

APRIL 1992

THE ROCKFINDER



Joyce Larson, Editor
Michiana Gem & Mineral Society
144 Spruce Drive
Westville, IN 46391

FIRST CLASS MAIL

1992 Combined
AFMS & MWF Show
July 23, 24, 25 & 26, 1992
Brunswick High School
Brunswick, Ohio



MICHIANA GEM AND MINERAL SOCIETY

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The MICHIANA GEM AND MINERAL SOCIETY, a non-profit organization, is affiliated with the MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES and with the AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES.

Regular Meetings

Time: 2:00 p.m. EST	Place: Westminster Presbyterian Church
Fourth Sunday of each month	1501 W. Cleveland Road
June - Field Trip meeting	South Bend, IN
July - No meeting	West of the St. Joseph River
August - Annual Club Picnic	
December - Date to be announced	
Christmas Party	

Dues

Individual	\$ 6.50 per year
Family	10.00 per year
Junior	2.00 per year

Rockfinder Staff

Editor.....Joyce Larson	144 Spruce Drive, Westville, IN 46391
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Staff.....Bob Heinek/Club Members	

All contributions for publication should be in the hands of the Editor (219-785-4382) by the 10th of each month.

Permission is hereby granted to reprint, at any time, items published in the ROCKFINDER provided due recognition is given.

THE ROCKFINDER

VOLUME - 32
PUBLISHED BY: MICHIANA GEM AND MINERAL SOCIETY

NUMBER - 4

APRIL 1992
SOUTH BEND, IN

MEETING: Sunday, April 26, 1992
University of Notre Dame
Engineering Library :

Parking is available in Lots B-1 and B-2, around Stadium and across the street from Fitzpatric Hall of Engineering.

Enter Fitzpatric Hall of Engineering via a door on the east side or west side of the building. Try all doors until one is found open. Meet at 1:30 outside Library door in the Fitzpatric Hall concourse. The group as a unit will be escorted to the College of Engineering board room on the second floor of the Fitzpatric Hall.

The business meeting will start at 2:15 or 2:20 followed by a talk by Rev. James A. Rigert, C.S.C., Professor of Civil Engineering & Geological Sciences, and Robert J. Havlik, Engineering Librarian.

Following the tour, visitors may walk to the nearby LaFortune Student Center for coffee if they wish, either in the Huddle or the new coffee shop on the lower level.

No hosts for the month of April .

SPECIAL CELEBRATIONS FOR THE MONTH OF APRIL

- Birthdays - 3 - Ed Miller
- 5 - Stan Kile
- 8 - Janet Landato
- 16 - Jim Russell
- 21 - Jim McHugh
- 28 - Bill Crull
- 30 - Ozzie Kytta

- Anniversaries - 12 - Katy & Stuart Biek
- 16 - Adeline & Fred Niebauer

Happy Easter!



APRIL BIRTHSTONE DIAMOND

SOMETHING TO THINK ABOUT

We have probed the earth, excavated it, burned it, ripped things from it, buried things in it, chopped down its forests, leveled its hills, muddied its waters, and dirtied its air. That does not fit the definition of a good tenant.

If we were here on a month to month basis, we would have been evicted long ago.

(- from the MWF Environmentally Speaking 1981, The Template and The Rocky Reader)

THINK SPRING!!!

MINUTES OF MARCH 1992 MICHIANA
GEM & MINERAL SOCIETY:

President Heinek opened our regular meeting. New members Chuck and Marge Collins, Anthony Spanley, and Carolyn and Cara Nelson were introduced. A motion was made, seconded, and passed to accept the minutes as printed in The Rockfinder. The treasurer's report was read and approved for audit.

COMMITTEE REPORTS:

Program - Today's program was briefly introduced.

Education - Gordon Dobecki is starting an advanced class April 1.

Sunshine - Carl Simkins had surgery recently.

Display - Alec Rubenstein brought items made in Gordon's beginner's class and pyrite and malachite from Chaney Limestone Quarry in Michigan. Paul Godollei brought in a nice display of fossils and several new library books. The current Lapidary Journal was also on display with the cover picture and story about Bob Miller's carvings.

