



PICK & SHOVEL

January 2016, Volume 58, Issue 5

Editor: Sharon Marburger

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.

BOARD OF DIRECTORS

President

Ed Dvorak, 402.946.3041
ed20649@windstream.net

1st Vice-President

Jayne Beer, 402.890.3307
JBeer60070@aol.com

2nd Vice-President

Charles Wooldridge, 402.416.3233
charles.wooldridge@nebraska.gov

Treasurer

Vera Lyman, 402.464.6089

Secretary

Jim Marburger, 402.430.6703
ed20649@windstream.net

Board Member

Carolyn Ashmore, 402.325.8878
saturn1_101@hotmail.com

Board Member

Fred McVay, 402.421.6724
fmcvay@twc.com

Board Member

Andrew Tiedje, 402.219.2323
silverjinnstudios@gmail.com

Board Member

Sharon Marburger, 402.792.2348
lgmc.editor@windstream.net

2016 MEETINGS AND ACTIVITIES

Regular monthly meetings are held at 7:00 p.m. at the Bethany Park Shelter House. Youth activities begin at 6:00 p.m.

Jan. 23: Mid-Winter Swap

Set-up at 12:00 noon; Open to Public 1:00 - 5:00

Juniors Meeting at 5:00 (GOLD!!)

Pizza Supper at 6:00 p.m.

Meeting at 7:00 p.m.

Program: Gold Panning

Feb. 18

Mar. 17

Apr. 21

May 12 (Please note the May 2016 meeting is to be held on the second Thursday of the month)

Board

Feb. 3: The Jewelry Connection

Mar. 2: Fred McVay Residence

Apr. 6: TBD

Apr. 27 (May Meeting): TBD

Activities

Mar. 13: Geology Day

Science Fair: TBD

Apr. 1: Show Set-up Day

Apr. 2-3: Annual Show

REFRESHMENTS

January:

Everyone brings crackers, cookies, and other finger foods to the Mid-Winter Swap

Vera will have a sign-up sheet at the January meeting to sign up for future months

JANUARY BIRTHDAYS

**Brian Beer
Linda Guenter
LGMC!**



**Mid-Winter Swap
January 23, 2016
Bethany Park Shelter House
1:00 - 5:00 p.m.**

PRESIDENT'S MESSAGE

by Ed Dvorak

Happy New Year to everyone!

It sounds like the 2016 year is off to a great start, yeah right! It is good to hear that our club members took care of our meeting site. THANK YOU.



I hope everyone had a great New Year's day. Plenty of food, TV, and a nice nap; I know I did. Now is the time to look back at 2015 and think about what we could do differently in 2016. There might be nothing to change, but things could always be improved a little. I, myself, could use lot of improvement. Anyone who does not like what they see or hear, and if I can make a difference, please let me know. Thank you.

Do not forget about our January Swap coming up and our meeting afterwards. We also have the BIG SHOW in April. Ask if there is something you can do to help make both events super.

Be happy and safe, and I'll see you at the Swap.

**There will be no
January Rock Party
due to the Mid-Winter Swap**

**Make copies of the
Mid-Winter Swap
flyer on page 3 and
distribute to various
businesses, friends,
and bulletin boards.
Copy two or four
to a page!**

GENERAL MEETING MINUTES

December 6, 2015 General Meeting & Christmas Party
Bethany Park Shelter
Submitted by Pat Dvorak

- ◆ Junior and Adult Awards were awarded before the meeting. The Rockhound of the Year was awarded to Jayne Beer.
- ◆ President Ed Dvorak called the meeting to order at 7:10 p.m.
- ◆ 27 members, 10 Juniors, and 5 Junior guests were present.

