

The Pick & Shovel

Volume 46, Issue 3, November 2005, Page 1

Club Events

- Nov 17 General Mtg , Antelope Park, 7PM
PM, Election of Officers
Dec 7 Board Mtg, Kinko's 48th & Vine 7pm
11 General Mtg, Antelope Park
(Christmas Party-Meal @ 6PM. Club provides
meat and beverages, club members each bring
a hot dish and salad or dessert. As always,
hobby-related gift exchange \$5 value.

Watch for date for the following 2006 events
in the next two newsletters:

- Jan SWAP & General Meeting
Feb Geology Day

Recap October Meeting

PROGRAM- Youth Night! Again, the club
came together and made a big hit with the
young people that attended the meeting. Rock
collections were built and kids and grownups
received education from the many members
who participated.

Food-Thanks to everyone for the delicious
treats

Door Prizes & Halloween Costume Prizes-
Provided by Judy Reilly and Jim & Sharon
Marburger

November Meeting

PROGRAM: Video, "Secrets of the Dead,"
exploring the archeological excavations in
Kyrghistan. Presented by Dave Heffelbower.

Election of Officers: Nominations accepted
from the floor

Food: Snacks provided by Judy and Susy

Thanks giving
November 24, 2005



President's Message



Attention!!!!!!!!!!!!!! Our Club needs you!! Please plan to
attend our November General meeting. For those of you
who have not been seen for awhile, the meeting will be held
at the Antelope Park Shelter on November 17 at 7:00 p.m. This meeting is very
important; it is our annual election of officers. We have a great slate of candidates,
but nominations from the floor will be accepted. Come vote for the best candidate.

In my previous message, I posed some questions to make you think about
how to improve our club. We have increased membership this year and have
started some youth projects. We need to have direction to keep the club exciting,
educational, involved, growing, sharing, friendly, and fun. Our membership is the
backbone of the club and we need everyone's help to reach the goals we set. We
each possess knowledge that can be shared with fellow members. Next year's
president will be asking for volunteers and making committee appointments.
Please consider accepting new challenges when you are approached.

When we all work together, the tasks assigned or undertaken are not really
time-consuming. All tasks need to be carried through to completion in a timely
manner, with no dropped or unfinished projects. If you need help completing a
task, please seek help.

We will be taking another vote in December that requires your input at the
November general meeting. The board of directors would like to change the
general meetings to the third Thursday of the month instead of the fourth Thursday.

This change would give a little more time between the general and board
meetings, along with making it simpler to remember when the meetings are. As it
stands now, part of the meetings are held during the third week due to holidays and
other park uses. The decision must be final in December in order to secure
meeting space in 2006.

There are several upcoming activities. Plans for the January Swap are
underway thanks to Swap chairman, David Heffelbower. Find out what you can
do to help David put together a great swap. Hopefully mother nature will provide
70 degree weather for us.

Geology Day will be here before you know it. Find out how you can be a
part of this annual activity.

The 2006 show is also quickly approaching. Pat Akins needs our help.
Please contact him with ideas to make this the best show yet and to offer your
assistance. Now is time to begin plans for your show display. No matter what part
of the hobby you love, you have something that can be put on display. Remember,
show attendees, whether involved in the hobby or not, can find every display case
educational. You never know which display might be the one to bring in the next
new member! See you at the November meeting.

Rock on!

Jim Marburger

Youth Page

Rockhound Riddles

1. Name a likeable rock
2. What mineral is always hungry?
3. How do geologists measure water?
4. What should all geologists know?
5. What mineral catches thieves?
6. What is an opening in a fence?
7. How do you keep a boat from drifting?
8. What vegetable is used for weighing gemstones?
9. Where does a skeleton sleep?
10. Name a citrus rock?
11. What is a teenage snake?
12. A through F paid. What about G?

(from The Mountain Gem, March 2005 via The Glacial Drifter, August 2005) **Answers, page 4**

ROCKHOUND WORD SEARCH

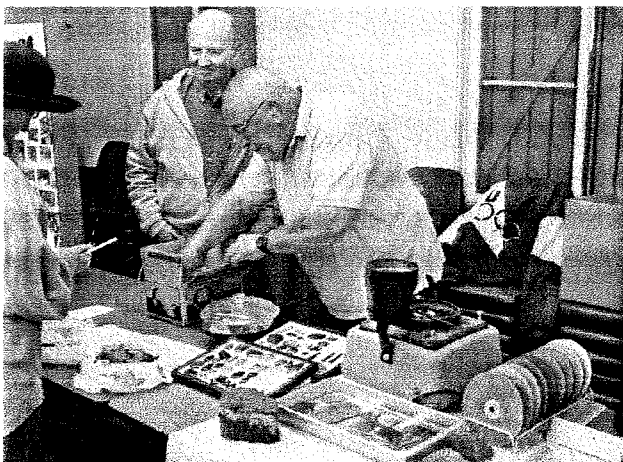
E L S A W T Y D L O G O R D Q
 J N T P E T I B O L I R T T H
 G A Z O G E M S S R K S L S M
 E L D B A G A T E Y S C I V S
 O F I E L D T R I P L I H P
 D T R N R A W A I E V E D P S
 E L S U Y O D E T E O S E S L
 A E A F E I C I R A I I M L G
 S F K P P I R K A L T O D A N
 R P O A O Y L C S L S U P R P
 P T L S P J A S P E R Q D E A
 V R U A S O N I D V L R S N S
 J G L B Q I N V E O T U H I S
 S E A S H E L L W H J T O M P
 Z T R A U Q P S L S P E W S Z
 A L R D G G E T L P E L P A U

