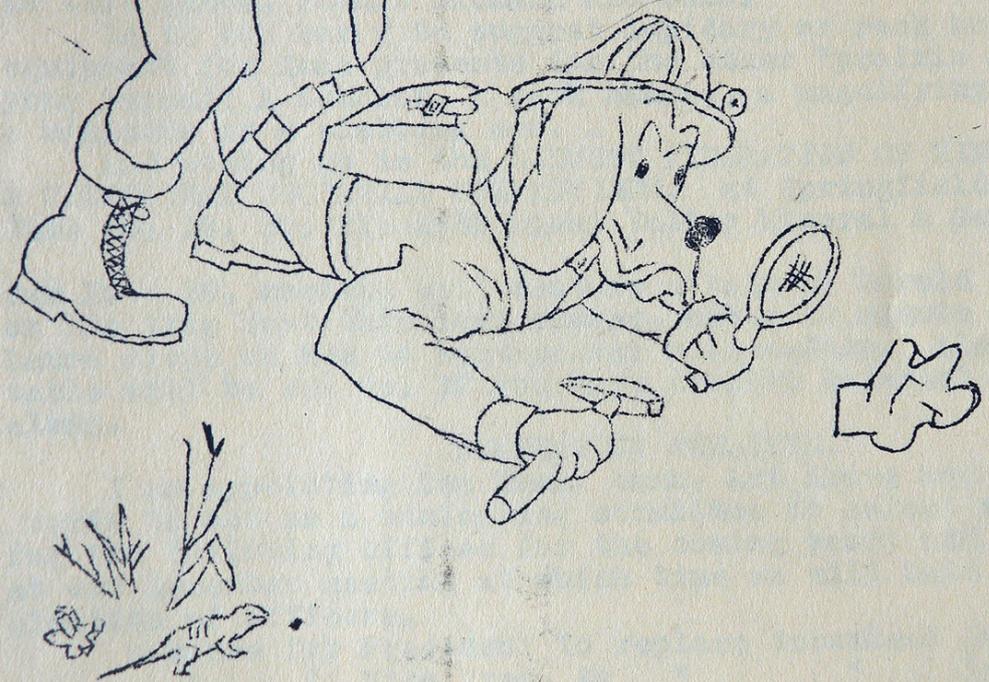
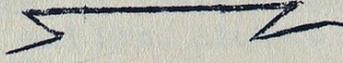




CENTRAL MICHIGAN ROCKHOUND NEWS



VOL. II

NO. IX

NOVEMBER 58

CENTRAL MICHIGAN LAPIDARY AND MINERAL SOCIETY
"AFFILIATED WITH THE MIDWEST FEDERATION"

MEETING PLACE: EAST LANSING SENIOR HIGH SCHOOL, RM. A-132
DATE: THIRD THURSDAY OF EACH MONTH EXCEPT JULY & AUGUST

DUES: \$2.00 ANNUALLY. STUDENTS UNDER 18 YRS. OF AGE, \$1.00 annually

CO-EDITORS: LARRY KIRBY AND JOHN FITCH
OFFICERS

PRESIDENT - - -JOE KREPS, 2605 DELTA RIVER DRIVE - - -IV 5-6047
VICE PRESIDENT-LEON NORTH, 861 GROVENBURG RD., HOLT-- -OX4-8367
SECRETARY - - -GRACE SHAPPELL, 219 B AILEY ST., E.L.MD2-3835
TREASURER * * *LAURA KREPS, 2605 DELTA RIVER DRIVE- IV5-6947

From The President's Rock Sack

I hope that a great many of you are planning to offer that "choicest of the choice" rock specimen for display at the Hobby Show, Nov 13, 14, 15, at the Civic Center. As it was last year, we again want this display to be a feature attraction at the show, and it always makes a display chairman happy to know in advance that he has a choice selection of pieces to choose from. - Call Merrill Payne, ~~IX~~ TU 2-2358 and let him know Also, if you could arrange to 'baby-sit' with the display for two or three hours during the show please call Merrill and tell him so.