OLD BUSINESS

- ◆ Secretary Pat Dvorak read the minutes of the November General Meeting. Richard Peterson moved and Jim Marburger seconded to approve the minutes as read. Motion carried.
- ◆ Treasurer Vera Lyman read the Treasurer's Report. Wooly Wooldridge moved and Breanna Suhr seconded to approve the report as read. Motion carried.
- ◆ Jayne Beer gave info on the Mid-Winter Swap being held on January 23, 2016 at the Bethany Park Shelter from 1:00-5:00 p.m. Members are asked to help set up at 12:00 p.m. with 1:00 p.m. opening to the public. Tables are \$10 for 1/2 table and \$20 for the whole table. Members are asked to bring snacks. A pizza supper will follow after the Swap for members and swappers. There will also be a short meeting after the meal.
- ◆ Jim moved and Richard seconded that the meeting be adjourned at 7:25 p.m. Motion carried.

JUDITH BAY'S RETIREMENT RECEPTION

All LGMC members are invited to attend
a retirement reception for Judith Bay
on Sunday, February 7, 2016
from 2:00 to 4:00 p.m.
at the Colonial Chapel,
5200 R Street, Lincoln.

See the flyer on page 4 for more information.



LINCOLN GEM & MINERAL CLUB'S
37th Annual Rock Swap

Saturday, **JANUARY 23, 2016**; 1:00 p.m. to 5:00 p.m.

**Family
 Friendly**

**Free
 Admission**

**Silent
 Auction**

**Buy
 Sell
 Trade**



**Rocks
 &
 Minerals**

Fossils

Jewelry

**Lapidary
 Supplies
 &
 Equipment**

Bethany Park Enclosed Shelter

64th and Vine Streets

Swapper Tables: ½ Table - \$10; Full Table - \$20 - Set up at 12:00 Noon.
 Swappers are responsible for collecting Nebraska State Sales Tax and remitting it to the State.


**Cash Sales must be completed using SWAPPER DOLLARS.
 SWAPPER DOLLARS are available from the Club Treasurer at
 a 10% surcharge, payable by the buyer.**

LINCOLN GEM & MINERAL CLUB
 Box 5342
 Lincoln, NE 68505-0342
 Contact: Jayne Beer, 402.890.3307

Please join us in celebrating Retirement for

JUDITH

FEBRUARY 7TH 2:00 – 4:00 PM



Happy Retirement Judith Bay!

RETIREMENT RECEPTION

A big episode of professional life has ended and a new fresh episode is about to begin! Come join us in kicking off the best retirement ever...
A card, a shared work memory, with your presence is so appreciated!
February 7th, 2:00 – 4:00 p.m. Colonial Chapel 5200 R Street, Lincoln

Silversmithing classes

Tuesday Evenings

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

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

Tuition: \$120 plus \$30 supply deposit

Session 1: Jan 5 - Feb 23

Session 2: Mar 1 - Apr 19

Session 3: Apr 26 - Jun 14

Summer Break

Session 4: Aug 9 - Sep 27

Session 5: Oct 4 - Nov 22

Contact:

Jayne Beer 402-890-3307

Judith Bay 402-423-7058

or e-mail

jbeer60070@aol.com

MINERAL MONKEYS

by Carolyn Ashmore

HAPPY 2016 JUNIORS!!

I need to remind everyone that the juniors' meeting will be immediately following the Mid-Winter Swap on January 23, which runs from 1:00-5:00 p.m. This means we will be meeting at 5:00 instead of 6:00.



Make sure to come early to the Swap. I will be handing out your earned Monkey Bucks so you can spend them as you wish. There's always something you can find to add to your collections. Don't forget to check out the silent auction table, too. There are good deals to be found here.

The lesson this month is Unit #12: GOLD!!!! We will be talking about prospecting and panning. I will be bringing a modern day gold panning kit to class this meeting. This will give you an idea of what was used in the old days, and what is still used today. We will look at how gold is mined today, and learn where the largest gold mine is in the United States.

For this lesson, I would like you all to write an article about THE MANY USES OF GOLD. And yes, your family and friends can help you with the research. I will give you some ideas of how gold is used today, but this article is yours to write. If you want to show a picture of gold with your article, that would be awesome, too. You will be presenting your articles to the juniors' class at our February meeting. I would like to give some of the articles to Sharon Marburger to publish in the Pick & Shovel. You might even win an award in the Midwest Federation and American Federation Bulletin Editors' contests. YOU CAN DO IT!!!!

