



PICK & SHOVEL

Lincoln Gem & Mineral Club

Lincoln, Nebraska

Program

General Meetings

All general meetings will be held at the Bethany Park Shelter at 7:00 PM on the third Thursday of the month. December and January are the only exceptions.

December 9, 2007 Christmas Party
 January 26, 2008 Annual Swap
 February 21, 2008
 March 20, 2008
 April 17, 2008
 May 15, 2008
 June 20 thru 22, 2008 Annual & Regional LGMC Show
 June, July, and August No meetings
 September 18, 2008
 October 16, 2008
 November 20, 2008
 December 14, 2008 Christmas Party

Board Meetings

Gere Library - 7:00 PM Room 1

December 5, 2007
 January 2 and 30, 2008
 March 5, 2008
 April 2 and 30, 2008

We are having a Christmas Party at the General Meeting on December 9.

The doors of the Bethany Park Shelter will open at 5:00 p.m., dinner at 6:00 p.m.

The club will provide chicken and ham, and members are to bring two covered dishes.

Rock bingo will be the entertainment. Bring specimens for Rock Bingo prizes.

MERRY CHRISTMAS AND HAPPY HOLIDAYS

Lapidary Class--Important Notice

Because of printing error, the winter session of lapidary at Southeast Community College did not appear in the recently issued catalogue.

Those wishing to register for this class may do so by calling Nancy Holman at 402 437-2712 and may make payment via credit card.

If you do not use credit cards, you may contact Nancy above for more details on registering.

Thank you. Roger K. Pabian, Lapidary Instructor



The following article was taken from *Western Rockhound Magazine*, the official magazine of the Rocky Mountain Federation of Mineralogical Societies, Vol. 2, Issue 12, December, 1967.

JOHN G. NEIHARDT COLLECTION DISPLAYED

NOTED AUTHOR AND POET LAUREATE OF NEBRASKA EXHIBITS AT NEBRASKA CENTENNIAL ROCKRAMA

To rockhounds who are also interested in the history of the early West, the highlight of the Nebraska Centennial Rockrama was the appearance at the show of Dr. John G. Neihardt, Nebraska's own Poet Laureate.

In cooperation with the state program to honor and promote the State of Nebraska during this centennial year, Dr. Neihardt had been invited to exhibit by the Lincoln Gem and Mineral Club when they held their show September 22 through 7 24, at the Pershing Auditorium in Lincoln, Nebraska. This was the first time that Dr. Neihardt had exhibited at a rock show.

Dr. Neihardt's case contained a crystal ring and a jade set consisting of pendant earrings, necklace and a dinner ring. The jade set was designed especially for his wife, Mona, from a piece of flawless apple green jade which had been given to him, in lieu of the proverbial gold watch, in 1946 when he retired from the Bureau of Indian Affairs.

Both rings are unique in that they are "hololith" rings, that is, the cabochon and the ring-circlet are cut in one piece from a single block of material. "Hololith" comes from two Greek words: "holo", meaning whole, and "lith" (from "lithos"), meaning stone.

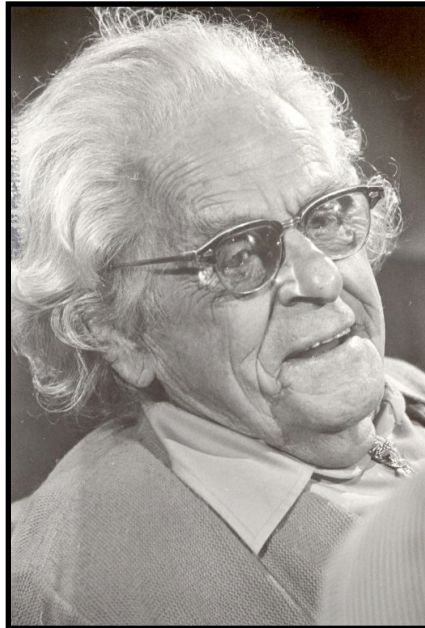
Dr. Neihardt designed and fashioned the necessary lapidary tools as their need arose in this uncharted process. His inspiration to make a hololith ring came from reading about such a ring done in crystal which was displayed in the British Museum.