SHOVEL	DINOSAUR	AGATE	SILVER
SAW	JADE	GOLD	SEASHELL
PICK	FOSSILS	LAPIDARY	OPAL
TURQUOISE	FIELD TRIP	FUN	ROCKS
SHOW	TRILOBITE	JASPER	QUARTZ
PYRITE	GEMS	GEODE	MINERALS



LEAH, THE ROCKHOUND

ALLIE & JUDY,
PROSPECTORS



Left: Al demonstrates lapidary. Above: New Junior member, Mitch and his dad ask questions and collect lots of specimens.

LINCOLN GEM & MINERAL CLUB, INC. - GENERAL MEETING – October 27, 2005, Antelope Park Shelter

The meeting was called to order at 7:31 p.m. after a lively rock sharing/collecting activity for the youth. Twenty-one adult members and two youth members were present. Seven guests were present: Ed Dvorak, Kay Young; Allison Baehr, Eve Lanik, Andrea Peterson, Terri Marti and son.

OLD BUSINESS: Mary Pittard moved to accept the minutes of the September meeting as printed, with a second by Phyllis Parks. Motion carried. David Heffelbower made the motion to accept the September Treasurer's report, second by Sharon Marburger. Motion carried.

John Harrison, Dealer Chairman for the 2006 show, reported that all dealers have been signed up. Shirley Rockel offered to help out with the youth booth, and will let Pat Akins know.

NEW BUSINESS: Discussion ensued regarding the disbanding of the Grand Island gem club, and other nearby clubs that have closed their doors. Several members from these defunct clubs have expressed an interest in becoming members of LGMC. Due to travel distances and the possible difficulty of attending meetings on a weeknight, the question arose about waiving the meeting attendance requirement for membership. The matter was to be put before the Board.

To avoid competing with "Boo at the Zoo" during the last week of October each year, John Harrison made a motion to change the October meeting to the third Thursday of the month, beginning in 2006. David Heffelbower seconded the motion. Motion carried.

Terry Anderson asked where we are planning to go for next year's President's Field Trip. The good-natured answer was, "Wherever the next President decides." President Marburger also stated that the Denver Guild was so happy about the joint 2005 trip, they are looking to include LGMC in their 2006 trip, which will possibly be to Wyoming.

Judy Reilly ruled that all the costumes were so good, everyone won a prize. Costumes present were Prospector and Mule, Rock-Hound, Banded Agate, and Mr. & Mrs. Quartz –Smokey & Rose. One of the visitors was Rat Queen.

The meeting adjourned at 7:59 p.m. on a motion by John Harrison, 2nd by Bill Rockel.

Thanks to everyone who brought goodies. They were all scrumptious!

Respectfully submitted,

Sharon Marburger

Mr. & Mrs. Quartz
(Smokey & Rose)



GEM & MINERAL CLUB, INC. – BOARD OF DIRECTORS – October 5, 2005

Kinkos, 48th and Vine

President Jim Marburger called the meeting to order at 7:01 p.m. Board members present were Jim Marburger, Roger Pittard, Sharon Marburger, Vera Lyman, John Harrison and Jim Atkins, along with guest Ed Ridge.

The minutes of the September meeting were distributed. Roger Pittard moved to accept the minutes as LINCOLN printed, Jim Atkins 2nd. Motion carried. The treasurer's report for September was handed out and Jim Atkins moved to accept the report as printed, 2nd by Sharon Marburger. Motion carried.

OLD BUSINESS: Roger Pittard reported that the spare tire has been purchased for the trailer.

No formal show report was made as Show Chairman Pat Akins was not present. However, Dealer Chairman John Harrison reported that 13 dealers had returned contracts and booth rent.

Plans for the Halloween party were discussed. It is designated as youth night, with desserts and hobby related Halloween costumes.

NEW BUSINESS: No new business.

The meeting adjourned at 7:27 p.m. on a motion by John Harrison, 2nd by Jim Atkins.

Respectfully Submitted,

Sharon Marburger

LGMC Treasurer's Report for October, 2005		
Pinnacle Checking Balance Sept. 30, 2005		\$ 5,951.74

Receipts:

** Two Show Dealer Receipts @ 450.00	<u>900.00</u>	900.00
--------------------------------------	---------------	--------

Payments:

Kinkos-Board Mtg 10/5		10.05
Super Saver-Club Table Service(social)		19.55
Postmaster-Nov/Dec P&S Postage		74.00
Judy Reilly-P&S-Sep=49.06/Oct=29.15		
P&S-Nov-Dec Covers=44.12	<u>122.33</u>	<u>225.93</u>

Pinnacle Checking Balance October 31, 2005		\$ 6,625.81
--	--	-------------

** 2006 Show

From the MWF Newsletter, Nov. 2005

FOSSIKING ON FOSSILS

by Cecilia Duluk, MWF Paleontology

“What IS that fossil oddball, anyway?”