You will like to read the account of their recent rock-hunting trip by our new members Mr. and Mrs. Richard Stevens in this issue. Thanks Richard and Lila.

Is it too early to suggest lapidary or rock hunting ~~equipment~~ equipment for Xmas presents for the other "prairie dogs" in your kennel? A tumbler, a rock hammer, a magnifying glass, a magazine or a slabbing saw. .

And coming up is the MIDWEST FEDERATION OF MINERALOGICAL & GEOLOGICAL SOCIETIES CONVENTION. at Springfield, Ohio - June 18, 19, 20, 21, 1959 Miami Valley Mineral & Gem Club, Host.

Our Nov. 20. meeting will feature a talk by Harold Stonehouse on his trip West this last summer, and a 10 minute talk by Laura Kreps on how to hand-polish a free-form. Also a swap-table will be set up. If you have trading material bring it along.

NOMINATING COMMITTEE

I am appointing Sam Knox, chmn, Art Krave and Chlore Morris to act as a nominating committee to select nominees for the following offices for the coming year, and to report at our December meeting at which time we will hold our annual election of officers.

nominee for President to replace incumbent	Joe Kreps
" " Vice Pres, to	" " Leon North
" " Secretary "	" " Grace Shappell
" " Treasurer "	" " Laura Kreps
" " Bd. of Dir. to	" " Harold Stonehouse

for a three year term.

MEMBERSHIP ADDITIONS

Richard E. & Lila Ann Stevens	5889 W. State.	Lans IV 72662
Wm. Coleman	5135 Jenison.	Lans ng. IV 9 3585
Clyde E. & Mary E. Henson,	1612 Cooper,	Lansing IV 9 6020
Dell Edwards	4612 Herron Rd.	Okemos ED 2 3173
Frank W. Mortimore.	1051 E. Britton Rd.	R.F.D. Morrice, Mich.

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We want to thank Mr. and Mrs. Norman Kunkel for their gracious hospitality and fine entertainment during their "Open House" recently. Those of you who were unable to attend have missed a most interesting evening. I am sure tha with the holiday season coming up there will be more such chances to visit our club friends in their homes. Mrs. Kreps and I plan to have one at our kennel as soon as the dust of this busy season settles a little.

THE RICHARD STEVENS' TAKE A TRIP

We, my husband, my aunt, and myself, left on our color and rock trip in the cool mist of a beautiful morning. We headed toward the Lake Huron coast line along Route #46. At Bay City we got on our main route, Route #23.

Our first stop was at Au Gres in the limestone pits there. The pits in this area have what we call chert nodules which, when opened, show very pretty lines and bands. Much to our amazement we found some nodules hollow and filled with small but pretty quartz crystals that looked a lot like the geodes we had collected this past summer in Illinois. The man in charge here told us we could pick up as many as we wanted to. When we left the trunk was half full and the nose of the car pointed towards the sky.

The next stop was at the gypsum mine at Alabaster. Along the road near the fence we picked up some small pieces of massive gypsum, some white and some a deep salmon in color. We asked for permission to go collecting in the pit but they don't allow people in there at all. Disappointedly we headed the car north along Route #23 and soon forgot it all as we watched the beautiful work of nature. The trees along the shore were at the peak of color, the bright reds of the maples, the yellows of the poplars and the reds and browns of the oaks.

Before we had left on our little jaunt I had called the state geology department and asked them where to collect along our route. They told me of a place called Partridge point south of Alpena where there was an outcropping of fossil bearing rock. They said it was not usually listed on a map but that one could see it there. This little point sticks out into Thunder Bay and as we approached this region we began looking and found a little road called Partridge Point Road. At the end of it we found some fossils but nothing like the ones we were to find the next day at Rogers City in the largest limestone quarry in the world.