The first step in making a hololith ring is to drill the finger hole in a block of desired material, allowing sufficient projection for the cabochon. Then, shape its design and carefully grind away excess material to form the circlet of the ring, which is "touchy business."

The crystal ring had a deep-cut flower petal motif with a red opal center (also called "jellybean" opal). The shaft of the opal and the receiving socket in the crystal base were practically "threaded" and

screwed securely. What fine treasures the world has been given by people who didn't know "you can't do it that way."

The jade dinner ring is lined with a band of gold which was inserted into the finger hole before grinding away the jade block from the exterior of the circlet. Dr. Neihardt said that pleasing effects of reflected light from a gold band lining in a crystal ring, or other transparent material, can be realized also.



DR. NEIHARDT MADE POET LAUREATE IN
1921 BY NEBRASKA LEGISLATURE

Dr. Neihardt is well known for his narrative poems describing the history of the early West. In 1921, the Nebraska State Legislature made him Poet Laureate of Nebraska in a resolution that read, in part, "Whereas, John G. Neihardt, a citizen of Nebraska, has written a national epic wherein he has developed a mood of courage with which our pioneers explored and subdued our plains, and thus has inspired in Americans that love of the land and its heroes whereby great national traditions are built and perpetuated;

John Gneisenau Neihardt was born on a farm near Sharpsburg, Illinois, January 8, 1881. He lived in a sod house with pioneer grandparents in northwestern Kansas during 1886 and 1887, then with his parents in Kansas City, Missouri until 1892, when with his then widowed mother, the family moved to Wayne, in northeastern Nebraska.

These years had a great influence on his writing. When he wrote of blizzards, prairie fires, and "thunderstorms in vast, empty lands", he had known them early, for they were vital facts of his world. He heard tales from old-timers that gave him stores of knowledge about which to write.

He had seen the Missouri River in flood stage at Kansas City. The river made a great impression on the boy and a desire to know what had happened on such a mighty river led to adventures that can be found in "The River and I." In the summer of 1908, he built a light boat at the headwaters of the Missouri, (continued on page 3)

JOHN G. NEIHARDT

Continued from page 2

Fort Benton, Montana, and descended the river to Sioux City. The trip of 2000 miles was made in 56 days.

He grew up at the edge of an Indian Reservation and was intimately associated with the Omaha Indians and later with the Oglala Sioux. In his book "Black Elk Speaks", a story of an Indian holy man, he tells of these experiences.

In 1896, at the age of 15, John Neihardt completed the teacher's course at the Nebraska Normal College at Wayne, and the next year received his bachelor of science degree.

As a young man, Dr. Neihardt did all kinds of work – he was a country school teacher for two years, during which time he wrote "The Divine Enchantment"; he was a reporter and he served as literary editor for several mid-western newspapers.

BEGINS WORK ON "CYCLE" IN 1911

In 1911, Dr. Neihardt conceived the idea of devoting the rest of his life to writing an "Epic Cycle of the West", to consist of five book-length narrative poems, dealing with the entire trans-Missouri country from 1822 to 1890, when the battle of Wounded Knee marked the end of Indian resistance on the Plains.

Perhaps the most noteworthy of these five poems, in terms of public recognition, is "The Song of Hugh Glass" which was published in 1915. It tells the story of the nine-months' struggle for survival of Hugh Glass as he made his way the hundred miles to Fort Kiowa on the Missouri through hostile Indian country, after he had been mangled by a grizzly bear and left by his companions to die.

In 1923, a cement "monument to courage" was erected by the Neihardt Club and others on the bluffs above the forks of the Grand River, southwest of Lemmon, South Dakota. More recently, the State Historical Society of South Dakota erected a highway marker about a mile east of the original monument. This new marker rests on a base of local petrified wood chunks. Dr. Neihardt wrote of "ghosts of an ancient forest" and proof can be found by visiting the Petrified Wood Park in the city of Lemmon.

