is set at \$20.00 per full page; \$10.00 per 1/2 page; \$5.00 per 1/4 page (minimum) per issue, paid in advance to the Club treasurer. Ads will be placed throughout the newsletter as space permits.

MEMBERSHIP INFORMATION

Membership dues for the Lincoln Gem & Mineral Club are as follows:

- Adults (age 16 and over) - \$20 per year or \$30 per couple (within the same household)
- Juniors - \$3 per year (with a responsible adult)

All new memberships must be accompanied by a written application. Prospective members must gain Board approval and attend one regular meeting before paying dues. Applications are available on the website: <https://www.lincolngemmineralclub.org/about/membership>, or you may contact Treasurer Vera Lyman for a printed copy.

GENERAL MEETINGS:

Monthly meetings are held on the **third Thursday** of the month during February, March, April, May, September, October, and November. The January meeting is held on the **fourth Saturday** and also includes the Mid-Winter Rock Swap followed by a Club Supper. The December meeting is held on the **first Sunday** and includes the annual Awards Presentations and Potluck Christmas Party.

Youth activities begin at 6:00 p.m. and adult meetings begin at 7:00 p.m. at the Bethany Park Shelter House.

**Next General Meeting
September 17, 2020**

Tentative Program:
“Gemstone Drilling”
Live Presentation by Jim Marburger

BOARD MEETINGS:

Most Board Meetings are on the first Wednesday of the month at the home of Vera Lyman, beginning at 6:30 p.m.

Exceptions: If the first day of a month falls on Thursday, the meetings will be changed to the **last Wednesday** of the **previous** month. This allows a minimum of 10-days public notice of the meetings, per Corporation rules.

**Next Board Meeting:
(tentative) September 3, 2020**

SHOWS:

MWF Convention, Howell, Michigan
September 18-20, 2020

AFMS Convention, Knoxville, Tennessee
October 15-17, 2020

LGMC 2021 Show: Lincoln, Nebraska
April 3 & 4, 2021

FIELD TRIPS, ROCK PARTIES, OTHER ACTIVITIES:

At this time, no activities are planned, due to the COVID-19 pandemic.



August: Rowdy Cropp
Nyky Lytle
Karen Messenger



2021 SHOW COMMITTEE

- Chairman:
- Dealers:..... Vera Lyman
- Demonstrators:..... Vera Lyman
- Displays:..... Jayne Beer, Ed Ridge
- Event Center Liaison Vera Lyman
- Finance & Ticket Sales:..... Jim Atkins, Vera Lyman
- Floor Chairman:.....
- Fluorescent Booth:.....
- FormsSharon Marburger
- LGMC Club Booth:
- Nebraska Gem Dig: Charles Wooldridge
- Plants:Ed Ridge
- Printed Program:.....Sharon Marburger
- Publicity & Promotion:..... Jim Marburger
- Ribbons & Recognitions:.....Sharon Marburger
- Security:..... Vera Lyman
- Show Flyer.....Sharon Marburger
- Silent Auction:.....Sharon Marburger
- Special Features:.....
- Web Master: Sharon Marburger
- Youth Activities:..... Brett Jurgens, Corey Beer

All articles, tidbits, and photos not individually identified as being contributed to this publication are provided by the Editor.

PRESIDENT'S MESSAGE

by Charles "Wooly" Wooldridge

As I write this message, the rivers and streams in Southeast Nebraska have been running full for a couple days. Some have reached moderate flood stage. This means, unless we get more rain, conditions should be good in a few days to collect on gravel bars. Most streams in this area, including the Big and Little Nemaha Rivers, the Big and Little Blue Rivers, and their tributaries, are excellent sources for agates, petrified wood, fossils, and artifacts. Did you know that Nebraska has more miles of streams than any other state? We are also blessed with an abundance of Ice Age fossils.



In an article I read about Amazonite, I was reminded of the field trip to Colorado that LGMC took a number of years ago. We met up with Joe Doris at his topaz mine and helped him mine topaz for a day. The area is near Lake George in the Tarryal Mountains. The next day we went to his amazonite claims and found lots of smokey quartz and amazonite. Both of these sites have been



featured on the TV show "Prospectors". We all had an amazing time!