I also will be handing out the information that you will need to enter this year's Midwest Federation's Poster Contest, "AMAZING AGATES". We have been talking about this for the past couple of months. The deadline is April 15, 2016, and it will be here before you know it. I would like to have an entry from each one of you. Remember, you gotta be in it to win it!

Rock On!

ALAA NEWS

Wilderness Proposed for Indian Creek Allotment, a Historic Fairburn Agate Area

Reported by Jan Baumeister (SD rep for ALAA, AFMS and the Rocky Mt. Federation)

The Forest Service Buffalo Gap National Grassland rangers in Wall, SD, held two meetings in June with the rancher/permittees of the Indian Creek Allotment, giving them only two days' notice. They were told: "Indian Creek is going into wilderness." The only notice of this meeting was put in the Wall newspaper and not the Rapid City Journal! It seems they don't want all other "users" protesting! This is one of our major areas to hunt Fairburn agates and the rare black agates, plus other specimens. It is the most scenic beautiful area of the grasslands, with badland buttes of golden yellow or a light brick red, topped with a layer of white, with cedar trees, and the creek snaking through the valleys.

Awhile back they finally put a nice graded trail in there, but now they want it closed down in the future to a total wilderness, where one can only hike in or ride in on horseback!

There are six big wilderness clubs in the Black Hills-Badlands areas, and they have the backing of 60 other wilderness clubs and the Nature Conservancy. The main reason behind this wilderness designation is that many people, including one rancher who runs buffalo in Indian Creek during the winter, want this land to be turned back to "wild land." In 2010 the wilderness clubs couldn't get a wilderness bill for Indian Creek Allotment passed by Senator Johnson with the PAC money of 60 wilderness clubs. It's a different situation now.

(Excerpted by Tom Noe from the July-Sept. 2015 ALAA Newsletter) —ALAA is the lobbying arm of the American Federation, working on behalf of rockhounds to keep public lands open and accessible to all, including the elderly and handicapped.

A personal note from Tom: Some years back, I drove my truck down the rough two-track trail into the French Creek area in SD to look for Fairburns. Driving back out at the end of the day, I came up behind an elderly man who flagged me down to hitch a ride back to his car. He had hiked in that morning, but it got hotter than he expected and he was feeling it—didn't have any water and was getting exhausted. If collectors aren't allowed to drive into these areas anymore, some of them are going to hike in and get into trouble like that fellow did.

BOARD MEETING MINUTES

December 2, 2015 Board Meeting
Gere Library
Submitted by Pat Dvorak, Secretary

- ◆ President Ed Dvorak called the meeting to order at 6:30 p.m.
- ◆ 6 members and 2 guests present

OLD BUSINESS

- ◆ Pat Dvorak passed out the November Board Minutes. Sharon Marburger moved and Carolyn Ashmore seconded to approve the minutes after a spelling correction. Motion carried.
- ◆ Jayne Beer passed out the Treasurer's Report in Vera Lyman's absence. Jayne moved and Carolyn seconded to approve the Report. Motion carried.
- ◆ Bob Gruit reported to Jim Marburger that it would be beneficial for the club to pay for the Hartford Insurance and the MWF Insurance. Neither insurance will cover Worker's Compensation. Jayne moved and Carolyn seconded to pay for both insurances. Motion carried.

NEW BUSINESS

- ◆ The Long-Range Planning Committee needs to meet to discuss if the dues need to be increased.

SHOW REPORT

- ◆ Vera reported to Jayne that she sent out demo and selling demo contracts.
- ◆ Ed will check to see what 2 Men & a Truck will charge to tear down after the Show.
- ◆ Richard Peterson moved and Sharon seconded to adjourn at 6:50 p.m.