John G. Neihardt, B.S., Litt. D., LL.D., was a Lecturer in English at the University of Missouri at Columbia until a year ago, when he retired at the age of 85. There he taught courses based on "A Cycle of the West."

He is retired now and makes his home on a farm near Columbia with his youngest daughter, Alice, where they raise and train

horses. At the encouragement of Bison Books, he is beginning to assemble material for his autobiography.

Some Spring morning when you should be getting ready for church, but are actually tossing gear into your car for a field trip, ease your conscience by reading Dr. Neihardt's "April Theology" found on page 117 of "Lyric and Dramatic Poems." He must have had rockhounds in his mind.

APRIL THEOLOGY

O to be breathing and hearing and feeling and seeing!

O the ineffably glorious privilege of being!

All of the World's lovely girlhood, unfleshed and made spirit,

Broods out in the sunlight this morning – I see it, I hear it!

So red me no text, O my Brothers, and preach me no creeds;

I am busy beholding the glory of God in His deeds!

See! Everywhere buds coming out, blossoms flaming, bees humming!

Glad athletic growers up-reaching, things striving, becoming!

(Editor's Note: Our thanks to Mrs. Myrtle Young of Lincoln, Nebraska, for supply [sic] information on the lapidary work of Dr. Neihardt. Mr. and Mrs. Young have been friends of the poet for many years.)

Article submitted by Sharon Marburger

GENERAL MEETING

November 15, 2007, Bethany Park Shelter

The meeting was called to order by First Vice-President Terry Anderson at 7:21 p.m. Nineteen adult members and one junior member were present. We welcomed three guests – Robert & Judy Cropp and David Defruiter.

OLD BUSINESS – The minutes of the October meeting were published in the electronic Pick & Shovel. Charles Wooldridge moved to accept the minutes as published, second by Al Stewart. Motion carried. The treasurer's report for October was read at the meeting. Phyllis Parks moved to accept the report as read, second by Mary Pittard. Motion carried.

Vera Lyman received information from Lincoln Public Schools regarding scholarship monies. They would like samples for the 5th grade classes; 1-2 inches in size, bagged in twelves. The specimen list was published in the Pick & Shovel. They will take as many specimens as we want to give. Larger samples will be accepted, but must have identification on the specimen and note the location found.

Nominations were requested from the floor; none were given. Phyllis Parks moved to close nominations and the slate be accepted as printed in the Pick & Shovel. Shirley Rockel seconded, motion carried. The officers and board members for 2008 are:

President – Terry Anderson
 1st Vice President – Roger Pittard
 2nd Vice President – Charles Wooldridge
 Treasurer – Vera Lyman
 Secretary – Sharon Marburger
 Board Member – Jim Atkins
 Board Member – John Harrison
 Board Member – Al Stewart
 Board Member – Jim Marburger

Nominations for replacing the outgoing Nominating Committee persons are: Mary Pittard and Phyllis Parks. Shirley Rockel moved to close nominations and accept the two nominees, second by Charles Wooldridge. Motion carried.

Charles Wooldridge gave the 2008 Show Report. Roger Pabian plans to have a show committee meeting on December 3 at 7:00 p.m. at the Gere Library, meeting room 1. The Villager no longer does conventions, so Woolly is working out a deal with Ramada Limited South. Ramada will cater in the meal.

Charles Wooldridge reported that the 2008 January Swap plans are proceeding on schedule. The Swap is scheduled for January 20. Setup will begin at noon, doors open to the public at 1:00 p.m.

Jim Marburger completed the equipment checkout form. It will be printed in the December Pick & Shovel. Equipment can be checked out by members only, in two-week increments, for a \$10 deposit. Upon return of the equipment, half of the deposit will be refunded. The remaining half will be placed in the Equipment Maintenance Fund account for future maintenance and/or replacement of equipment. A member may check out equipment for a longer period of time, with \$10 deposit for each two-week period of checkout.

NEW BUSINESS – Vera Lyman will be Acting Secretary for the December board and general meetings as Sharon Marburger will be out of town for both meetings.