With the incidents of Corona Virus continuing to rise, it does not appear with any certainty that we are going to be able to meet in person any time soon. With this in mind, I think we need to consider how we can stay in touch with one another. One way, of course, is through this newsletter. You don't have to be a writer; hell, I'm only half literate; to share your thoughts and activities related to the hobby. Let's share with one another ideas to make our club even healthier when we come out the other side. What would be your dream field trip? What would you like to know more about? Another vehicle for communicating is through Facebook. We have a group there where we can share pictures, related articles and so forth. The Cedar Valley Rock and Mineral Society is a good example of a club doing this. There are many Facebook groups that are relevant to our hobby. Off the top of my head, I can think of: Lapidary Tips and Tricks, Lapidary Equipment Marketplace, Cabs and Slabs-The Slab Depot, and Lincoln Metalsmith. What other ones are you aware of?

We may want to have Zoom meetings for a while. Is there anybody that has the initiative and skill to set this up? Please let me know.

Well, I've sputtered long enough. Take care, stay safe, good hunting, and I hope to see you soon.

Silversmithing classes 2020 Schedule

Tuesday Evenings
7:00 p.m. - 10:00 p.m.

**The Jewelry Connection Ltd.
Indian Village Shopping Ctr.
13th & Arapahoe, Lincoln**

Tuition: \$150 plus \$30 supply deposit

~~Session 1: Jan 8 - Feb 26~~

~~Session 2: Mar 5 - Apr 23~~

~~Session 3: Apr 30 - Jun 18~~

Session 4: Aug 13 - Oct 1

Session 5: Oct 8 - Nov 26

Contact: Jayne Beer 402-890-3307
Judith Bay 402-423-7058
jbeer60070@aol.com

ASBESTOS IN JEWELRY: ARE YOU WEARING ASBESTOS GEMSTONES?

by Michelle Whitmer, Outreach & Awareness
Asbestos.com,

<https://www.asbestos.com/blog/2020/04/20/asbestos-jewelry-mesothelioma/?fbclid=IwAR2IYhJUtjPlncltacqObkVkoF8vrkbg4FJ7MbF3RbHmgqidq49vVMvjcgk>

Apr 20, 2020

One of the lesser-known sources of asbestos exposure could be hiding in your jewelry box. If you like to wear gemstone jewelry, you might be wearing asbestos without knowing it.

Gemstones are pieces of mineral crystal that have been cut and polished. Also known as gems, jewels or semiprecious stones, they are widely available online, in retail stores and in open-air markets to wear as jewelry or to collect as mineral specimens, the latter of which is popular among children.

While these gemstones are unlikely to result in dangerous exposure for those who wear them, they could result in minimal exposure if they break.

(Continued on page 5)

ASBESTOS IN JEWELRY—CONTINUED*(Continued from page 4)*

Children who play with asbestos-containing gemstones run the risk of exposure if they damage, grind or break them.

The highest risk of exposure to asbestos through gemstones is faced by jewelers. Scientific studies have revealed cases of cancerous and noncancerous asbestos-related diseases among jewelers. The risk is low, but it remains a threat because it is legal to sell, buy and use asbestos-containing gemstones in the U.S.

Tons of fibrous gemstones, some of them containing asbestos, are traded in global markets on a daily basis. In the U.S., most gemstone mining is conducted by gem clubs, individual collectors and hobbyists. The businesses that sell natural gemstones in the U.S. are typically small, averaging about three employees, and they operate independently.

The process of cutting, shaping and polishing gemstones is known as lapidary. Lapidarists [*sic*] and jewelers use high-speed lapidary saws and abrasive rotary equipment to create polished gems for use as pendants, charms, beads and ring inlays. Lapidary of asbestos-containing gemstones can release significant amounts of asbestos fibers into the air.

In 2003, geoscientists at Pennsylvania State University used high-powered microscopes to study the structure and composition of tiger's eye. Prior to the investigation, mineralogists assumed that tiger's eye formed after crocidolite asbestos was replaced with quartz.

Penn State's researchers discovered that tiger's eye forms when veins of quartz fill in breaks that form in crocidolite asbestos. Rather than replacing crocidolite, the quartz forms a vein alongside it. As the iron in the crocidolite oxidizes, it develops the

brown and gold colors that tiger's eye is known for.

How Are Jewelers Exposed to Asbestos?