LGMC is a proud member of ALAA

COOKING TUXEDO AGATE

Published in *The Glacial Drifter*, Vol. 55, No. 3, March 2012

(Topeka Gem & Mineral Society, Inc.)

By Daniel Bontempo, TGMS Member

(Due to outdated information and web links, this article has been edited and updated by the P&S Editor)

Treating or enhancing gemstones is a controversial topic. Most objections pertain to high-end transparent, facet-grade gems, where any attempt to hide flaws could be fraud if not disclosed. Likewise, artificial diamonds or pearls have much lower value than unflawed natural ones. In contrast, with semi-precious gemstones, it is often more acceptable to stabilize or heal material if it means colorful, well-patterned material can be rescued from the scrap heap. Many agates and jaspers have pits, soft spots, or partially-healed fractures. Sometimes whole varieties are known for their problems (e.g., Morgan Hill Poppy Jasper is notoriously fractured). Perhaps this is because the small-dollar value of the slab or cabochon does not change a lot pre-post treatment, so it is not a financial fraud. As noted in an article about gemstone coloring on the Mindat.org ([http://www.mindat.org/article.php/170/Historic + Methods + of +Artificially+Coloring+Agates](http://www.mindat.org/article.php/170/Historic+Methods+of+Artificially+Coloring+Agates)) website, “coloring of gem materials to make them more desirable to the consumer is as ancient as greed and avarice.” Clearly, potential financial motivations are a large part of the controversy.

Nonetheless, semi-precious stone treatments that heal, or other treatments that color or enhance, are not always viewed as negatively. Many semi-precious stone enthusiasts place value on natural and healing (or stabilizing) with a transparent resin, and is generally perceived as less unnatural than changing the color or pattern of a stone. I, personally, have never liked the bright pink, neon purple, and aqua blue dyed Brazilian agate slices found in many gift shops. Besides looking very unnatural, some of the dye is toxic. I usually turn my nose up at dyed material. Sometimes, for some people, heat-treating to bring out reds and browns is not considered beyond the pale of natural. At least toxic chemicals are not involved, and natural variation/pattern is often preserved - only in deeper colors.

One process for dyeing/enhancing agate that I have become fascinated with is called the sugar-acid process, and it has a long history, dating back to Roman times. This process can take an uninteresting pale grayish agate with light (sometimes not too noticeable) white banding and transform it into a vivid

agate with bold white bands against a stark black (or espresso brown) background. Essentially, a dissolved sugar ($C_nH_{2n}O_n$, where n is between 3 and 7) is given time to penetrate the pore space of the agate, and subsequently heated acid is used to strip off the $H_{2n}O_n$ atoms and leave behind the C_n atoms – pure black carbon. It is not known when this was first done, but Pliny The Elder (born 23AD, died 79AD), in his *Natural History*, seems to describe this process using honey and vinegar (acetic acid). [Kurt Nassau quotes applicable passages from Pliny on p69 of the 2nd edition of his book *Gemstone Enhancement: History, Science, and State of the Art*.]

In the 1800s, gem cutters in Germany and elsewhere applied more modern chemistry. Nassau credits a German gem cutter in Oberstein and Idar with rediscovery of the process in about 1820. Sulfuric acid was found to work much better than acetic acid. Daniel Russell, who wrote the above cited article at Mindat.org, excerpts several scientific publications from around 1850 describing the process in some detail. Particular emphasis is placed on the fact that not all agates are porous enough, and noting how water penetrates or beads on the surface can predict whether the agate can be treated. One of the most detailed recipes is given by George W. Fisher in his 1990 book on *Gemstone Coloration and Dyeing*, largely based on his own home experiments. (Text is available at: <http://www.ganoksin.com/borisat/nenam/black-dyeing-agate.htm>). On today's internet, you can find various references to the sugar-acid process, or even recipe details. There are some discrepancies about the exact concentrations, times, and amount of heat/boiling needed, as well as recommended types of agate and slab thickness, so any adventurous lapidary wishing to practice this ancient art should expect to have to work some bits out, or to engage in a bit of trial and error. For example, Fisher mentions boiling acid, but the boiling point is listed on Wikipedia as 639°F., which seems hotter than the hotplate described by Fisher was likely to produce – likely he meant simmer at 300-400°F., where water in less than 100% sulfuric acid can be seen to make vapor bubbles. Fisher recommends Brazilian Agate and agate from Coconut Geodes as having suitable bands in otherwise porous agate.