We are having a Christmas Party at the General Meeting on December 9. The doors of the Bethany Park Shelter will open at 5:00 p.m., dinner at 6:00 p.m. The club will provide chicken and ham, and members are to bring two covered dishes. Rock bingo will be the entertainment. Bring specimens for Rock Bingo prizes.

Jim Atkins has requested to increase the amount of space for the web page. Increasing the size would allow keeping a couple years of Pick & Shovel publications available to website visitors, along with the ability for more photos and information. The club needs to keep up with trends of modern society, with most of the younger generation being "cyber savvy". An initial proposal will be provided to the Board at the December meeting.

The meeting adjourned to program at 8:10 p.m. on a motion by Charles Wooldridge, second by Jim Marburger. Motion carried.

The Program was The Secret Canyon – Exploring The Archeological Remains Of Range Creek Canyon. Thank you, Woolly, for providing this interesting video. Woolly also shared a short presentation of hunting for specimens on the Nemaha River. That was fun!

A big thanks, also, to those who brought pies for our enjoyment. Yummy!

Respectfully submitted,
Sharon Marburger

LINCOLN GEM & MINERAL CLUB, INC. – BOARD OF DIRECTORS

November 7, 2007, Gere Library

The meeting was called to order at 7:03 p.m. by Second Vice President Roger Pittard. Board members present were Roger Pittard, Vera Lyman, Sharon Marburger, Jim Marburger, John Harrison, Charles Wooldridge, and Jim Atkins.

The minutes of the October Board meeting were distributed. Jim Marburger moved to accept the minutes as printed and distributed, second by Charles Wooldridge. Motion carried. The Treasurer's report for October was distributed. Jim Marburger moved to accept the report as printed and distributed, second by John Harrison. Motion carried.

OLD BUSINESS: Charles Wooldridge reported that the Villager notified him that they no longer do banquets. He is checking with several different motels to get one lined up for the MidWest Federation activities during the show.

Jim Marburger presented a draft rental agreement for checking out the portable fluorescent light equipment. After reviewing the draft, Charles Wooldridge moved to accept the rental agreement as printed, second by Jim Atkins. Motion carried.

Vera Lyman made contact with Lincoln Public Schools regarding the possibility of the club using scholarship funds for students. Vera suggested we use some of the scholarship money to purchase specimens that aren't donated. Samples appropriately marked and packaged can be given to Vera for delivery to LPS. Vera will find out the quantities wanted.

NEW BUSINESS: The annual non-profit IRS reporting form came in. Vera Lyman will take care of it.

Jim Atkins moved that the meeting minutes be published in all copies of the Pick & Shovel and that financial reports be made available at the meetings. Sharon Marburger seconded the motion which carried.

Jim Atkins will provide a proposal at the December board meeting for upgrading the club's website.

Everyone will be requested to bring a pie to the November general meeting.

No further business was discussed. The meeting adjourned at 8:02 p.m. on a motion by John Harrison, second by Charles Wooldridge. Motion carried.

Respectfully submitted,
Sharon Marburger

Holiday Greetings

This next year looks very exciting, with the biggest rock show planned in these parts in along time. Field trips, displays, shows, silent auctions, and everything a rock hound could want. Maybe some new members too. Making new friends and sharing the knowlage of our hobby with others. Fun times ahead.

Rock Bingo On

Terry Anderson
President LGMC



New Portable Fluorescent Black Lights

To rent the new fluorescent black lights
contact Jim Marburger at 402-792-2348
or by
E-mail jm24122@windstream.net

Lincoln Gem & Mineral Club rental agreement can be found on page 9 of this newsletter.



2008 Show Plans

By Roger Pabian

Several big steps forward and a big step backward is the report for the 2008 Show at this moment. First, the step backward. We had arranged to have the Villager Motel as our host motel and convention meetings site. The contract was signed, sealed, and delivered, but then The Villager backed out on its commitment and cancelled all shows and conventions. Not only did the Lincoln Gem and Mineral Club event get axed, but several other events related to other hobbies got the axe too. Charles Wooldridge has been on the search for another host motel/hotel, and we hope to have this site confirmed by the end of November. We got the news of the cancellation by the Villager out to the Midwest Federation, and it was put on their web site and will be announced in the forthcoming newsletter. We will have to publish a supplement to the initial informational packet that lists the new host motel/hotel.