Next morning we were at the quarry gates ready for some hunting. The guard at the gate found a guide for us from the laboratory who was just starting to make a collection of Rogers City fossils for the company. He had done quite a bit of studying about them and was willing to collect with us as long as we wanted to stay. We found loads of brachiopods, horn coral and crinoids, much more scarce were the butterfly shells and the trilobites. Rich, my husband, found one beautiful big butterfly shell and I found a trilobite tail. Our guide found the imprint of a trilobite eye and gave it to us. My Aunt was in her glory, she has the fever along with the rest of us. All too soon it was 11:00 o'clock and time for us to check out of the motel, but we knew that we were headed for more good hunting across the state at Petoskey.

Petoskey turned out to be a big failure as far as good stones were concerned, and we were about to give up when a very nice man told us of a place south of Charlevoix where he had done some collecting. He said to go straight west of Atwood to the lake and there we could find some in the sand. He was right, and we picked up rocks until our hands were frozen and it was too dark to see them. Now we have to find a place to put all those stones. Isn't that always a problem?

Lila Stevens
5889 W. State Rd. Lansing

OUTLINE OF THE GEOLOGIC

HISTORY OF MICHIGAN

By Edson Brower

How It Happened

Period I: In the beginning, the Great Lakes area was a basin-shaped lowland (now known as the Michigan Basin) of granitic rocks bordering a granitic highland known as the Canadian Shield, the core of the North American continent.

The rim of this basin can now be seen in the Huron Mountains of Marquette County. The time is known as Archean. No one is certain when it began, but it ended 1,050,000,000 years ago. It is believed, from studies of radio-activity, that the earth is some three billion years old.

Period II: A narrow, shallow sea entered, probably from the east, covering much of what is now the Northern Peninsula, not spreading over what is now the Southern Peninsula. Mechanical and chemical weathering produced sediments that were washed into the seas by primitive rivers--sand, clay, lime. Primitive plants appeared in the sea. Bacteria and chemical processes removed and deposited iron and lime salts from solution.

The time when all this happened is known as Huronian, and it lasted some 250,000,000 years.

Rocks of the Huronian time: Sandstones, conglomerates, limestones shales, iron formations--17,000 feet. Earth movements and granitic intrusions metamorphosed these to quartzites, marbles, slates, iron ores. Descending water enriched the ores.

Fossils: Imperfect plant remains.

Economic Products: Iron Ore, marble, graphite, slate.

Outcrops: In Baraga, Dickinson, Goebic, Iron, Marquette, and Menominee counties.

Huronian time ended with convulsive earth movements and volcanic activity, 800,000,000 years ago.

Period III: Explosive vulcanism followed by quiet lava flows of copper-bearing ~~lava~~ ~~eruptions~~ with ~~times~~ of erosion of the lavas by wind and water which produced sandstones and conglomerates. Heated waters moving upwards brought copper minerals and native copper and silver which were deposited when the waters cooled in the gas bubble pores of the lava, pores of the sandstones and conglomerates, and in partings and cracks of the rocks. Greatest deposit of native copper on earth. Some unimportant copper ores (arsenides, carbonates).

The time when this happened is the Keweenawan, and it lasted 250,000,000 years.

Rocks: Lava flows--diabase, basalt (trap), sandstones, conglomerates--more than 40,000 feet.

Fossils: No fossils found in Michigan, though primitive Animals were in the seas elsewhere, probably having no hard parts to be fossilized.

Economic products: Native copper, silver, semi-precious

stones, building stone, road metal.

Outcrops: Keweenaw rocks in Goebic, Keweenaw and Ontonagon counties.

All this early time, known as pre-cambrian, ended 550,000,000 years ago with subsidence of vulcanism and slow elevation of the Killarney Mountains that the flat-lying Keweenaw rocks when granites pushed up where the Porcupine Mountains are now. From this time on, the area of the Michigan Basin (east of the meridian of Marquette) slowly sank--became more basin like, with its deepest part shifting but always in the central part of the north half of the Southern Peninsula.