Even the most casual fossil collector occasionally runs into a “fossil oddball”—one of those strange-looking preservations or imprints that is usually impossible to identify. I’m not talking about unusual preservation or partial fossils that “look like a— ‘petrified dandelion,’” such as a horn coral imbedded in limestone broken across the cup that resembles that weed.

No, I speak of the true “oddball,” an obviously fossilized something that even the professional paleontologists can’t really explain. After many such fossils have been found in a certain locality or strata (usually by a bunch of interested amateur collectors), the pros might get involved, which may (or may not) result in a published solution. On the other hand, such studies may result in even more confusion as to what the “oddball” really was as a living organism, because no modern counterparts exist.

The number one classic example of such a fossil is, of course, the TULLY MONSTER, discovered in the Mazon Creek, Illinois concretions by Francis Tully in the 1950s. Fourteen years and hundreds of “monster” specimens later, Drs. Eugene Richardson and Ralph Johnson of the Chicago Field Museum named the “oddball” *Tullimonstrum gregarium* and described it as “a soft-bodied marine invertebrate animal”¹ that was—like nothing ever seen before!!! The *Tullimonstrum*, in fact, is still an oddball, having been variously classified as a worm, a shell-less mollusk, and a planktonic snail!

Few fossil oddballs retain the mystery and romance of the Tully, but many are interesting enough to fill a series such as the one begun in this issue. The last ten years or so have, in fact, at least provided some answers for me to a few of the “What IS that fossil oddball?” question.

In future issues, look for articles on The Blob, the Cornucopia, the “screw,” and the “that’s the weirdest crinoid I’ve ever seen” fossils.

One important thing to remember if you collect an oddball—ALWAYS NOTE THE EXACT

LOCATION where you found it. You might not know what “it” is, but if you know WHERE IT CAME FROM you can at least put it (in most cases) in a time frame. Unfortunately, some collectors will thumb through a large book like Index Fossils of North America (Shimer & Shrock), see an illustration that LOOKS LIKE their “oddball,” and stick that name on it. Then later, any quest to really identify it is doomed to failure because—they put a genus name on it that belongs to an Ordovician species, when in fact, the locality where they found their “oddball” was all Pennsylvanian Age strata!

The best bet is to FIRST study some geologic time charts and other books on “what evolved when,” not for SPECIFIC dates (which are always being reevaluated up and/or down by a few million years) but for the general flow of evolutionary development. This can be a quite inexpensive undertaking. I would like to hereby recommend an exceptionally clear booklet, Evolution and the Fossil Record by John Pojeta, Jr. & Dale A. Springer, pub. 2001, by American Geological Institute, Alexandria, Virginia (under \$10 from www.agiweb.org) also sponsored by The Paleontological Society. Write for two FREE U.S. Geological Survey booklets Geologic Time by William Newman; and Fossils, Rocks, and Time, by Lucy Edwards and John Pojeta, Jr.

(FOR FUN, you might also ask for Birth of the Mountains (Southern Appalachians) by Sandra Clark, and Deserts Geology and Resources by A. S. Walker. Lots of geology in them—but remember, paleontology is just geology with “oddballs” in it!) All four of the above may be obtained for FREE from the U.S. Geological Survey, Information Services, Box 25286, Federal Center, Denver, Co 80225.

¹ For a complete amateur discussion of the Tully, see “The Monster of Illinois Paleontology and Politics” by Mary R. Carman, Rocks & Minerals magazine, Vol. 64, No. 1, Jan/Feb 1989.

Happy “oddball”ing!

How to Find the Fire in Fire Agate

Author Unknown. From The Tumbler 1/03, via Breccia 6/05, via The Rock Collector 9/05, via The Backbender's Gazette 10/05 via Cedar Valley Gems 10/05

Fire Agate is a quartz based rock with layers of iron oxide in chalcedony, which results in iridescence. It occurs in nodules of milky or grayish translucent chalcedony. Sometimes it is found in botryoidal growths in geodes and in chalcedony roses.

Fire Agate Appears as a dull reddish brown layer, but when the surface layers are removed, the rainbow colors or iridescence are exposed. The fire is brought out by tumbling, trimming, and grinding off the outer layers to expose the iridescence. Polishing magnifies the fire.

To find the fire, remove the matrix, then tumble polish the stones. Tumbling removes the excess chalcedony. when tumble polished, remove the remaining excess stone around the edges, then polish the set.allow the stone to retain its irregular shape and **polish slowly** so you don't go through the fire layers. The graceful, natural shapes are superior to those cut to calibrated sizes, as the best fire doesn't always fit a mold. To set it off,mount the fire agate in a custom made gold or silver setting. Fire agates are most often found in Arizona, California, Idaho and Mexico among other locales.

-Blessed is the person who is too busy to worry in the daytime and too sleepy to worry at night.
-Blessed are we who can laugh at ourselves for we shall never cease to be amused. **Anonymous**

Peacock Ore

By Kemp Roll from Chats and Chips 3/02 via The Rockhound Gazette 10/05

"Peacock Ore"- A strange name for a mineral;,but it makes sense. The peacock is noted for its brilliant array of iridescent colors-gold hued reds, blues and purples. So is this mineral. It's brilliant colors change from golden purples to pinks to blues depending on how the light reflects from it.