On more positive notes, John Harrison informs me that 12 of the 14 dealers spaces have been filled. There will be a couple of new dealers at the show, and one of them has already sent me details about an educational gold exhibit he will bring to the show.

Over the many years that I have been involved in gem and mineral shows and geology, I have had the opportunity to make many friends, and I have been fortunate to have many of them desire to place an exhibit in the 2008 show.

There are outstanding invitations out for a display of agate and gemstone marbles, American Indian Petroglyphs, a history of the usage of gold through the ages, midwest fossils, Cretaceous fossils, Missouri gems and minerals, fancy lapidary work, Nebraska gems, and many other unique exhibits.

Karen and Charles Messenger have been in the process of arranging a broad variety of programs for the show, and we are planning on having shows on fossils, petroglyphs, geology of Nebraska, and other subjects.

Several field trips are in the planning stages including one to Richardson and Pawnee counties for late Paleozoic fossils, one headed by Wooly to the Big Nemaha to look

for fossils and lapidary arterial, one to look for Odell diamonds, and one to look for Cretaceous fossils. Several self-guided trips will also be available for show visitors.

Betty White will be in charge of the silent auction table, and we will have several auctions during the show. One will support the NAOESCI treasury, our club's obligation to the state show part of the 2008 show. Proceeds from other auctions will go to the Midwest Federation endowment fund. Now is the time for our club members to begin clearing out their excess rocks and putting up some good examples for the silent auctions.

We are planning to have a full array of both selling and non-selling demonstrators. Plans call for metal smithing, lapidary, rock painting, fossil preparation, flint napping, beading, and faceting to mention a few.

We will have a junior activities booth and that should be supplemented by the Midwest Federations junior activities material. There should also be a display from the Midwest Federation director of supplies.

In the meantime, I would like to see each member of Lincoln Gem and Mineral Club prepare at least one exhibit for the show. Even if this is a Federation Show, we should not rely wholly on their resources to provide exhibits.

Al and Marilyn Stewart are in charge of ribbons and certificates, I will work with Al and Marilyn to design a nice certificate for each of the show participants.

The competitive displays are in the hands of Joyce Hanschu, the Midwest Federation Uniform Rules Chair. We hope to have some nice competitive exhibits from novices as well as those trying to earn AFMS eligibility.

A show committee meeting is scheduled for Monday, December 3, at the Gere Library, 56th and Normal. We will get a more complete progress report after that meeting.

Roger K. Pabian
2008 Show Chair

A Fossil Hunter's Career Summary

by Ben Vrana

As I undoubtedly have spent a great deal of time collecting fossils, I should tell about my work in organized fossil trips by colleges, universities and other organizations. Because I am a teacher by profession, I was able to make use of time during the summer months (when I wasn't detasseling hybrid seed corn with my children) to volunteer on digs. I won't go into too much detail on any volunteer work, but you can ask me about them sometime. Be prepared for long stories!

UN-L (University of NE - Lincoln) 1982 - McClary Ranch site west of Ash Hollow State Park in western NE We found 10,000 year-old bison bones and discovered paleo tools made by Native Americans.

Dinosaur National Monument - Utah - 1986 & 1987I helped save an Apatosaurus dinosaur skeleton from destruction. Our crew lugged in a generator, tools and water into the back country in 110 degree heat. We jackhammered away the cement-hard matrix to save the skull from dropping into a 50-foot deep ravine. We also discovered two new species of fossil sharks. One summer we screened gravel to find teeth of some of the earliest mammals from the Triassic Period, the multituberculates.

Ashfall Fossil Beds - Nebraska- many times in the 1990's and also in the 2000's. Prof. Mike Voorhies identified many of the bones we found in the upper layers - extinct horses, rhinos, camels, etc. I later translated their brochure into German for the many German speaking tourists from Switzerland, Austria, and Germany.

