

CEDAR VALLEY GEMS  
CEDAR VALLEY ROCKS & MINERALS SOCIETY  
CEDAR RAPIDS, IOWA

SEPTEMBER 1988

VOLUME 16

ISSUE 1  
Page 1

September 21, 1988 is the date of our first meeting of this season. Betty DeSotel, Program Chairman says we will have our annual "Brag Night" or "Show and Tell." Please come prepared to share some of your summer happenings with us.

Remember we meet at 7:15 at the Linn County Historical Museum, 101 - 8th Avenue S.E., Cedar Rapids, Iowa. Guests are always welcome, so bring a friend or two if you would care to.

We will be looking for you.

As Gladys and I both have several other committments just now, this is a slightly abbreviated Bulletin. Sorry. We will try to do better next time.

Hosts and hostesses - None yet at the time this is being typed. (9-7)

MEMORIES OF THE MIDWEST FEDERATION SHOW at MACOMB, ILLINOIS

This was the first Midwest show that we had been able to attend for several years. I had forgotten how big they are, how many extra special exhibits they have, and some of the people I think I had not seen since the last Midwest Show. It was good to see all these long time old friends.

We exhibited a display of fossils along with several other MAPS members. We Helped Norman and Alice Brown with the Scholarship Auction on Thursday and Friday. It was a very busy area. Hardly seemed like we got it set up for the auction. The bidding was closed, and it was time to set it up again. While the receipts from the auction were very good, it did not seem like the material was the quality it was at the last auction we had helped with.

We had elected to stay at the dorm, rather than one of the motels. It was not as comfortable as a motel would have been, and of course, there was no TV, but it was an experience I would not have wanted to miss. The dorm in which we stayed, was also hosting a cheer leader camp. It was enjoyable to watch all of those giggling, cute little girls. They were vivacious, lively and just refreshing to be around. On Friday they had Crazy Days. I wish you could have seen some of the outfits they wore, some of the things they did to their hair. Saturday was their last day and they all came to breakfast in their dress uniforms. It was exciting to see the transformation from the day before and to see the many styles and colors of the uniforms.

We also got breakfast and supper at the dorm. That, too, was an enjoyable part of the day, as it gave us an opportunity to visit with other rockhounds which we would probably not have had in any one of the restaurants.

Remember that faceted topaz which our club voted to help pay for, well, it was there. It is humongous, and so beautiful. You can be glad that you had a part in the purchase of this magnificent stone. In the several exchange bulletins that I have read, it has been variously described as big as the headlight on your car to as big as a loaf of bread. It is very large!!

The weather there was extremely hot and everyone hurried from one air-conditioned area to the next. There was very little visiting in the parking area, or anywhere outside in the day time hours as the sun baked the already hot, dry campus. There were no cool breezes in the evenings. Just stifling. We were glad to get home to air conditioning. Yes, are room was air-conditioned, however not as well as it is at home.

The swap area, an area which they have not had at the Midwest Shows on a regular basis, was full most of the time. Swap bucks were in use and everyone seemed to be happy with the activity there.

There were several museum displays, geological survey displays and literature, maps, booklets and many educational displays.

Mary Boland, from Wisconsin, and the paleontological chairman, had a very interesting table, also with all kinds of maps, literature and booklets from several states. She had many little fossils which she gave out to the children. She had xeroxed a number of articles which she handed out. She and her committee manned the booth long hours.. A really great effort.

I could go on and on. Many of you were there. Guess it would be nice to read about your thoughts on the show. Won't you take your pen in hand and jot down some thoughts, please.

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Summer is gone. I realize it was extremely hot and there was not the activity that there normally is, however, I know some of you took trips and have gone rock hunting. Write up a paragraph or two and tell us what you have been doing.

We had three well-attended summer picnics, though there were several of you who we did not see all summer. As always, we had lots of good food with new and interesting dishes. There were always 'show and tell' rocks. Jeff was here for the July picnic, but had returned to school in the east before our August picnic. We did have one impromptu picnic in Bever Park, in Jeff's honor. Had some good laughs about some of our past field trips. Maps do take you in some rather strange places - even into towns that cannot be fully appreciated until you go through them the second time. No wonder no one remembers just how to get there. WHERE?? Well, who knows. We have not had one of those famous hand-drawn on a luncheon napkin for sometime. Perhaps it is time for another one. I have not had such a good laugh in a long time.