Correspondence - Thank you's were received for contributions made in memory of Mary Miller's mother, Laura, and member Richard Scherer. We have been invited to a Notre Dame baseball game at Covalleski Stadium. Margaret has a list of dates and times; if you would like to organize a group of members to go, see her. We also received a letter from the Convention and Visitor's Bureau about publicity for our show.

Rockfinder - Bob Heinek won a clover plant for counting the correct number of clovers in the last issue.

Old Business - Ed Miller has been in touch with Fred Dopler, from Rock Island, IL, concerning a field trip to the Rensselaer Quarry. We will plan to meet at the quarry when the weather improves.

New Business - We've been invited to hold our next meeting in the Engineering Department at Notre Dame where we will be able to see their collection. Watch for further details in this issue of the Rockfinder. It was moved, seconded, and passed that we contribute \$25.00 to Junior Achievement.

Field Trip - We will plan a field trip to Chaney Limestone Quarry just north of Battle Creek, MI for our June meeting.

The American Federation is considering establishing a separate entity for lobbying purposes. The pro's and con's of such a move were discussed. Further discussion will be had at the Midwest Federation Meeting this summer. It was moved and approved that the club purchase 5 fossil and 5 mineral charts to sell at our fall show.

Program - Member, Clarence Orrell, showed us a fascinating display of stones he and others had faceted and explained faceting to us. Thank you, Clarence!!!

Door prizes were awarded to Cara Nelson, Jenny Milchak, Jessie Milchak, Alec Rubenstein, Jerry Goble, Sister Jeanne, Sister Georgia, Margaret Schultz, and Molly Elwell.

The meeting was adjourned at 4:00 p.m. Thirty members, five junior members, and two guests attended.

Respectfully submitted,

Pam Rubenstein

LET'S WELCOME NEWCOMERS

Remember your first meeting? What brought you back to another meeting? Did one of the members of the club introduce you to other members? Did they sit and talk with you about the hobby? Were you made to feel a part of the group? Whatever it was that caused you to return and join the club is the same element that is needed everywhere to bring in new members. Make every stranger a friend. Don't be so busy at a meeting that a guest is ignored. I've been guilty of this myself--too busy conducting business that a guest is forgotten. Bad News! The guest should come first and business second. No guest should ever leave a meeting without having been made welcome by each member of the club. Some of my closest "Rock Buddies" were once strangers at a meeting. You, too, can be so lucky! (-consolidated from the SCFMS Newsletter by Jeanne Mager, past CFMS President) I recall Molly Elwell and Catherine McHugh taking charge of me my first meeting. Thanks to you both.

Joyce

MARGARET'S COLUMN:

It looks like we will never have spring weather! What with the snow the last 3 days, but its not lasting too long, then the promise of rain we know it is April. Should get warm soon, and we will be looking for air-conditioning!

This month's program should be very interesting. We have been invited to the Engineering Department at Notre Dame to hear about their library books on geology and to view their specimen exhibit. Instructions are on the first page with locations and parking areas. As you drive into the campus, tell the security guard where you are going and why.

There will be a short business meeting at the University. While we will not have our usual social hour, there are 2 coffee shops on campus, where refreshments may be purchased.

Bob and I visited the St. Brovo School in Mishawaka on April 2nd, and spoke to 47 students from the 5th and 6th grades on the 3 basic rocks. The 5th grade is studying this subject and the 6th grade is in the advanced class. There were about 2 of the 47 that were intensely interested, and asked most of the questions, one girl and one boy. Interesting! If you hear of a school that would like to have someone visit them, get a slide program or video and talk to the classes. If you are not interested in giving a program, let me know, and we will see if someone else would be willing. Bob passed out fliers and asked them to come to the show to see our displays. These are our future rockhounds, so it pays to encourage them.

One of our junior members, Amy Ness, called and inquired where she could get about 50 small Petosky Stones to give a class demonstration on how to polish them to bring out the pattern. Since the club has buckets of Petoskys in storage, I took it upon myself to give her enough small ones to share with her class. Amy called after giving the program to say that she had gotten a 98 on her presentation. That was GOOD, AMY!