South Dakota School of Mines - I found a mosasaur skull (marine reptile from about 80 million years ago) along the SD shoreline of Lewis and Clark Lake and helped Jim Martin and Bruce Schumacher remove the skull (now in the School of Mines collection) Over the next several years I went on many expeditions with them - digging dinosaurs near Sundance, WY and fossil deer, rhinos and ancestral swine in the Badlands National Monument For a few years, we were invited to dig on the Native American Reservation north of Chamberlain SD. There we found remains of huge fossil turtles, mosasaurs, different types of fossil fish, and sharks' teeth in the marine deposits of the Cretaceous Period.

BLM (Bureau of Land Management). This Federal agency wanted a large area of land in WY surveyed for fossil remains. We were allowed to remove those fossils, which were in danger of being destroyed by erosion (I remember putting a plaster jacket on a 7 foot-long dinosaur femur), but mostly we noted dinosaur areas on maps. We worked with students and professors from Auburn (Alabama) University, and we had a good time camping on the Thunder Basin National Grasslands.

National Forest Service. I helped dig at the Hudson-Meng Bison Kill Site north of Crawford, NE. Almost 10,000 years old, the site contains the bones of an extinct type of bison. We did find Alberta Points

(chert and flint spear points and knives) inside the rib bones, which indicated that the bison were killed by Native Americans, not driven over a cliff nor frozen in a blizzard. This Site, partially covered by a building, is still being worked and is open to the public during the summer season.

Ponca State Park. Since 2001, I have been hunting mosasaur bones along the banks of the Missouri River in this Park on Fathers' Day weekend in the Cretaceous marine deposits. It's now publicized as "Father's Day Fossil Weekend". Children also help look for marine fossils in the Greenhorn Shale and Limestone. One ten-year-old found a six-foot long fish (Gillicus) in the shale last year, and a group of us volunteers spent a lot of time digging out a huge slab of rock (Brother Fred helped) and hauling it off to the Visitor's Center. We started to uncover the head this summer (2007), but it will still be years before we get it all prepared.

I've enjoyed camping at these dig sites, seeing the wildlife -even the rattlesnakes - and prairie flowers. Away from the light pollution of the cities, we have a beautiful view of the heavens on cloudless nights. There are also new people who haven't heard my old jokes and stories before! Most of my good fossils from my own digs are in the UN-L Vertebrate Fossil Collections - three are on display in The Nebraska State Museum or in the collections of the South Dakota School of Mines in Rapid City.

The National Rockhound Hall of Fame

Has Inducted Editor Ben Vrana

by Ben Vrana

No, I did NOT nominate myself to this honor. I wish to thank the person or persons who did submit my name. It's been a pleasure to work with all the friendly rockhounds in our hobby.

The Hall of Fame, located in Murdo SD, was founded in 1987 as a way to honor rockhounds who have contributed greatly to the hobby.

Six inductees are honored each year, one in each of the six categories - Minerals, Lapidary, Metalcraft, Fossils, Education and Tribute (deceased). My category was in Fossils.

My picture and a plaque engraved with my name will be on display in the Rockhound Hall of Fame in Murdo. You are welcome to stop by to visit. The Hall is not open daily - call 605 -669-2256 for information.

There is a website as well. -

www.rockhoundhalloffame.org.

Giant Sea Scorpion Discovered; Was Bigger Than a Man

James Owen for National Geographic News November 21, 2007

<http://news.nationalgeographic.com/news/2007/11/071121-giant-scorpion.html>

A fearsome fossil claw discovered in Germany belonged to the biggest bug ever known, scientists announced Tuesday. The size of a large crocodile, the 390-million-year-old sea scorpion was the top predator of its day, slicing up fish and cannibalizing its own kind in coastal swamp waters, fossil experts say. *Jaekelopterus rhenaniae* measured some 8.2 feet (2.5 meters) long, scientists estimate, based on the length of its 18-inch (46-centimeter), spiked claw. The find shows that arthropods—animals such as insects, spiders, and crabs, which have hard external skeletons, jointed limbs, and segmented bodies—once grew much larger than previously thought, said paleobiologist Simon Braddy of the University of Bristol in the United Kingdom. "This is an amazing discovery," Braddy said. "We have known for some time that the fossil record yields monster millipedes, supersized scorpions, colossal cockroaches, and jumbo dragonflies," he added. "But we never realized, until now, just how big some of these ancient creepy-crawlies were."