It is also called "purple copper ore". Freshly mined chalcopryrite displays such colors also. The is called "yellow copper ore".

It's the tarnishing exposure to air that produces the thin-filmed iridescence. the reason one doesn't see such a mineral on jewelry is that the color disappears soon after exposure to the atmosphere. The sulfides oxidize and a thicker, duller coat of copper/iron oxides conceals the colors below.

An ore is exactly what it is- copper ore. Chemically, it is a sulfide of copper and iron with metals in varying proportions. It's an important source of metallic copper. Mining is mostly in Chile, Canada, and Mexico.

For the purist, it is "bornite" after the 18th century mineralogist, Ignatius Von Born (also called "Peacock" by his friends.)

Answers to Rockhound Riddles, p. 2

- 1.Gneiss, 2.Apatite, 3.With quartz, 4.Their Faults, 5.Copper, 6.Agate, 7.Ankerite, 8.Carat, 9.In a bone bed, 10.Limestone, 11.Serpentine, 12. Geode

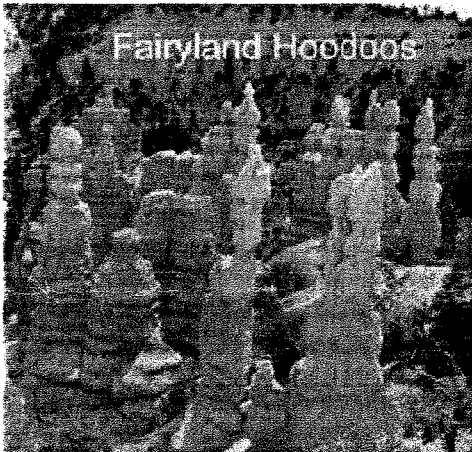
Question of the Month - HOODOO

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

From the July issue: What is HOODOO? Would you believe that hoodoo is rock voodoo? Well, it was worth a try, but NOT according to the Roadside Geology of Texas, hoodoos are "differentially eroded columns or pinnacles of rock that resemble animals or creatures. Hoodoo is also a type of African magic, the name of a rock band, the name of a record company, and the name of an oil company, but for now we will stay with the geological definition.

Hoodoos are formed when a harder rock is deposited on top of a softer layer of rock. As the area is weathered and eroded, the harder rock protects, to some degree, the softer rock underneath. Eventually a spire or pinnacle is formed as the surrounding softer rock erodes away except underneath the hard rock cap. Layering of softer and not so soft rocks in the original layered area (such as mudstone and limestone) can add bulges and recessions in the spire, resulting in strange shapes. Perhaps the best-known example of hoodoos is found in Bryce Canyon National Park in Southern Utah. Hoodoos abound there - miles and miles of them looking like guardians or castles. Geologically speaking, hoodoos are relatively short lived. It is estimated that Bryce Canyon will eventually become just a steep walled canyon in about 3 million years.

If you don't want to visit Bryce Canyon, another choice for seeing hoodoos would be at one of the Disney Theme Parks (Disneyland, Magical Kingdom, Disneyland Paris, Disneyland Tokyo). The Thunder Mountain Railroad ride



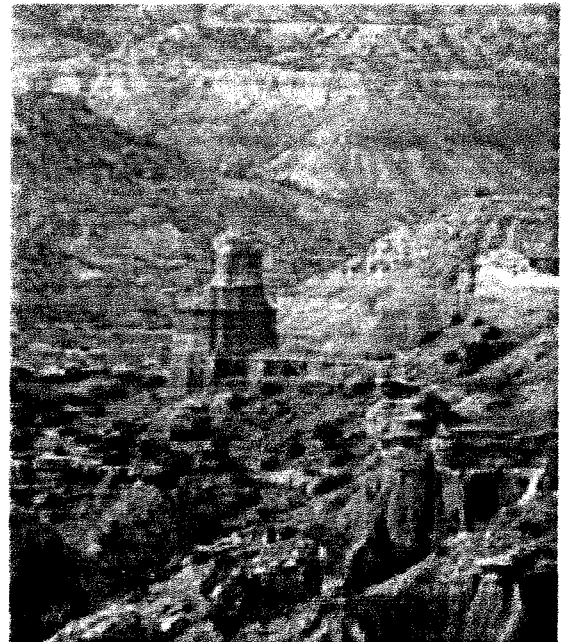
Fairyland Hoodoos

travels through a series of man-made hoodoos! Thunder Mountain Railroad is (by today's standards) a rather timid roller coaster ride, simulating a runaway railroad cart speeding though a rickety mine shaft. The hoodoos of the Thunder Mountain ride were built to resemble the hoodoos of Bryce Canyon.