Period IV: A long period of erosion followed: The Killarney Mountains were worn down to stubs--Mt. Bohemia, Mt. Houghton, Mt. Horace Greeley in Keweenaw Co. The Paleozoic Era--time of early life--had begun. Plants lived on land and in the sea; animals became air breathers on land in the middle of the Paleozoic time. Deposition and mountain building were going on in eastern North America.

During the Paleozoic, the seas made some six major incursions into the Michigan Basin with many minor ebbs and flows, so that for more than 315,000,000 years the Michigan Basin was at times filled with a sea, and at times, land, desert and swamp. The seas teemed with life and the muds at the bottom of the seas and became cemeteries as corals, clams, snails, shelled creatures and others died. The muds then solidified into rock museums of former life. As seas ebbed, sediments hardened to rocks that became the floor of the next invading sea. But many times before the next sea invaded, the rocks were at the surface and being eroded, thus a record was written of land surfaces buried under later sediments. As each sea ebbed, erosion began on the sediment exposed, bevelling the edges of each rock bowl and entirely removing the sediment in many places, so that present day outcrops do not represent the former extent of the seas and the sediments laid down on their floors.

The Seas and What They Brought

I. Cambrian: Seas encroched from the southwest. Stopped at north by Killarney Mountains.

Rocks: Mainly sandstone, some shales, 2,000 feet. Lowest rock bowl.

Fossils: Age of invertebrates in the sea. Plants on land started building soil.

Time: 100,000,000 years.

Economic products: Building stone and water.

Outcrops: In Alger, Baraga, Chippewa, Dickinson, Houghton, Iron, Luce, Marquette, Ontonagon Co.

2. Ordovician: Seas not so far spread to the north, encroched from the east; time of shifting seas. Ordovician time ended with widest encroachment of the sea over North America; covering Michigan to probably the southern half of the eastern half of the Northern peninsula.

Rocks: Limestones and shales, 2,100 feet thick.

Fossils: First primitive vertebrates, shelled invertebrates,

corals and plants on land and in seas.

Time: 70,000,000 years.

Economic Products: Water, limestone, petroleum.

Outcrops: In Chippewa, Delta, Houghton, Menominee, Schoolcraft Co.

3 Silurian: Warm seas encroached from the east, north and south.

Age of coral; at first deep, warm coral sea; end of Silurian; an age of arid conditions; very salty seas.

Rocks; Thick lime deposits; then aridity and thick deposits of salt; nearly 4,000 feet of limestone and rock salt.

Fossils: Land flora abundant; corals; invertebrates in sea; first land animal, a scorpion.

Time: 25,000,000 years.

Economic Products: Limestone, petroleum, gas, salt and fresh water.

Outcrops: Chippewa, Delta, Mackinac, Monroe and Schoolcraft Counties. Lowest and oldest of rock bowls with a southern Michigan outcrop.

4. Devonian: Seas encroached from the east; time of Michigan coral seas; age of fishes elsewhere.

Rocks: Deposits of limestone and shale nearly 3,000 feet thick.

Fossils: Few records of Devonian forest plants in Michigan, Corals, mollusca, brachiopods and other invertebrates; first fishes; first amphibians.

Time: 35,000,000 years.

Economic Products: Limestone, shale, petroleum, gas water, brine, salt and glass sand.

Outcrops: Alpena, Charlevoix, Cheboygan, Emmet, Monroe, Presque Isle and Wayne counties.

5. Mississippian: Seas encroached from the south; warm seas with corals; followed by time of aridity when salt and gypsum were deposited in shallowing seas; Michigan sea almost cut off from seas in interior of continent.

Rocks: More than 3,400 feet of shale, limestone, sandstone, and gypsum; near close of the period seas became a landlocked bay in which gypsum and thin limestones were deposited.

Fossils: Lower order of land plants; invertebrates in sea; amphibians important.

Time: 35,000,000 years.

Economic Products: Brine, fresh water, sandstone, shale, natural gas and gypsum.