The primary ways jewelers have been exposed to asbestos include:

- Sanding, cutting and shaping asbestos-containing gemstones.
- Manufacturing asbestos-containing soldering molds that shape jewelry pieces to be soldered (fused together). The soldering board on which this work was performed was also made of asbestos.
- Cutting asbestos sheets to line casting molds that were baked in ovens to make pieces of jewelry.
- People who worked around these activities, especially anyone who swept asbestos dust in jewelry shops, were at risk of asbestos exposure.
- Those who collect, handle and transport raw asbestos-containing gemstones are also at risk of exposure.

How Can Jewelers Avoid Asbestos Exposure?

Jewelers should do the following to limit asbestos exposure:

- Avoid working with gemstones known to contain asbestos.
- Use a respirator mask with a high-efficiency particulate air filter or an N-100, P-100 or R-100 mask.
- Use tight-fitting protective eyewear to prevent asbestos dust from causing eye irritation.
- Work in a properly ventilated area, which may include using a ventilation system in a jeweler's workshop.

*(Continued on page 6)***J J & L Rocks & Minerals**

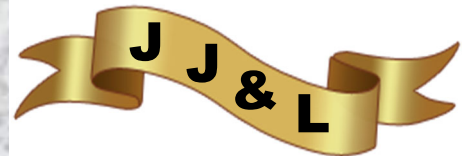
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Proudly serving
the hobby for
44 years

ASBESTOS IN JEWELRY—CONTINUED

(Continued from page 5)

Jewelers working with asbestos-containing gemstones are required by law to double-bag asbestos waste in 6 milliliter bags, place it in a sealed plastic container, label it properly and pay to dispose of it in a government-designated landfill. Those who do not follow these regulations face steep fines.

Mesothelioma in the Jewelry Industry

Asbestos in jewelry has exposed jewelry workers and caused some of them to develop asbestos-related diseases, including mesothelioma. These cases were connected to asbestos used in soldering, which is a process that connects pieces of jewelry together.

A 1992 case report published in American Journal of Industrial Medicine reported on a case of mesothelioma in a commercial jewelry worker. A 61-year-old man was diagnosed with pleural mesothelioma and his only known exposure was manufacturing asbestos-containing soldering molds.

For 35 years, up until three weeks prior to his mesothelioma surgery, the patient made asbestos soldering molds at a costume jewelry production facility by hand-mixing asbestos powder with plaster of Paris and water. Analysis of his lung tissue revealed both chrysotile and amosite asbestos fibers.

Other cases of cancerous and noncancerous asbestos-related diseases have been documented in jewelry industry workers:

- Another case of mesothelioma was documented in a 44-year-old woman who worked with asbestos-contaminated talc for 20 years in a costume jewelry facility.
- A mesothelioma patient involved in a hospital study reported that he worked in the jewelry manufacturing industry.
- A cluster of mesothelioma cases was documented among Native American silversmiths.
- Cases of pleural plaques and asbestosis were previously reported among jewelry workers in Rhode Island.
- Pleural plaques and asbestosis have been documented among jewelry workers in Denmark.

Gemstones have fascinated people for centuries. They not only like to collect them and wear them as jewelry, but some people believe they contain metaphysical qualities. For example, the gemstone known as green zebra jasper, which contains chrysotile asbestos, is said to balance out the lives of those who possess it.

The risk of asbestos exposure among people who

wear asbestos-containing jewelry is low, but jewelers and lapidary workers face a higher risk of exposure and long-term health consequences.

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JUNIORS

by Brett Jurgens, Junior Co-leader

Hello Juniors! What a strange year this has been. First off, I hope all of you and your families are doing well.

Earlier this week, I judged 4-H photography at the Lancaster County Fair. I have been judging at this fair for over 20 years. This year was a year of firsts. We judged remotely from home; participants uploaded their photography to a website and we logged in to look at the entries and judge. While there were a few technical issues that mainly increased the time it took, everything went well. I was glad to be judging photography rather than other divisions. The baking judges were only able to watch an uploaded video, they were not able to taste any of the baked goods. While it was not a typical judging experience, we were able to adapt and overcome.