In Texas, hoodoos can be found at Palo Duro State Park. The park is about 18 miles south of Amarillo, TX and 12 miles east of Canyon, TX. Erosive forces by the Prairie Dog Town Fork of the Red River formed the Palo Duro canyon. The canyon is 120 miles long, up to 20 miles wide, and 300 feet deep. It is the second largest canyon in the United

Bryce Canyon National Park States, following only the Grand Canyon. The park has a number of interesting geological features, but as a Texas State Park, there is no removal of rock or plant material from the park. Nonetheless, a trip to Palo Duro would be well worth your time. One really nice feature of this state park is that you can drive down into the base of the canyon (as opposed to Grand Canyon where you must hike down. This will allow you to get up close to the many geological features of the canyon with minimal effort. Make sure to take a copy of the Roadside Geology of Texas when you visit.

1. Spearing, Darwin, Roadside Geology of Texas, copyright 1991, Mountain Press Publishing, Missoula, MT
2. Bryce Canyon National Park Geology, <http://www.travelwest.net/parks/brycecanyon/geology.html>
3. Wikipedia Free Encyclopedia, [http://en.wikipedia.org/wiki/Hoodoo_\(geology\)](http://en.wikipedia.org/wiki/Hoodoo_(geology))
4. Palo Duro Canyon State Park, <http://www.tpwd.state.tx.us/park/paloduro/>



Palo Duro Park State

From The Glacial Drifter 9/05

KANSAS SALT (HALITE)

We all know that halite is just common salt, but that chemically it is sodium chloride. We also know that it is essential to life; it keeps our blood and body fluids in balance. In Kansas, however, halite is an important economic mineral. It is mined several hundred feet down into Permian sediment rock layers near Hutchinson-Lyons-Kanopolis. This Permian salt bed is about 400 feet thick and, in this area of Kansas, it is about 800 feet below the surface.

Geologists believe that about 200 million years ago an arm of a Permian inland sea covered parts of Kansas, Colorado, Texas and New Mexico. Arid and hot conditions evaporated this inland sea until gypsum, halite and other salts precipitated from the solution. Very special conditions had to exist over a long period of time in order for 400 feet of relatively pure halite to be formed. A large amount of salt is obtained yet today by evaporation of ocean water in many parts of the world.

Table salt is mined in Kansas by pumping warm water down into the salt layer and bringing the saturated salt solution back to the surface, then continuing the heating of the saturated solution so that pure cubic crystals of salt are formed for our table use.

The dissolving of salt by water to form cavities is also carried out in Kansas for the purpose of filling the cavity with petroleum products. The products do not dissolve salt and, thus, can be stored in the underground salt cavities. However, salt water must be stored above ground in order to pump the saturated salt solution back into the well when the petroleum product is again needed. Therefore, petroleum storage wells must also have a surface storage pond of saturated salt water always nearby for those purposes. Hundreds of storage cavities are being used just a few miles west of McPherson.

Kansas salt is also mined by underground mining methods just as coal is mined. The salt is then used for livestock salt or for industrial uses.

A large mined-out room of a Lyon salt mine has been experimentally used for the storage of radioactive wastes. This is possible due to a property of salt... it can flow under pressure, just as glacial ice flows under pressure. Thus, cracks in the salt will slowly close up, and safely retain the radioactive wastes.

In an old Carey salt mine in Hutchinson, another kind of storage facility has been made. The constant temperature, the constant humidity and the absence of sunlight make ideal conditions for the storage of special types of materials such as paper, film, pictures and records.

Limestone and gypsum layers are formed when sea water evaporates, though in much smaller amounts than halite. This is because, as the sea water evaporates, the

least soluble mineral—calcium carbonate or calcite—precipitates first, then a more soluble gypsum (calcium sulfate), followed by the more soluble halite. Still the last mineral to precipitate, even more soluble than halite, is potassium chloride, called sylvite. The Kansas salt layer does not have sylvite associated with it, though Germany and Canada both have salt deposits that do have the sylvite mineral intimately associated with the halite layer.

Halite has been mined and used for over 8,000 years, by both man and animal. In fact, it has been used as money because it is so valuable. You have heard the old saying, "That guy isn't worth his salt." The word "sal" (salt) is related to "salary" or wages.

*by Wesley DeCoursey,
Quarry Quips, 01/01, Via The Rockfinder, 06/05*

PETRIFIED WOOD

The first step in the formation of petrified wood is the rapid burial of part or all of a tree, dead or alive, in a fine-grained sediment or ash. In anaerobic conditions (no oxygen is present), the tree does not decay, but remains intact within its burial layer. If enough oxygen is present to cause the wood to decay it may leave a void in the sediments that retains the shape and texture of the wood. Then if hot, silica-rich water flows into the layer, the dissolved silica can begin to precipitate on the structures in the wood or on the edges of the void space.

What triggers silica deposition? Nobody knows for sure, although there are plenty of ideas. In any event, the water saturates the wood or collects in the void and silica may begin to deposit if conditions are right. After it precipitates out of solution, the silica gradually dehydrates through progressively denser forms from opal to chert or jasper.

If there was wood remaining in the burial, then the saturated cell and ring structures will be replaced by silica and remain visible in the resulting petrified wood. In some cases, the preservation is so good that the species of plant can be identified.

If the wood structure was lost through decay, there will be no internal structures and the silica fills the void to form a limb cast.

Of course, conditions in nature are seldom pure and many variations of this formation process can occur. In addition, the silica solution will contain a variety of other dissolved minerals in varying amounts which contribute to coloration and other qualities of the resulting stone.