Periodically, there has been modern commercial manufacture of small sugar-acid batches. My first

(Continued on page 7)

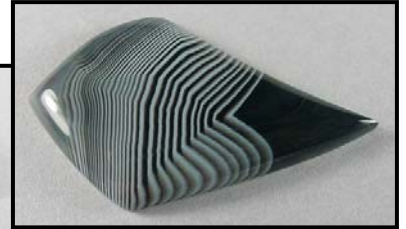
COOKING TUXEDO AGATE - CONTINUED

(Continued from page 6)

introduction was via a stone called Tuxedo Agate, produced by The Gem Shop in Cedarburg, Wisconsin, and sold in Tucson shows in 2005. Slabs, generally cut thin to insure penetration, were also sold. When I inquired, I was told they had used Moroccan Agate.

To date, I have made three batches of Tuxedo Agate from some rather plain Moroccan Agate, and an additional batch with Madagascar Agate, crazy lace agates, and other experimental materials. I also re-cooked part of my first batch because only a dark brown coloring was initially achieved. I recently got some very plain Brazilian agate and hope to get it slabbed and into sugar water before too long. Another small batch has been in sugar solution for a very long time now, and one spring day, I will have a patio cookout. Gloves, pot holders, tongs, eye-protection, fume venting, and all the usual sensible precautions apply. (This includes having a plan to neutralize and dispose of sulfuric acid. Washing soda is great to have on hand.) There have been a few glitches, and I am getting slightly less than 1/8" penetration, so 1/4" slabs may not color all the way through. I figure there is still room to tweak my process, and the ideal agate for dyeing could be found any day. My efforts, complete with pre-post pictures and discussion of difficulties, disappointments, and successes, have been posted on online lapidary forums (see URLs below).

photos from www.samsilverhawk.com



<http://andy321.proboards.com/index.cgi?board=sawingb&action=display&thread=34092>

<http://andy321.proboards.com/index.cgi?board=sawingb&action=display&thread=33886>

<http://andy321.proboards.com/index.cgi?board=sawingb&action=display&thread=38119>

<http://andy321.proboards.com/index.cgi?board=sawingb&action=display&thread=38247>

J J & L Rocks & Minerals

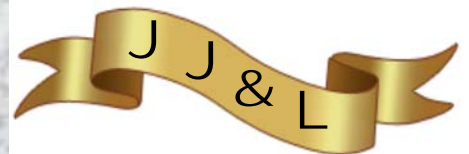
**P.O. Box 68
Hickman, NE 68372**

Lee Harrison
Eric Harrison
402.792.2337

**330 Locust
Hickman, NE 68372**

James Marburger
Sharon Marburger
402.792.2348

jimandjohn@jjlrocksandminerals.com
www.jjlrocksandminerals.com
jjlrocksmin - Ebay Username



Proudly serving
the hobby for
40 years

SPARKY THE SURVIVOR - LIGHTNING WON'T STOP THIS BISON



U.S. Department of the Interior

<https://www.doi.gov/blog/meet-sparky-bison-lightning-strike-survivor>

This is Sparky, one tough bison at Neal Smith National Wildlife Refuge in Iowa. In summer 2013, Sparky was struck by lightning on his shoulder hump.

While doing a survey of bison on the refuge in late July 2013, Wildlife Biologist Karen Viste-Sparkman noticed a bull standing by himself. On closer inspection, it was clear that he had been struck by lightning and burned over a large area of his body. "Sparky" was thin after the strike and wasn't expected to live long. Since a lightning strike is something that could happen to wild bison anywhere, the refuge let nature take its course. But two years later, Sparky is going strong!