SHOWS AND SWAPS

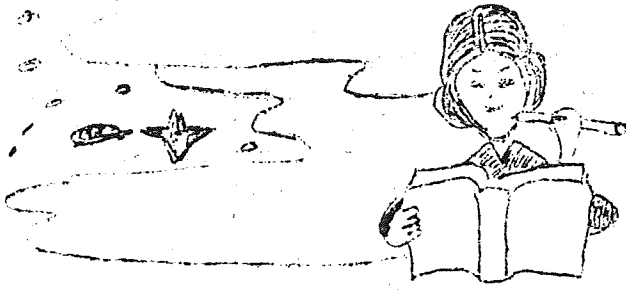
- Sept. 16-17 - TULIP CITY GEM and MINERAL CLUB - SHOW, Holland Civic Center, W. 8th, Holland, Mich. 10-10; 10-9.
- Sept. 16, 17, & 18 ASSOC. OF EARTH SCIENCE CLUBS OF GREATER KANSAS CITY & LINCOLN CHAMBER OF COMMERCE - ROCK SWAP, Lincoln, MO Park shelter House, east of HWY 65. Potluck 5 P.M. Saturday.
- Sept. 24-25 - AUSTIN ROCKHOUND ROUNDUP - 4-H BLDG, Mower County Fairgrounds, Austin, Minn.
- Oct. 1-2 - BLACKHAWK GEM AND MINERAL CLUB - SHOW, Masonic Temple, 420-18th St., Rock Island, Ill.
- Oct. 1-2 - Elgin ROCK AND MINERAL SOCIETY - SHOW, Hemmens Exhibition Hall (lower level), Elgin, Ill. 11-8; 11-5
- Sept. 30 & Oct. 1-2 - Platte Valley Rock and Minerals Society - SHOW Nat'l Guard Armory, North Platte, NE
- Oct. 8-9 - NEBRASKA MINERAL AND GEM CLUB - SHOW - Exhibition Hall, Holicay Inn, 72nd and Grover Sts, Omaha, NE 10-7; 10-5 (72nd St. exit off I-80)
- Oct. 8-9 - ROCK RIVER VALLEY GEOLOGY SOCIETY - SHOW - County Fairgrounds, Jefferson, WI 10-7; 10-5
- Oct. 15-16 - KEN ROCK GEM, MINERAL AND FOSSIL - SHOW - Ken Rock Community Center, 3218-11ths St., Rockford, Ill. 10-6; 10-5 (some very interesting dealers listed)
- Oct. 15-16 - DES MOINES LAPIDARY SOCIETY - GEM AND MINERAL SHOW United Rubber Workers Hall, 2nd & Broadway, Des Moines (2nd Ave. exit off I-80) 10-6; 10-5
- Oct. 21, 22 & 23 - SAUK VALLEY ROCK AND MINERAL - SHOW, Northland Mall, Sterling, Ill. 10-9; 12-5.

OOPS!! I MISSED ONE\_

Sept. 16-18 McDONNELL DOUGLAS "SILVER ANNIVERSARY SHOW, North County Recreation Complex, Veteran Memorial Park, 2577 Redman Rd., St. Louis County, MO

LINN COUNTY HISTORICAL MUSEUM ASSOCIATION

The museum is currently having a membership drive. Join now and get the balance of 1988 free. My term on the board expires in January. It would be nice if we could have an active rockhound get elected to the board. Give it some thought. Memberships for couples is \$15. per year. Sorry I do not have the schedule at hand to tell me how much for singles, seniors, etc.



### CLEARLY, SOME BASICS

by Diane Dare

Education Chairman

The Sons of the Pioneers sang of cool, clear water. In "Earthclock" Anita Nygaard wrote "In August, the transparent, speaking stream is for watching slippery reflections, learning to know leaf patterns, for the patient study of stones". Can you think of at least six "clear stones" (colorless minerals) that can be found in Illinois?

We usually talk about minerals, which are chemical elements or combinations of chemical elements. ROCKS are combinations of minerals.

Rocks are the result of forces in the earth - geologic processes - acting over long periods of time, building up some chemicals, breaking down others. Normally it begins with molten matter, becomes igneous rocks, changes to sediment and sedimentary rocks, and either before or after that change, is the metamorphic stage. These then are the three types of rock - igneous, sedimentary, and metamorphic.

Ignis, Latin for fire, is a clue as to how this group of rocks forms. Since we know that long ago the earth was a mass of molten hot material, all rocks and minerals had to come from this matter. They hardened, or "froze".

Today there is still molten material - magma - deep within the earth. It is not liquid like water; pressure in the earth keeps it sort of semiplastic, like bubblegum. Pressure on the magma is relieved by cracks in the solid rock above it, or by heat loss due to radioactivity, and the magma reaches a melting temperature and starts to rise. It may cook as it rises up in the cracks and turn solid there, or it may pour out on the earth's surface, when lava flows

from a volcano, and THEN become solid. Whether it cooled below the surface or on top, it is igneous rock.

Even the most deeply buried igneous rocks are eventually exposed by erosion, and the forces of weathering attack them. These forces can be chemically decomposing ones, such as acids in the soil, moisture, and carbon dioxide, or they can be mechanical ones that cause disintegration, such as freezing and thawing, or abrasion by wind and ice. Any way, the igneous rocks crumble and decompose.