Via PGG5 Petrograph, 4/05

From The Rockfinder, 9/05

THE CAVES OF THE BLACK HILLS

By Wes De Coursey

The Black Hills area in South Dakota is a very unusual and interesting geologic area. A few million years ago a large mass of molten magma was pushed up into 300-million-year-old sedimentary rocks that covered the flat plains. The hot magma was very fluid and as it cooled slowly it formed granite rock with crystals of feldspar, mica, quartz and hornblende. The heat and pressure of the magma caused widespread metamorphism, and schists, gneisses and quartzite were formed. Erosion over thousands of years has exposed high peaks of granite and metamorphic rocks. Around these high peaks remain the up-tilted layers of limestone, sandstone and shale. The limestone is referred to as the Pahasapa limestone. Caves are formed when rainwater and carbon dioxide form a weak acid solution called carbonic acid. This solution gradually dissolves the limestone. Dozens of caves are found in the Black Hills.

Wind Cave National Park contains the largest cave and includes 68 square miles of grassland where buffalo, elk, deer, prairie dogs and antelope are free to roam. The large cave itself has 33 miles of explored passageways. Wind Cave does not have the usual stalactites and stalagmites that are found in most caves, but is renowned for its boxwork, calcite veins and crystalline features. Other descriptive names are dogtooth spar, popcorn, green fluorescent frostwork and fibrous cotton-like gypsum deposits.

Jewel Cave National Monument is located some 15 miles west of Wind Cave and is somewhat different in character. Its walls and ceilings are covered with very large dogtooth spar calcite crystals. In the last few years it has been found to be a very large and extensive cave. The Park Service has kept it in a less improved state. You can tour the cave with gas lanterns just like the early spelunkers did. The cave brochure says, "There are no electric lights but we have gas lanterns. Not recommended for those in poor physical condition. Wear old clothes and stout walking shoes."

I want to mention one of the privately owned caves because of its unusual features. It contains rooms which are completely covered with dogtooth spar calcite crystals. These crystals are from 6 to 12

inches long and very smooth and clear. You feel like you are in a huge calcite geode. The crystals must have grown when the cave was completely filled with calcite-saturated water solutions and over many years the crystals grew to that large size. Being a private cave the owners were selling some of these large crystals. I purchased one dogtooth spar crystal and a rhombohedral crystal.

The Pahasapa layer of limestone is so large and encircles the whole Black Hills area, so it seems likely that there are many caves yet to be found and connecting passageways may even connect up to Wind Cave and Jewel Cave. This makes a cave spelunker quiver with excitement.

The Conglomerate (June, 2005)

Lincoln Friendship Force Club Plans June, 2006 Visit to Tanzania in Southern Africa

Ben Vrana of the Lincoln FF Club announces that the Friendship Force International (Atlanta, GA) has approved an exchange of the Lincoln Friendship Force Club with the Iringa, Tanzania Friendship Force Club for June 7th through June 24th, 2006. The group (limited to 20) will stay in Iringa Club members' homes, experience African music and culture, help in the local schools, and participate in a three-day safari to nearby Ruaha National Park to see the birds and animals in the tropical plains and forests. Also planned is a one-day excursion to a 60,000-year-old archeological site near Iringa. Time permitting, the group may spend two days in Dar es Salaam, capital of Tanzania and visit the Island of Zanzibar, famous for its production of spices, especially cloves, or see Mt. Kilimanjaro, the 19,000+ ft volcano in northern Tanzania.

For more information, contact Ben Vrana at (402) 352-5531 or bbv5531@intergate.com

A workshop for interested travelers is planned for 2 PM on Sunday, October 30th in the community room at Loren Eiseley Library, 1530 Superior Street in Lincoln.

The Lincoln Friendship Force Club is one of hundreds of clubs in this international, non-profit and non-religious organization. Friendship Force International promotes friendships among these ordinary citizens who invite members from Friendship Force Clubs from all over the globe into their homes for one week. In return, they are hosted for a week by members of those clubs. Group rates reduce the usual expense of international travel. Friendships among families and individuals promote international relationships and understanding among nations.

OK, digging weather is about gone for the year...but this is still a good article (P&S ED.)Taken from Quarry Quips 9/05

What do I wear to a dig? And, what to pack for it?

By Chris Robinson - TRMS member

I haven't been digging for rocks, minerals or fossils for quite some time. What do I wear to a dig???? In the heat, one must have a hat (baseball or wide brim), a bandana and a hard hat (if one is required), an oversize long sleeve white shirt to keep the sun from frying your skin, especially if you are fair skinned; Gloves, protect you hands while digging; they may be cloth or rubber. I like the rubbery garden kind because they are thicker. You can't pick up a dime but it is handy for picking up that special rock! If it rains, a lightweight poncho is a definite. One can use it as a "tent" while digging. In my case I look like the proverbial "Orange Pup Tent". Hey, I was dry!!!! Most importantly, bring the SUNSCREEN. If you are fair skinned or you have children with your party, I would strongly suggest 45 SPF or higher. BUG REPELLENT; spray, lotion or wipes. This is very important too. (I consider this to be worn!) A whistle, wear it around your neck. It is very easy to get lost, lose your bearings, wander away from the group or buddy, become sick or hurt. **ALWAYS...KEEP A BUDDY AROUND JUST IN CASE.**