Remember there will be a time change this month, so if you live in Michigan you will come 1 hour earlier. And if you live in La Porte or farther west, you will come 1 hour later than you did before, as you will be on the same time as South Bend (South Bend area stays Eastern Standard time!!!!)

I had a call from the Century Center telling me they have replaced the carpet and wall covering in the Convention Hall A. It will be nice having the new rugs and walls. They are doing quite a few improvements to the office area, now that they have taken the Studebaker Museum out of the Center. Let's make this a good show and get your cases ready for your displays. Remember the club will have a few cases for you to borrow if you do not have one of your own. You no longer have an excuse not to exhibit!!!

Margaret

HOW MUCH DO YOU KNOW ABOUT INDIANA?

What's the Indiana State tree?
 What is the Indiana State flower?
 What Indiana tree has been considered a medicinal tree over the world?
 What is an Indiana banana?
 What is Indiana's motto?
 Who wrote about Freckles?
 Where is Johnny Appleseed buried?
 Who told us "the frost is on the pumpkin"?
 How many counties are there in Indiana?

(-via The Happy Hounder - Bureau of Tourism)

-and-

I can add one more.....
 Who is Indiana's most famous cartoon cat?

DID YOU KNOW THAT...the oldest living thing on Earth may be a bristlecone pine growing in eastern Nevada. At 4,900 years old, it would have sprouted before the Egyptians built the pyramids.

(-via The Glacial Drifter and The Measure of the Universe)

Dear Heineks and Club:

This is the life! In the old days I slept on the ground and got a bath when I got back out. Now, we get a hot shower after a hard day in the field, watch cable TV and sip a cold drink before getting a good night's sleep.

In sequence, since we arrived we got to Utah and the Wah Wahs a month early and were snowed out. We got around in the mountains OK, this truck is a marvel, but you can't see anything so we moved back to Searchlight, Nev.

By the way, the red beryl is found at only one place in the world, in the Wah Wahs alright, but is already claimed, and is a working mine. It is owned by Rex Harris and his daughter, Tina Nielson who sells the jewelry in Delta, Utah. So much for the red beryl. It's been the story of my life. 30 years ago I chased lost mines and treasures.

We are now at a little dot on the map out in the desert at CAL-NEV-ARI, Nevada. Nice people here. There are a lot of minerals here and enough flour gold to supplement retirement income, but you have to work at it, have a metal detector and carry a lot of water for washing the dirt and magnetite. Most of the apparent sites have been staked but most of these people run around the desert looking for gold and couldn't identify any of the other 40 minerals if they tripped on them.

We are on our 2nd assay: the first was for gold in pyrite in a mica schist. The assay is not back yet. The 2nd one for tungsten went out this afternoon (Mar. 6) by UPS from Bullhead City, AR to an assayer in Sparks, NV. I decided I was tired of panning the loose sand from the first deposit on top of the hill and started digging in a gully at the base of the hill. At about 2' I hit a coarse quartz rock in a contact metamorphic zone which is very friable, disintegrating at least on the surface. I took a 5 gal. bucket back to the trailer and crushed it, panned it, checked it for magnetism, washed the rocks and after dark decided to check it under UV - BINGO - See if you can figure it out! Fluoresces bright golden yellow with an occasional pink to red in both LW & SW. The LW is strange. The crystals are tiny but are the classic bi-pyramid of Scheelite. The dark background fits Molybdenite. The differences point to only one mineral - poulelite - talk about getting the old ticker racing! I had a hard time getting to sleep.

Now all we have to do is wait for the assay. If it is good, try to stake a claim and try to mine it. The ore is almost all Wolfram (tungsten) and Molybdenum, so it may be very profitable (I hope).

Will let you know how it comes out next month. By the way, Rex Harris donated a 2" crystal of beryl to the Smithsonian.

Regards to all - Dave and Joyce Darrow

HOW LONG IS THAT?

AEON - 1 billion years! Used by astronomers to estimate the age of the galaxies, stars, or the universe.

FORTNIGHT - an easy way to say 14 nights or two weeks - used commonly in Great Britain.

MOON - 29 1/2 days or the time between two new moons; used by the early farmers of the Tigris-Euphrates Valley and probably by our American Indians.