Sparky is just one of the bison that call Neal Smith National Wildlife Refuge home. The refuge was established to protect, restore, reconstruct and manage the diverse native ecosystems of tallgrass prairie, oak savanna and sedge meadow. As part of that mission, Neal Smith has a small herd of bison.



U.S. Fish & Wildlife Service

<http://www.fws.gov/news/blog/index.cfm/2016/1/5/Sparky-the-Survivor--Lightning-Wont-Stop-This-Bison>

by Karen Viste-Sparkman, USFWS & Courtney Celley, Public Affairs Specialist, Midwest Region

Can you imagine being struck by lightning? Sparky, a bison at Neal Smith National Wildlife Refuge in Iowa knows exactly what it's like! Sparky was struck in 2013, and is doing surprisingly well. We recently checked in with Wildlife Biologist Karen Viste-Sparkman to learn more about Sparky's amazing story.

Sparky joined the herd at Neal Smith in 2006 after being transferred from the National Bison Range in Montana. As you may have guessed, Sparky earned his name after the lightning strike and is the only bison that has been struck at the refuge - although it does occasionally happen across the country.

Karen does regular checks on the bison to watch for signs of illness and check body condition. During a survey in late July 2013, she noticed a bull standing by himself. When she took a closer look through her binoculars, she noticed that Sparky looked bloody. This wasn't entirely surprising because bison bulls will often fight during the mating season and July tends to be a prime time for injuries. Upon closer inspection, it was clear that Sparky had been burned over a large area. His hump was missing hair and there was a large lump on his hind leg, which must have been the exit wound, meaning Sparky was laying down at the time of the strike.

Sparky was thin after the strike and wasn't expected to live long. Since a lightning strike is something that could easily occur in wild bison anywhere, the refuge let nature take its course. There are no natural predators in the bison area, so injured bison are monitored regularly and euthanized if they're unable to eat or walk. Sparky was standing when his injuries were discovered, which was a promising sign. Karen kept checking on Sparky and was able to watch his wounds slowly heal. With a limp, Sparky kept walking.

At 11 years old and about 1,600 pounds, Sparky is a bit thinner than the rest of the bison, but he still stands strong. Before being struck, Sparky fathered three calves. Genetic testing will tell us if he successfully reproduced after the strike, but we're hoping that he does because he's one tough bison!

If you ever find yourself near Des Moines, stop by Neal Smith National Wildlife Refuge and see if you can spot Sparky. He tends to spend his time just like other bulls - hanging out in small groups or enjoying some quiet time alone.

Thanks to Susy McMahan for submitting these articles for publication.

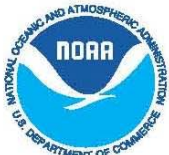
WHAT TO DO IF YOU ARE CAUGHT OUTSIDE IN A THUNDERSTORM

Information taken from the National Oceanic and Atmospheric Administration at <http://www.nws.noaa.gov/os/lightning/resources/lightning-safety.pdf>

Weather Safety: Lightning



Lightning Safety for You and Your Family



FEMA

American
Red Cross

For More Information

NWS lightning links, forecasts, assessments:

<http://www.lightningsafety.noaa.gov>

NOAA Weather Radio All Hazards:

<http://www.weather.gov/nwr>

American Red Cross:

<http://www.redcross.org>

Federal Emergency Management Agency:

<http://www.fema.gov>

What You Should Know About Being Caught Outside Near a Thunderstorm

There is no safe place outside in a thunderstorm. Plan ahead to avoid this dangerous situation! If you're outside and hear thunder, the only way to significantly reduce your risk of becoming a lightning casualty is to get inside a substantial building or hard-topped metal vehicle as fast as you can. In addition, you should avoid the following situations which could increase your risk of becoming a lightning casualty. Remember – there is no substitute for getting to a safe place.