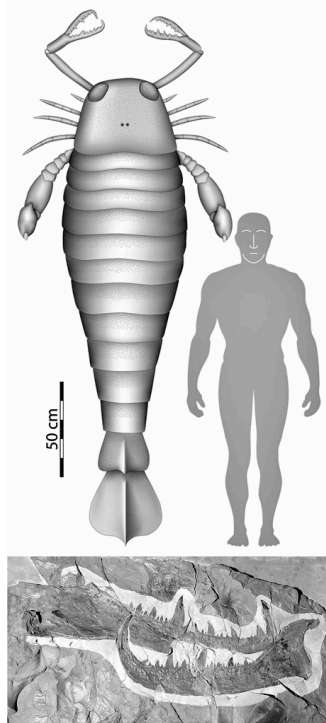
The newfound fossil creature is estimated to be at least one and a half feet (46 centimeters) longer than any previously known prehistoric sea scorpion, a group called eurypterids. Braddy and co-author Markus Poschmann of the Mainz Museum in Germany report the find in the latest issue of the journal *Biology Letters*. Poschmann uncovered the fossilized claw in a quarry near Prüm in Germany. Rock layers encasing it suggest the creature lived in a brackish coastal swamp or river delta, the researchers said.

Water Bug

Smaller sea scorpions are known to have crawled ashore to mate or shed their outer skins. But "there's no way this monster bug would have been able to do that, because it was just too big," Braddy said. Its legs were relatively flimsy compared to the size of its body," he added. Without water buoying the big beast up, its legs would have collapsed under the weight of its body, Braddy said. The arthropod was top of the food chain, he said. "They were cannibals but they also would eat some of the early armored fish that were around at the time." Some researchers think that some primitive jawless fish evolved protective bony shields because of predatory pressure from sea scorpions, he added. Though *J. rhenaniae* has been known for many years, no one

realized the species grew so huge, according to paleontologist Paul Selden of the University of Kansas.

"It would pretty much have eaten anything smaller than itself," Selden said. The animal's claws were armed with long sharp teeth that "would have grasped even a slippery fish." Held at the ready on two long, folding arms, those claws would have been used to ambush prey, Selden said. "I think they were designed for shooting out when close to prey, like the arms of a praying mantis," he added. Eurypterids, the relatives of modern-day land scorpions and spiders, likely reached such massive sizes due to lack of competition from fish and other vertebrates—animals with backbones—study author Braddy said.



Top Predator

"The backboneed animals hadn't stepped up a gear yet in their evolution, so they weren't any real threat to the arthropods," he said. "When they did, that's when the arthropods had to downsize." Jason Dunlop, arthropod curator at Berlin's Museum of Natural History, agrees. "You didn't have so many jawed fish offering competition," Dunlop said. "When fish evolve jaws during the Devonian period [416 to 359 million years ago]—afterwards the sea scorpion fossil record does tail off."

Biggest Bug

The new fossil represents the largest arthropod so far discovered, he added. The next biggest fossil arthropods were massive millipedes that grew more than 2 meters (6.5 feet) long, Dunlop said. The giant sizes of these and other land-dwelling prehistoric arthropods—including dragonflies with the same wingspans as seagulls—have been linked to increased levels of oxygen in the atmosphere. But as sea scorpions were water animals, "atmospheric oxygen probably wouldn't have played such an important role," Dunlop said. Eurypterids disappeared from the fossil record during the Permian extinction some 250 million years ago, when about 95 percent of marine species were wiped out. The largest arthropods living today include lobsters and spider crabs, both of which would have been bite-size snacks to *J. rhenaniae*.

Lincoln Gem and Mineral Club

Rental Agreement



Portable Fluorescent Light (Black Light), battery, battery charger, and 110-volt inverter (the “Equipment”).