GENERATION - 25 years for man, 4 years for horses, 2 minutes for bacteria; used by biologists who study lifecycles.

NANOSECOND - one billionth of a second or the time it takes a beam of light to travel 30 centimeters; used by scientists studying tiny atomic particles.

(-via The Polished Slab, Pegmatite and The Glacial Drifter)

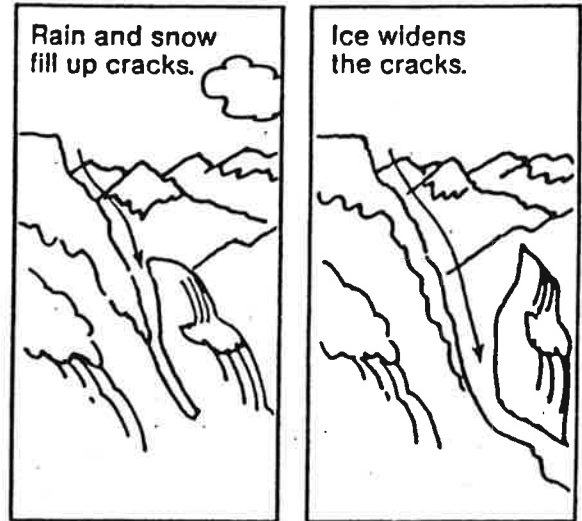
WHAT IS WEATHERING?

PHYSICAL WEATHERING OF ROCKS

Weathering is the name for all the ways a rock may be broken down. There are two kinds of weathering: physical and chemical. In 'physical weathering' the physical properties of a rock change, but it remains the same kind of rock. Physical weathering occurs in areas where temperatures change, causing rocks to expand, shrink, and break off. Plants and animals also cause physical weathering. Plant roots break up rocks as they grow, and rodents loosen rocks as they dig in the ground.

In 'chemical weathering' the physical properties of a rock change, and it no longer remains the same kind of rock. Chemical weathering dissolves rocks by chemical changes. Water dissolves rock salt. Water also reacts with some minerals causing them to rot into a soft clay. Rainwater can cause chemical weathering. Carbon dioxide in rain makes a weak acid that wears away limestone in caves. Chemical and physical weathering often act together.

(-via The Rocky Reader)



In cold regions, rain and snow fill up the cracks in rocks and freeze. Ice widens the cracks, breaking the rocks.

In hot regions, such as deserts, the sun heats the rocks during the day. At night the rocks cool and shrink, causing the rocks to split.

FROZEN SMOKE: Here's a mineral that's hard to believe. Scientists at Lawrence Livermore National Labs in California have come up with a fluffy substance they call "frozen smoke." It has so little solid matter it's almost invisible. This "smoke" consists of linked microscopic fibers of silica. The smoke, however, can support fairly heavy weights. They are calling this substance an "aerigel".

Nasa says one use of this material might be for a trap in space to collect particles there that could be returned to earth for analysis. Particles that hit the trap are slowed to a gentle stop instead of disintegrating. Maybe they could be used to collect the small pieces of junk we've managed to leave in outer space. Aerogels are made with solutions of silica and have the consistency of gelatin. Chemical and heat treatments remove alcohol and water from the gel, leaving "frozen smoke." Any ideas hobbyists?

(-via Canaveral Moonstone and The Rock Rattler)

OLD IDEAS: Although some ancient Greek philosophers suspected the true nature of fossils, for centuries and on through the Middle Ages odd ideas about fossils prevailed. Typical was the notion that fossils were the writings or charms of underground spirits. Another popular belief existing into the mid 1700's was that fossils were remains of plants and animals buried under the debris of Noah's flood only a few thousand years before. Geologists now realize fossils are the key to the relative ages of sedimentary strata all over the world.

(-via Polished Slab, Dinny's Doin's, Paleodiscovery & The Glacial Drifter)

A LETTER FROM MAMA

Dear Son:

I'm writing this slow because I know you don't read fast.

We don't live where we did when you left. Your Dad read in the paper where most accidents happen within 20 miles of home so, we moved! But, I can't give you the address because the last family took the numbers with them for their next house so they wouldn't have to change addresses.