- ◆ **Avoid open areas.** Don't be the tallest object in the area.
- ◆ **Stay away from isolated tall trees, towers or utility poles.** Lightning tends to strike the taller objects in an area.
- ◆ **Stay away from metal conductors such as wires or fences.** Metal does not attract lightning, but lightning can travel long distances through it.

If you are with a group of people, spread out. While this actually increases the chance that someone might get struck, it tends to prevent multiple casualties, and increases the chances that someone could help if a person is struck.

Act Fast If Someone Is Struck by Lightning!

- ◆ **Lightning victims do not carry an electrical charge, are safe to touch, and need urgent medical attention.** Cardiac arrest is the immediate cause of death for those who die. Some deaths can be prevented if the victim receives the proper first aid immediately.
- ◆ **Call for help.** Call 9-1-1 or your local ambulance service.
- ◆ **Give first aid.** Do not delay CPR if the person is unresponsive or not breathing. Use an Automatic External Defibrillator if one is available.
- ◆ **If possible, move the victim to a safer place.** Lightning can strike twice. Don't become a victim.

(Continued on page 10)

THUNDERSTORM: WHAT TO DO - CONTINUED



(Continued from page 9)

Organized Outdoor Activities

Many people enjoy outdoor activities. It's essential for the people in charge of these activities to understand the dangers of lightning, have a lightning safety plan in place, and follow the plan once thunder is heard or lightning is seen. Many outdoor activities rely on volunteer leaders, coaches or sports officials to make safety decisions. Make sure the leaders of these activities follow a lightning safety plan. Don't be afraid to ask, and don't be afraid to speak out during an event if conditions become unsafe. You could save a life!

When Thunder Roars, Go Indoors!

Each year in the United States, more than 400 people are struck by lightning. On average, between 55 and 60 people are killed; hundreds of others suffer permanent neurological disabilities. Most of these tragedies can be avoided with a few simple precautions. When thunderstorms threaten, get to a safe place. Lightning safety is an inconvenience that can save your life.

The National Oceanic and Atmospheric Administration (NOAA) collects information on weather-related deaths to learn how to prevent these tragedies. Many lightning victims say they were "caught" outside in the storm and couldn't get to a safe place. With proper planning, these tragedies could be prevented.

Other victims waited too long before seeking shelter. By heading to a safe place 5 to 10 minutes sooner, they could have avoided being struck by lightning.

Some people were struck because they went back outside too soon. Stay inside a safe building or vehicle for at least 30 minutes after you hear the last thunder clap.

Finally, some victims were struck inside homes or buildings while they were using electrical equipment or corded phones. Others were in contact with plumbing, a metal door or a window frame. Avoid contact with these electrical conductors when a thunderstorm is nearby!

What You Might Not Know About Lightning

◆ **All thunderstorms produce lightning and are**

dangerous. In the United States, in an average year, lightning kills about the same number of people as tornadoes and more people than hurricanes.

- ◆ **Lightning often strikes outside the area of heavy rain and may strike as far as 10 miles from any rainfall.** Many lightning deaths occur ahead of storms or after storms have seemingly passed.
- ◆ **If you can hear thunder, you are in danger.** Don't be fooled by blue skies. If you hear thunder, lightning is close enough to pose an immediate threat.
- ◆ **Lightning leaves many victims with permanent disabilities.** While a small percentage of lightning strike victims die, many survivors must learn to live with very serious lifelong pain and neurological disabilities.