Typically, the club and the juniors take the summer off from meeting. However, we are approaching the start of the school year, and when the club would usually start to have meetings again. It may be awhile before we are able to meet in person. As a club, we have to look out for each other. I would like to get feedback from you and your parents regarding having meetings online. Would you prefer having a live meeting online, or activities and projects posted? We have a wonderful curriculum through the Future Rockhounds of America program, and I would like to get started on that.

Please send me an e-mail at quartz89@aol.com and let me know what meeting format you would prefer to see this fall. I look forward hearing from you. Stay safe.

ASBESTOS IN JEWELRY - CONTINUED

(Continued from page 6)

PRESIDENT CHARLES WOOLDRIDGE
 NOTE: This article failed to mention the importance of water. You should always grind and sand under a steady flow of water to prevent dust from getting in your lungs. However, if you prefer dry polishing, always use a good quality mask. There are a number of really nasty lung conditions that you could develop from inhalation of asbestos micro fibers. In fact you should take these precautions even if the material does not contain asbestos. Silicosis is a lung fibrosis caused by the inhalation of dust containing silica (silicon dioxide); in other words, quartz.

A CALL FOR INFORMATION

By Brett Jurgens, 2nd Vice President

As a junior, I can remember spending countless time at the shows watching Ed Junker's homemade sphere machines slowly grind and polish rocks into beautiful spheres. I feel there is a disconnect with the current generation of youth and mechanics. That is one of the reasons I truly love all the demonstrators we have at the our shows and public gatherings. Just earlier this year, I watched kids crowd around Jayne and Corey Beer as they showcased their Genies at the LPS Science Fair.

Out of personal interest, I have been looking into lapidary equipment made in Nebraska. I know of Ed Junker's sphere machines; and Stan Shurtleff's vibrating laps, saws, tumblers, and sphere machines. Who in the club uses equipment made by these two? Does anyone know of any other makers of lapidary equipment in Nebraska?

Reading through past issues of the Pick and Shovel, I have seen ads or read of rock shops and clubs unknown to me. I would like to hear of rock shops in Nebraska, past and present, as well as past and present clubs located throughout the state. I have fond memories of saving my money to go shopping at Wooly's shop in his basement. He would call when he got a new shipment in and we would go over to see what he had. I still get excited thinking about walking down those steps. Do you have a favorite memory of an event or rock shop? Please let me know. quartz89@aol.com

Gemstones Known to Contain Asbestos

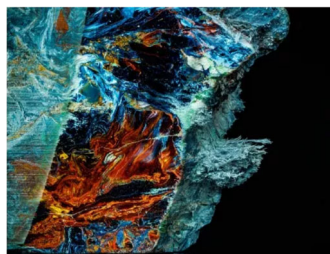
- | | | |
|------------------|------------|-----------|
| Tiger's eye | Pietersite | Hessonite |
| Grossular garnet | Binghamite | Brucite |
| Cat's eye | Yuksporite | Natrolite |
| Hawk's eye | Denisovite | Mesolite |
| Silkstone | Tokkoite | Scolecite |



These polished jewelry beads contain pure chrysotile asbestos.



This specimen is an example of blue crocidolite asbestos, which has the potential to transform into tiger's eye.



Pietersite contains blue crocidolite asbestos, which is considered one of the most dangerous minerals known to human health.

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A color version of the Pick & Shovel is available at:
<http://www.lincolngemmineralclub.org/index.php/newsletters/current>

PICK & SHOVEL

LGMC FACEBOOK GROUP - HOW TO POST TO THE GROUP FEED

By Jim Marburger, Facebook Administrator

If you are not already a member of the LGMC Facebook Group, request to join the group. Complete the requested information. Once you have been approved/accepted, you are a member of the LGMC Facebook Group, **not a member of the club**.

You are now able to post to the group. Post only hobby-related items.

If you do not yet have a Facebook account, you must set one up in order to access the group. Go to [facebook.com](https://www.facebook.com) and follow the instructions for creating an account.

Posting to the LGMC Facebook Group is done the same way as posting to your personal account. Go to the Group feed and post. It's as simple as that!

If you want to share another post, share the article to a group instead of Facebook by using the drop down box on the share page. When you opt to share to a group, it will ask which group or show the groups you can post to. If you can't find the share to a group option on the page you want to share, click the three dots in the upper right corner and select copy link. Then paste in the comment in the group you want to share with.

If you need assistance, please contact me.