This place has a washing machine. The first day I put four shirts in it, pulled the chain and haven't seen them since.

It only rained twice this week - three days the first time and four days the second time.

Oh' remember the coat you wanted me to send you? Well, your Aunt Sue said it would be too heavy to send in the mail with them heavy buttons so we cut them off and put them in the pockets!

We got a bill from the funeral home, They said if we don't make the payment on Grandma's funeral, up she comes! That makes me think of your Father's new job. He's got over 500 men under him...he's cutting the grass in the cemetery to help pay that bill. He said he didn't like my Mom when she was here the first time!

About your sister-she had a baby this morning! I don't know if you are an Uncle or an Aunt yet because I haven't gone to the hospital to find out if it's a boy or a girl.

Your Uncle John fell in the whiskey vat. Some fellows tried pulling him out but he fought them off playfully. We had to drag the vat until we found his body. We thought we'd save money and had him cremated. It ended up costing more to hire the night guards and firemen...he burned for three days!

Three of your old buddies went off the river bridge in a pickup. Ed was driving and Tom & John were in the back. Ed rolled down the window and escaped to safety. Tom & John both were drowned because that old tailgate on Ed's truck wouldn't go down!

Well, I got to go now. I can't remember where it was I was going but I'm sure I 'll recognize it when I get there.

Write me back soon, but write slow because I take a lot after you!

Love, Mama

P.S. I was going to send you some money but the envelope was already sealed when I thought about it.

(-by Phayrene Scott, Gneiss Gnews and The Rock Rattler)

WORLD'S OLDEST PROFESSION?

Almost everyone can name the world's oldest profession. And, almost everyone who makes a response is wrong.

Rockhounds will certainly be pleased to know that stoneworking is not only a much older profession than the one traditionally cited, but it has also been of greater importance in the history of man.

Stoneworking is conceded to be the largest (most critical) factor in man's 200 million year survival. Man's ability to shape and use stone tools set him apart from other primates and gave him the status of homosapiens, or wise man.

In fact, many specialists who study the brain claim that humans didn't become skilled stone workers because they had larger brains than other animals, but that man developed those superior brains because of their work with stones.

Sooo!! Rockhounds are not crazy after all!

(-via Hy-Grader, Eureka News, Napa Gems and Gem City Rock News)

DID YOU KNOW THAT...Recycling just one run of the Sunday New York Times would save 75,000 trees?

(-via The Glacial Drifter)

ROCKS FOR FOUNTAIN OF FREEDOM

The "Fountain of Freedom" project, conceived by Norbert Cawood, Superintendent of Independence National Historical Park, will be built at the Independence Mall in Philadelphia, Pa. to celebrate the U.S. Constitution. A large rock from each of the 50 States will be included in the memorial. A non-profit organization called "We the People 2000" is now working on this, and the rocks selected to represent the States are listed below.

Most of the blocks or rock are about 2 x 2 x 4 feet. Nevada's rock, silver ore, is the heaviest, weighing about 10 tons. Some are cut and have at least one side honed and polished, while others are rough. They range in age from 3.5 billion years to less than 10,000 and cover the three main rock groups (igneous, sedimentary, and metamorphic).

Each rock has a story...for instance, Colorado's block of Pikes Peak granite comes from the mountain on which Katherine Lee Bates was inspired to write the words to "American the Beautiful." California selected a gold-bearing piece of Mariposite from near Sutter's Mill, Placerville area, El Dorado County.

Eight residents escorted a "Rock Across America" caravan from Placerville to Philadelphia. Buzz Aldrin, the astronaut, who first brought rocks from the moon back to earth, was in the send-off celebration. The caravan stopped along the way to pick up the rocks sent to represent Utah, Wyoming, Montana, and North Dakota, with much ceremony.