What to pack...a sturdy knapsack. Light weight enough to carry on your back. A bucket, plastic container, or a flat box is handy to tote along with you. This is a must...WATER, WATER, WATER. (Did I mention WATER???) I like to pack a washcloth too. Just in case I start getting over heated and feel sick. At least the cloth or bandana can be wet with WATER. You can wear it around your head or neck area. A compass is good to take along, magnifying glass, or loupe, a brush, knee pads, pick hammer, chisel, gardening tools work well too. Newspaper, small plastic bags; egg boxes are really good for small specimens and a permanent marker are good to pack as well. Throw a couple of band-aids in your knapsack as well. But most importantly, keep a FISRT AID KIT handy. Optional things to consider are: pick axe, shovel, crow bar, flashlight, black light (if dig requires it).

This is brilliant A ski pole to use as a walking stick. They are so sturdy. You can pick one up cheaply and it is a great idea. Some members from the Wichita Club had them and told me about them. Get this...if you are an environmentalist you can take it with you and pick up trash!!!!!! What a concept!!!!!!

This is all I can think of for now. If you think of other items, I may have forgotten to mention please write in to the bulletin. THE KEY IS TO HAVE A SAFE AND FUN DIG!

Source: T-Town Rockhound, Tulsa R&M Society Tulsa Oklahoma, August 2005

Editors addition: If you are taking any medications, or have any health issues, it is a good idea to give this information to your field trip leader or your buddy (you can put it in a sealed envelope to be opened in case of emergency). In the event of a medical emergency, someone will have your information to give to the EMT's, if you are not capable of doing so!



Via Quarry Quips 9/05

DUES!

It's time for LGMC DUES again. Dues can be paid by mailing check to the club post office box # (address and fees are on inside cover of the Pick & Shovel) or by bringing payment to a club meeting by December 31. Dues are delinquent January 31, 1006.

2005 ELECTED OFFICERS

President	James Marburger	332 Locust	Hickman, NE	68372 (402)	792-2348
1 st Vice Pres.	Pat Akins, Jr.	5017 N. 6 th St.	Lincoln, NE	68521	477-1322
2 nd Vice Pres.	Roger Pittard	1013 Road K	Geneva, NE	68361 (402)	759-4623
Treasurer	Vera Lyman	420 N. 56th St.	Lincoln, NE	68504	464-6089
Secretary	Sharon Marburger	332 Locust	Hickman, NE	68372 (402)	792-2348
Board Member	James Atkins	3028 S. 35th St.	Lincoln, NE	68506	483-1610
Board Member	John Harrison	330 Locust	Hickman, NE	68372 (402)	792-2337
Board Member	Judy Reilly	4050 Worthington Ave	Lincoln, NE	68502	421-3064
Board Member	Charles Wooldridge	10305 202 nd St.	Greenwood, NE	68366 (402)	789-8100

Nominating Committee

3 years	Susan Esquivel
	John E. Harrison
2 years	Mary Pittard
	Phyllis Parks
1 year	Vera M. Lyman
	Edward Ridge

Chairman: Immediate Past-President Susan McMahan

Long-Range Planning & By-Laws Committee

3 years	Daniel Dexter-Guy
	Phyllis Parks
2 years	Susan Taylor
	Edward Ridge
1 year	Vera M. Lyman
	Roger K. Pabian

Standing Committees

Education / Librarian:	Roger Pabian	MWF Liaison:	Vera Lyman
Field Trips:	Pat Akins, Coordinator	Scholarship:	Vera Lyman
Historian:	Sharon Marburger	Christmas Party:	Edward Ridge
Membership Record:	Edward Ridge	2005 Show:	John E. Harrison
Programs:	David Heffelbower	2006 Show:	Pat Akins, Jr.
Property:	Pat Akins, Jr. & James Marburger	2005 Swap:	Roger Pittard
Youth Activities:	New Committee in Place	2006 Swap:	David Heffelbower
Refreshments/Door Prizes:	Judy Reilly		
Housing Committee:	Susy McMahan, Pat Akins, Charles Wooldridge & Vera Lyman		
Auditing Committee:	John Harrison, Roger Pabian & James Marburger		
Geology Day Coordinator:	2nd Vice President Roger Pittard		

L. G. M. C. web address—courtesy of Jim Atkins:

<http://incolor.inetnebr.com/jna/gemclub/lgmc.htm>

Your PICK & SHOVEL Staff

Publisher:	Lincoln Gem & Mineral Club, Inc., P.O. Box 5342, Lincoln, NE 68505-0342
Editor:	Judy Reilly 421-3064 4050 Worthington Ave., Lincoln, NE 68502 Email: jshannonreilly@aol.com
Circulation:	Phyllis N. Parks 476-6798
Business Reporter:	Vera Lyman 464-6089
News Reporters:	All Club Members

The *PICK & SHOVEL* is the official publication of the Lincoln Gem & Mineral Club, 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 and that a reprint of the bulletin is sent to the editor of the *PICK & SHOVEL*.