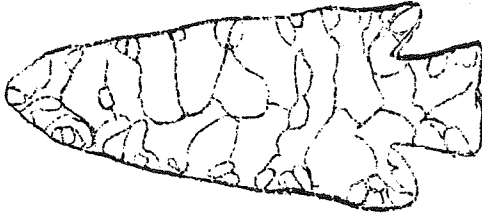
Some of the rock particles may dissolve in rain water seeping through soil, or be blown away by wind, or carried by glaciers, but most are washed away by streams. However they are moved, they are deposited somewhere else, and here they harden into new sedimentary rocks. Most of the top layers of the earth's crust are sediment or sedimentary rocks, since this is where the weathering, erosion and deposition takes place.

Metamorphic rocks are the result of drastic, extreme changes in either igneous or sedimentary rocks, while they were in a solid state. They have changed so much that often it is impossible to tell if the original rock was igneous, sedimentary, or even another metamorphic rock. The structure as well as the original color changes.

What can cause such changes? One cause is heat from an invading magma, a movement of lava. Another is pressure from deep burial, or pressure from movement of the earth, as in an earthquake. Or it could be a chemical action of liquids and gases. Sometimes the heat and pressure may be like the original environment under the crust or in a volcano, so the high-temperature minerals of the original crystalline rocks are sort of "reborn" but the original mixture is destroyed. Because of these changes, fossils are very rare in metamorphic rocks. Almost all signs of any ancient life are removed.

Next month we'll look at some specific examples of the three types of rocks.

Continued on page 6



KNOW YOUR RELICS

by Jerry Elliston  
Charter Member  
Deceased

Sixth in a series of articles, submitted  
by member Bill Corley, via AIES News  
October 1972, p. 7

H A R D I N   B A R B E D :

The Hardin type point was named for types found in Illinois and Eastern Missouri. It ranges up to 5 inches in length, being about 4 times as long as it is wide. The stem has straight edges but flares outward slightly and is about one-fourth as long as the point. Hardins sometimes exhibit grinding along the sides and base.

The only true date for the Hardin Barbed point comes from Graham Cave in Missouri where it was found in levels 5 & 6 dating from 7,900 to 9,700 years before present.

You too can be of help in gathering data about early Indian artifacts. Always report your finds with all available information about the place where you found them to :

Illinois Archaeological Survey  
109 Davenport Hall  
Urbana, Illinois 61801

Suggested reading: Early Archaic Projectile Points, by Kubet Luchterhand, Illinois State Museum and Illinois Archaeological Survey , Bulletin No. 1.

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I also recommend reading: Story In Stone (Flint Types of the Central & Southern U.S.), Illustrated by Valerie Waldorf, text by D.C. Waldorf. Ed.

Be looking for the Snyders Point in the September issue.

INCREASE YOUR KNOWLEDGE OF ARCHAEOLOGY

HOW MUCH DO WE KNOW ABOUT METEORITES?

by Dave Mowery, SIESC Member

Probably very few rockhounds get up on Saturday mornings to go on a field trip with the avowed intention of finding a few meteorites. Meteorites are just not that easy to find. In fact, most meteorite discoveries have been made by chance. Meteorites can bury themselves to considerable depth and then gradually somehow get closer to the surface where some of them are eventually turned up.

There are three principle kinds of meteorites: The Stony Meteorites, Iron Meteorites and Stony-Iron Meteorites. The stony type consists primarily of silicate minerals and small amounts of iron. The iron meteorites, or (siderites) are mainly composed of iron-nickel alloys with usually some cobalt and copper. In a surprisingly large number of cases small diamonds are found in such meteorites. The stony iron meteorites usually have a composition of approximately 50 percent metal and 50 percent stone.

Most astronomers believe that the birth place of meteors is the region between Mars and Jupiter. Some scientists also suggest that astroids, planetoids, meteors, etc., represent the debris formed when another existing planet once orbiting between Mars and Jupiter blew up or otherwise disintegrated. The common terms "falling stars" or "shooting stars" are actually meteors that are literally burning up at a temperature of about 4,000 degrees F as they hurtle through the earth's atmosphere. Meteors which finally impact the earth's surface are called meteorites, and some of these meteorites ultimately find their way into Rock & Mineral Collections.

Most meteorites seen blazing through our atmosphere are very small compared to their original size. As they enter the atmosphere they are usually the size of a grain of sand. Most meteors entering our atmosphere therefore burn up completely. Contrary to belief, most meteorites are cold enough to handle immediately after impact, as the intense heating is on the outer surface.

from The Rock Hounds Manual, Gordan Fay

(Continued from page 5) Illinois minerals that may be clear or colorless include: quartz, gypsum, mica, fluorite, calcite, barite, celestite, kyanite.....and one I bet no one remembered, ice!-

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