Avoid the Lightning Threat

- ◆ **Have a lightning safety plan.** Know where you'll go for safety and how much time it will take to get there. Make sure your plan allows enough time to reach safety.
- ◆ **Postpone activities.** Before going outdoors, check the forecast for thunderstorms. Consider postponing activities to avoid being caught in a dangerous situation.
- ◆ **Monitor the weather.** Look for signs of a developing thunderstorm such as darkening skies, flashes of lightning or increasing wind.
- ◆ **Get to a safe place.** If you hear thunder, even a distant rumble, immediately move to a safe place. Fully enclosed buildings with wiring and plumbing provide the best protection. Sheds, picnic shelters, tents or covered porches do NOT protect you from lightning. If a sturdy building is not nearby, get into a hard-topped metal vehicle and close all the windows. Stay inside until 30 minutes after the last rumble of thunder.
- ◆ **If you hear thunder, don't use a corded phone except in an emergency.** Cordless phones and cell phones are safe to use.
- ◆ **Keep away from electrical equipment and wiring.**
- ◆ **Water pipes conduct electricity.** Don't take a bath or shower or use other plumbing during a storm.

STANDING COMMITTEES

Audit	Ed Dvorak, Jayne Beer James Marburger
Christmas Party	Edward Ridge
Education / Librarian	Charles Wooldridge
Facebook	Andrew Tiedje
Field Trips	James Marburger
Geology Day Coordinator	Charles Wooldridge
Grinding Party Coordinator	Charles Wooldridge
Historian	Sharon Marburger
Legislative Liaison	Susy McMahan
Membership Record	Edward Ridge
MWF Liaison	Vera Lyman
Programs	Jayne Beer
Property	James Marburger
Recognition / Awards	Richard Peterson Charles Wooldridge, James Marburger
Refreshments / Door Prizes	Vera Lyman
Roadside Clean-up	James Marburger
Scholarship	Vera Lyman
Show—2016	Ed Dvorak
Swap—2016	Jayne Beer
Website	Jim & Sharon Marburger
Youth Activities	Carolyn Ashmore Susy McMahan

LONG RANGE PLANNING & BY-LAWS COMMITTEE

Jim Marburger, Chairman

1 year:	Edward Ridge Robert Cropp
2 years:	Charles Wooldridge Sharon Marburger
3 years:	Vera Lyman Ed Dvorak

NOMINATING COMMITTEE

Jim Marburger, Chairman

1 year:	Vera Lyman Edward Ridge
2 years:	Robert Gritmit Sharon Marburger
3 years:	Jim Atkins Andrew Tiedje

ADVERTISING, SUBSCRIPTION, AND MEMBERSHIP 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.

Subscription to the Pick & Shovel is \$15.00 per year for mailed copy.

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

Adults (age 16 and over) - \$15 per year or \$25 per couple (within the same household)
Juniors - \$2 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 being approved for membership.

2016 SHOW COMMITTEE

Chairman:	Ed Dvorak
Breakfast:	Vera Lyman
Dealers:	Charles Wooldridge
Demonstrators:	Carrie Burkhardt
Displays:	Jayne Beer, Ed Ridge
Event Center Liaison	Vera Lyman
Finance & Ticket Sales:	Jim Atkins, Vera Lyman
Floor Chairman:	Ed Dvorak, Charles Wooldridge
Forms	Sharon 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:	Andrew Tiedje
Special Features:	
Web Master:	Jim & Sharon Marburger
Youth Activities:	Carolyn Ashmore Susy McMahan

Mail Exchange Newsletters to:

Lincoln Gem & Mineral Club, Inc.
P.O. Box 5342
Lincoln, NE 68505-0342



Or e-mail newsletters to:
lgmc.editor@windstream.net

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

PICK & SHOVEL

The *Pick & Shovel* is the official publication of the Lincoln Gem & Mineral Club, Inc., Lincoln, Nebraska. Articles and items appearing within may be reproduced in other club bulletins, provided proper credit is given to the *Pick & Shovel* and the author.

YOUR PICK & SHOVEL STAFF:

PUBLISHER: LINCOLN GEM & MINERAL CLUB, INC.
P.O. Box 5342
Lincoln, Nebraska 68505-0342

EDITOR: SHARON MARBURGER
P.O. Box 64
Hickman, Nebraska 68372
E-mail: lgmc.editor@windstream.net

CIRCULATION: VERA LYMAN
402-464-6089

REPORTERS: All members are encouraged to submit features, articles, poetry, or drawings.

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