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.

J. J. & L. ROCKS and MINERALS

COME SEE US FOR YOUR ROUGH NEED'S

GEMS - CABS - SLABS - MOUNTINGS
STERLING SILVER - GOLD FILLED - 14K GOLD
SILVER SUPPLIES - TOOLS - MACHINERY - NEW AND USED
CUSTOM SERVICES FOR SLABS, FLAT LAPPING, AND CABOCHONS

STARTING OUR 30th YEAR

330 LOCUST
HICKMAN, NE 68372-0068

PHONE
402-792-2337

"PROVIDING SUPPLIES FOR THE NOVICE TO THE DISCRIMINATING ROCKHOUND"
Please Call for Appointment

LINCOLN GEM & MINERAL CLUB

hosts our

48th Annual Show

at

PERSHING CENTER

226 Centennial Mall South

*** March 25-26, 2006 ***

Show Chairman

Pat Akins, Jr.

Advertising by rock-hobby business or interest is permitted with the approval of the Board. The rate now set at \$15.00 per full page; \$7.50 per 1/2 page; \$5.00 per 1/3 page; and \$3.75 per 1/4 page (min) per issue, paid in advance. These ads will be placed through the bulletin as space permits.

Subscription to the Pick & Shovel is \$10.00 per year mailed.

Dues to Lincoln Gem & Mineral Club are as follows:

Adults (age 16 and over) \$10 per year Juniors (age 12 to 16) \$2 per year

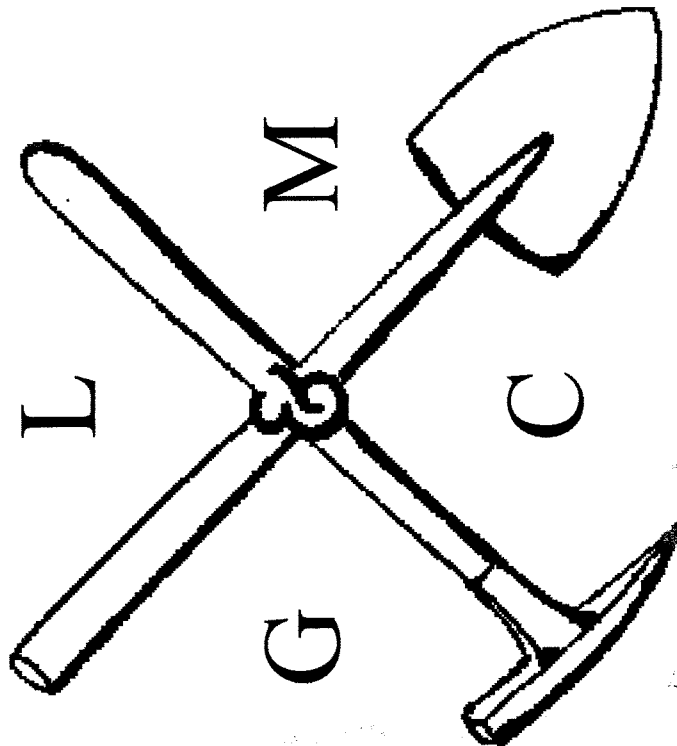
Family Membership (Couple, resident children under age 16) \$22 per year

New memberships must be approved by the Board, after the applicant attends at least one meeting of the club and pays the above dues plus a \$5 registration fee.

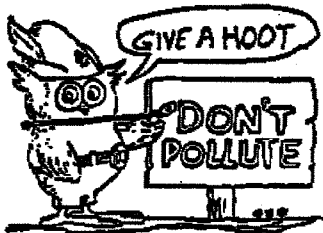
Meetings: Fourth Thursday, Sept. through May except December & January to be announced. Held at Antelope Park Indoor Shelter, near 30th and Sumner, next to the Veterans Memorial and the children's playground.

THE PICK & SHOVEL

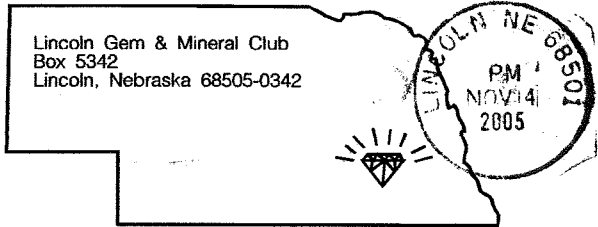
November 2005



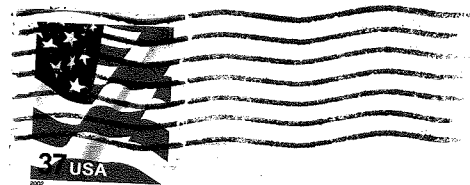
OFFICIAL PUBLICATION OF
LINCOLN GEM & MINERAL CLUB
LINCOLN, NEBRASKA



Mail Exchange Bulletins To:



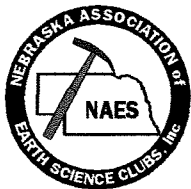
Lincoln Gem & Mineral Club
Box 5342
Lincoln, Nebraska 68505-0342



H. E. L. P.

Help Eliminate Litter Please

Associated with



Edward Ridge
2507 A St.
Lincoln, NE 68502