Rental of the Equipment shall be in two-week increments. A \$10.00 (ten dollar) fee will be charged for each two-week rental of the Equipment, of which \$5.00 (five dollars) will be refunded upon return of the Equipment in good working order. The \$5.00 (five dollars) retained by the Club will be allocated for replacement costs and maintenance of the Equipment.

The Renter must be a member in good standing of the Lincoln Gem and Mineral Club. Breakage or abuse of the Equipment will be the responsibility of the RENTER.

I _____, a member in good standing with the Lincoln Gem and Mineral Club, accepts responsibility of the Equipment and will return it in the same condition it was at the time of check-out. If I choose to extend the check out period, I will call the Property Chairman to confirm the availability of the Equipment. I understand that additional fees for extended rental will be assessed at the time I return the Equipment. I understand that I am responsible to reimburse the Club for loss of or damage to the Equipment.

Unit Number _____

Check out date: _____

Amount Paid: _____

Check in date: _____

Return of \$5.00 deposit: _____

Extend Date of rental: _____

Property Chairman: _____

2008 Elected Officers

President	Terry Anderson	402-826-1169	cajunbrat@neb.rr.com
1st Vice President	Roger Pittard	402-759-4623	rogerp@dtmspeed.net
2nd Vice president	Charles Wooldridge	402-325-8849	charles.wooldridge@bhss.ne.gov
Treasurer	Vera Lyman	402-464-6089	
Secretary	Sharon Marburger	402-792-2348	mamamar@windstream.net
Board Member	James Atkins	402-483-1610	jna@inetneb.com
Board Member	John Harrison	402-792-2337	jh21923@alltel.net
Board Member	James Marburger	402-792-2348	jm24122@windstream.net
Board Member	Al Stewart	402-483-1044	mmstewart@inebraska.com

Nominating Committee Long Range Planning & By-Laws Committee

3 Years	Vera Lyman	3 Years	Charles Wooldridge
	Edward Ridge		Phyllis Parks
2 Years	John Harrison	2 Years	Susan Taylor
	Aulden Stewart		Edward Ridge
1 Year	Mary Pittard	1 Year	Vera Lyman
	Phyllis Parks		Roger Pabian

STANDING COMMITTEES

Education/Librarian	Roger Pabian
Field Trips	James Marburger
Historian	Sharon Marburger
Membership Record	Edward Ridge
Programs	James Marburger
Property	James Marburger
Refreshments/Door Prizes	Judy Reilly
Youth Activities	Kay Jurgens, Vera Lyman Susan McMahon, Judy Reilly
Housing Committee	Charles Wooldridge, Vera Lyman, Susan McMahon
Auditing Committee	John Harrison, Roger Pabian, James Marburger
Geology Day Coordinator	Roger Pittard
MWF Liaison	Vera Lyman
Scholarship	Vera Lyman
Christmas Party	Edward Ridge
2008 Show	Roger Pabian
2008 Swap	Charles Wooldridge

J.J. & L. Rocks and Minerals

COME SEE US FOR YOUR ROUGH NEEDS

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At
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Show Chairman - Roger Pabian

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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 applicant attends at least one meeting of the Club and pays the above dues plus a \$5 registration fee.

Meetings: Third thursday, September through May except December & January. Those dates will be announced. The meetings are held at Bethany Park Indoor Shelter, at Cotner and Vine Street.

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 Lincoln, Nebraska 68505-0342
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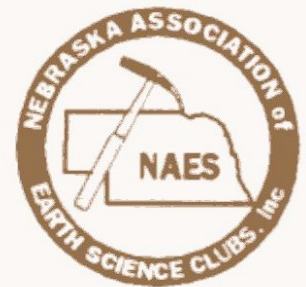
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The purpose of this corporation shall be to study, promote an interest in, and disseminate knowledge of lapidary and various Earth Sciences including by not necessarily limited to Geology, Paleontology and Mineralogy. It shall be a particular purpose of the corporation to provide education in these fields to its members and the general public, especially to youth and student groups.