Alabama	- Sylacauga Marble	Montana	- Travertine
Alaska	- Basalt (Douglas Island)	Nebraska	- Oread Limestone
Arizona	- Petrified Wood	Nevada	- Argenite-Silver Ore
Arkansas	- Kimmswick Limestone	New Hampshire	- Concord Granite
California	- Mariposite	New Jersey	- Stockton Limestone
Colorado	- Pikes Peak Granite	New Mexico	- Madera Limestone
Connecticut	- Stony Creek Granite	New York	- Adirondak Anorthosite
Delaware	- Brandywine Gneiss	North Carolina	- Mount Airy Granite
Florida	- Key Largo Limestone	North Dakota	- Red Granite
Georgia	- Robin Blue Granite	Ohio	- Massillon Sandstone
Hawaii	- Probably Lava	Oklahoma	- Reformatory Granite
Idaho	- Boise Sandstone	Oregon	- Basalt (+ Sandstones)
Illinois	- Joliet Dolomite	Pennsylvania	- Diabase Black Granite
Indiana	- Salem Limestone	Rhode Island	- Westerly Granite
Iowa	- Dolomitic Limestone	South Carolina	- Columbia Granite
Kansas	- Zeandale Limestone	South Dakota	- Milbank Granite
Kentucky	- Dolomitic Limestone	Tennessee	- Holson Limestone
Louisiana	- Limestone (Salt Dome)	Texas	- Sunset Red Granite
Maine	- Deer Island Granite	Utah	- Meonkopi Sandstone
Maryland	- Wakefield Marble	Vermont	- Barre Granite
Mass.	- Ayer Granite	Virginia	- Amphibolite (Gneiss)
Michigan	- Kona Dolomite	Washington	- McIntosh Sandstone
Minnesota	- Morton Gneiss	West Virginia	- East Lynn Sandstone
Mississippi	- Tuscumbia Limestone	Wisconsin	- Wausau Granite
Missouri	- Winterset Limestone	Wyoming	- Brecciated Quartzite

(-via Crystal Gazer, Pterodactyl and Rockhound Harold)

DID YOU KNOW THAT...A gray kangaroo can jump more than 11 feet high and cover 44 feet in a single hop?

(-via The Glacial Drifter)



THE AMERICAN FEDERATION

Serving The Six Regional Federations

Public Relations



ARTICLE #9 - "DEALERS"

Whether we're in a recession or in "boom" times, the importance of dealers throughout this great hobby cannot be overemphasized. We rely on dealers to provide us with the "tools" that we need to work with-- and by that I mean more than picks and shovels for field trips, collecting and the like. If you've ever looked through magazines for the hobbyists, you'll find all kinds of items to make the hobby more attractive and interesting -- a great majority of these are provided by your local dealers as well as those from coast to coast.

Can you imagine a gemshow without dealers? Fortunately most clubs have seen the importance if for no more than bringing in the public (gate receipts are very important to any show and dealers can draw the public with items used by jewelers, craftpersons, consumers, as well as club members for projects of all types).

Additionally, you may belong to a club/society that is fortunate enough to have club members who own and operate local businesses associated with the hobby of "rockhounding." If so, you have a wealth of experience available to you as well as a local source for the "tools" you'll need to grow in the hobby. Many of these "old timers" can provide you with locations of gems and minerals that they learned about in earlier times and most will be happy to share these with fellow club members. In some cases, they can also provide you with goods and services at "cost-plus" prices.

Are you aware that some clubs are allowing the placement of "dealer" ads in their bulletins from club members who are dealers (business card size)? It appears to provide money that can be used to upgrade the quality of the local newsletters as well as provide sources (and reminders) for members who may need items from time to time. If there are no restrictions (legal, moral or whatever) you might want to consider it.

Has your club/society ever considered a field trip to club members's homes and lapidary shops? There's a lot of "stuff" laying around for such an outing and the idea is certainly an excellent one for anytime of the year.

H. K. "Hal" O'Leary, Chairman Public Relations
(AFMS) Post Office Box 5659
Grants Pass, Oregon 97527-5659

I want to thank all of the clubs sending in "exchange" bulletins. What a great variety of articles! Only another editor would realize the time involved in putting together a good bulletin with the hopes that our members find informative and interesting reading. I find that as soon as the monthly bulletins are mailed, I am looking for next months material. A lot of our articles are coming from your publications - bulletins from California to Florida; Idaho to Texas. At our annual show your bulletins are put on display at our booth table. Just thought you might all like to know that. So - keep the news coming and again, many thanks.