Outcrops: Alpena, Antrim, Arenac, B ranch, Calhoun, Cheboygan, Eaton, Grand Traverse, Hillsdale, Huron, Iosco, Jackson, Kent, Ogemaw, Ottawa, Presque Isle, Sanilac, St. Joseph and Tuscola counties.

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LOCATION OF " THE MYSTERIOUS
SEVEN CITIES OF CIBOLA

by ED BROWER

In the last issue of our paper the Rev. Luke McMillian had an article on the Seven Cities of Cibola. History has for a long time placed them in the North American Continent, when actually they are in South America.

The seven cities are as follows:

Santiago de las Montanos--at the mouth of the Santiago River on the west bank.

San Francisco de Borja-- on the south bank of the Maranon River at Borja.

Legrono--on the midwest side of Rio Santiago at the foot of the Condors Mountains.

San Reys--the exact location has not been announced.

Jaen de Bracamoras--near Yamicat.

Bajadeloro--headwaters of the Chinochipe River.

Zamora--in Qualaquixa Jivaro Country, Rio Zamora, west of the Condors Mountains.

These locations are in eastern Ecuador, northern Peru and Western Brazil, and were found by Colonel Leonard Clark of the United States and Miss Inez Pokorny of Great Britain in 1946.

OUR ROCKHOUND ADVENTURES

by Pebble Sue (Ruth Kirkby, Calif.)

This story begins in April, nineteen hundred and fifty six. When Sam read the story of serpentine, we headed for Snake Creek

The bracing air of the Mountain Plateau, after the desert below was scented with odors of springtime; "perfume of the Gods" you know.

We ventured off on a graded road, winding around through the hills.

Then found ourselves on a rocky ledge, with space below for thrills.

From the mouth of a mine poured forth a dump, on the side of the canyon wall; Such as asbestos and serpentine, all any rockhound could haul.

We carefully filled our sacks up full, awed by the perilous heights.

Then loading our truck with each rockhound prize, we drove to explore new sights.

The road took a drop rather sudden like and we paused 'er we drove below;

For our sheepwagon might not maneuver this grade; back up to the high plateau.

So we get the hand brake and shifted the gears, hoping to back up the slope.
But the wheels spun around and dug into the ground, while from us was burned all hope.

The hill shot on down at a $\frac{1}{2}$, with a creek at the bottom at that.
Our heads in a whirl, as we coasted on down, to turn around on the flat.

Now, to give her the gas and make for a run, hoping the truck would succeed.
But after the first fifty feet more or less, she stopped like a dying steed.

We tried this again, then looked at our tires and decided to unload our rock.
While hour after hour we pushed and we shoved, using a rock for a block.

We paved that dirt track with rubber, it seemed, with tires so faithful and new,
Who shed their best life as they clung to the track, as if their duty to do.

At long and at last we crested the top and looked back that grade with relief.
Then remembered our rocks and started the trek of hauling by nature's own beast.

Now that we're home, we shiver and shake, to recall these adventures we've had,
Each time we look at the serpentine. To be home, we are so glad.....

FREE
COME ONE, COME ALL!

Hobby & Craft Show and Sale--at the Civic center--November 13, 14, & 15th.--open 12:00 noon until 10 pm. No admission charge. Bring your family and friends. Among the more than 50 hobby displays will be two of our club members. Mr. Melvin Young will have a jewelry booth and Roger Kirkby will have a booth with jewelry and more than fifty mineral specimens.

HISTORY OF MICHIGAN con't from page 7

6. Pennsylvanian: Shallow sea encroached from southwest, then reduced to a small, central brackish swamp.
Rocks: More than 950 feet of sandstones, shales, coal and thin limestone.

Fossils: Coal flora, tree size equisetums, ferns, ground pine, invertebrates and first reptiles.

Time; 45,000,000 yrs. Eco. Products: Coal, water & shale.
Outcrops: Arenac, Genesee, Ing. Ionis, Jackson, Sag. & Shiawassee