Editor - Joyce



BOOK REPORT: by Paul Godollei, Club Librarian

During the past month we acquired 3 new books for the club library.

TRACKING DINOSAURS by Martin Lockley - was published by the Cambridge University Press in 1991, and is a facinating review of the history of dinosaur tracks and footprints, and how the importance of them has finally been recognized. Good reading for everyone!

THROUGH THE CRUST OF THE EARTH by Energlyn, and published by McGraw/Hill in 1973 is a voyage of exploration into the earth from man's earliest involvement to the latest discoveries about the earth and what lies beneath it. It covers geology, fossils, minerals, volcanos, the forces that formed the earth and much more in a new and exciting manner.

SEARCH FOR THE PAST by James R. Beerbower, was published by Prentice-Hall in 1960, and is an introduction to Paleontology. It explains what the purpose of paleontology is, the history and development of the fossil record; methods of studying fossils and interpreting their significance, animal and fossil classification, and a chapter on each of the main groups, such as corals, brachiopods, pelecypods, cephalopods, arthropods, plant fossils and vertebrates, and their evolution. A good book for the layman and student of paleontology.

The following books have not been returned to the Librarian:

- 8 - Crystals & Crystal Growing taken out since 5-22-88 by Ed O'Neill
- 55 - Crystal Growth - 5-22-88 - Ed O'Neill
- 56 - Geology of Michigan - 9-25-88 - taken out by Harold Edington
- 60 - Minerals, Rocks & Precious Stones - 2-22-91 - B. J. Burkhart
- 70 - Gemstones of North America - Vol. 2, 3-19-90 - R. Young
- 77 - Indian Jewelry Making - 5-17-89 - Ian J? (can't read the name)

(Editor's Note: If any current member knows any of the above parties, please attempt to contact them for return of the books.)

THE PENNSYLVANIA AGE IN INDIANA
Part 5 April 1992
By - Paul Godollei, Club Member

The fossil plants of Indiana are found in association with the coal beds, and are mostly found today in the spoil dumps from the old abandoned strip mines in Southeastern Indiana.

Stems, leaves and cones of lycopsids and sphenopsids are common, and seed fern and Cordaitales are also found. Fernlike foliage is abundant in the shale, and trunks and stems and roots are also found.

146 species of 68 genera have been identified in a survey conducted at 93 sites in 1953 and 1954 and reported in 1959.

At the abandoned strip mine of the Long & Price Coal Co. in Greene County, near the intersection of SR 48 and 157, I found abundant ironstone concretions in the spoil banks, which when split open revealed specimens of Calamites, Annularia, Asterophyllites, and Palaeostachya.

The old White Ash mine dumps 2 miles west of Wheatland on US 50 contained shale with impressions of Sigillaria, Sphenophyllum, and Alethopteris.

(continued page 10)

(Pennsylvania Age in Indiana, Part 5 - continued:)

In Daviess County, an abandoned strip mine 1-1/2 mi nw of Burns City had concretions on the spoil banks with *Lepidodendron*, *Lepidophyllum*, and *Calamites*. Near SR 57, 2 mi no. of Gilzen in Pike County, I found some nice specimens in the concretions in the mine dumps, including *Neuropteris*, *Alethopteris*, and *Asterotheca*.

One and One half miles southwest of Wendell in Posey County, you can find *Calamites* impressions and *Neuropteris*, and *Sphenophyllum* along Raben's Creek branch. At the old Dixie Bee mine site, 1/2 mile south of Pimento in Vigo County, the shale contains *Lepidodendron*, *Lepidostrobus* and *Lepidophloios*. Three miles east of Farmersberg in Sullivan County, ironstone nodules on the spoil banks from Coal VII can be found on the old mine spoil banks. *Asterotheca*, *Asterophyllites*, *Syringodendron* and *Sphenophyllum* can be found.

Almost any of the abandoned mine dumps will yield some concretions containing plant fossils, but do not enter any property without permission, or where there are no trespassing signs.

Bibliography: Indiana Dept. of Conservation, Geological Survey, Report of Progress, No. 14-Fossil Plants of Indiana - by James E. Canright, 1959.

PLANT FOSSILS OF THE PENNSYLVANIAN FORMATIONS

