

THE ROCKFINDER

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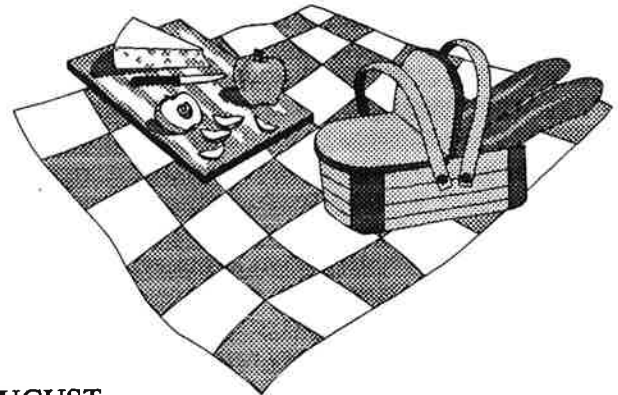
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Michiana Gem & Mineral Society

ANNUAL CLUB PICNIC

Clay Park, North Shelter, Sunday
August 13, 1PM. The park is a few blocks
north of Healthwin Hospital on Laurel Rd.
About ½ miles west of US 31-33.

Club will furnish the meat, rolls,
punch and you are to bring a dish to share,
your own table service, a good appetite and
come and enjoy.

P I C N I C



HAPPY BIRTHDAY & ANNIVERSARY

JUNE-

Carherine McHugh
Kate Johnston
Jessie Zieger
Marge Collins
Mary Etta Miller
Elizabeth Jordon
Brian Hess
Tom & Sue Fields
Jim & Dawn Cytacki

JULY-

Chuck Collins
Fred Niebauer
Dewey Hassler
Pat McLaughlin
Paul Godollei
Mary Etta Miller
Nick Pellus
Bob Steel
George Morley
Scott Zieger
Louis Jordon (jr)
Nina & Dewey Hassler
Bob & Margaret Heinek

AUGUST-

Sherry Russell
Robin Schuster
Todd Miller
Larry Hess
Dawn Cytacki
Josephine Kytta
Betty Stout
Phyllis Smallwood
Sister Georgia Costin
Amy Hess
Ed & Marsha Miller
Jim & Sherry Russell

WORKSHOP - At the picnic.....

We will like to fill some boxes with
items for the Kiddies Korner. This should
be a good project for the juniors and hope
they will help with this project. The boxes
were donated by Pam and are about the right
size to hold a stone or even a coin.....
Come ready to help with this.

MARGARET'S COLUMN

This will be the last ROCKFINDER until September, so Bob and I wish you a good summer. Several of us will be attending the AFMS Convention in Boise, Idaho in July, some of our Society are on the national board and some are just going to the show.

These conventions are fun, and there is so much to be learned. One of the meetings that several of us will attend, will be the Rules Committee meeting. Rules for the competition are discussed and hopefully the standing rules will not be changed. Some of us sometimes judge, which is fun! But this year we feel we would like to go on field trips rather than be tied up judging.

The rest of us will attend the AFMS meeting, and give our reports. Bob and I will attend the Editors breakfast, and hope to get an award for the ROCKFINDER. Larry was informed that the bulletin was in the top 10 in the MWF, which means it may have gone to National competition.

Now, make sure you mark your calendar for the date of our picnic. It will be held at the North Shelter at Clay Park on August 13th at 1 PM. We usually have our picnic there, but in a different shelter. The club will furnish the meat, rolls and punch. If you want tea or coffee, maybe someone will volunteer to bring one of them. Bring salads, vegetables or dessert. This will be a very important meeting, the last get-together before the show on Labor Day Weekend. So PLEASE come and see what you can do to help at the show. There will be sign-up sheets there for workers.

Tom Noe will be in charge of the Silent Auction. He will need items for this and help also. One of our members gave some nice items to be used at the Auction and the Kiddies Wheel. So if you have items you can spare, let Tom know so he can plan on what he will have to sell.

Bob Miller is in charge of the

displays, and he hopes you will have a display to show your minerals, fossils and rocks with our attendees. When you go to a show, don't you enjoy the displays? Even if you have shown them other years, do so again. How about the juniors making up cases? We have cases in the storage that can be borrowed, so let Bob Miller know if you will need one.

Gordon Dobecki has volunteered to be the Demonstration Chairman. If you would like to demonstrate, contact Gordon.

So enjoy your summer and we will see you in August.

Bob and I were unable to attend the June field trip, but it was reported there were about 10 cars, and many attendees. Some very good specimens were found, and quite a few were collected for the Kiddies Wheel.

Several families that were invited by Gordon Dobecki, children from his class, went and are interested in becoming members, and we welcome them.

WNIT has asked us to answer the phones on Tuesday Aug. 8th, as we did last year. They have planned on a NOVA program on Outer Space and what is seen by the space capsules. Chuck Collins had made arrangements for last year, and we all felt we had fun and would be willing to do it again. This is good advertisement for the Society and also the show. If anyone has a piece of meteor that we could have on the show, let us know so we could borrow it. And if you are interested in answering the phones, let me know, so we can plan on having 6 members there.

There will not be a Board Meeting in July, but there will be one in August. If you are interested in attending, come and help us plan for the show and the fall meetings.

You might also be thinking about attending the MWF Convention on October 13, 14 and 15, 1995 in Detroit. Make plans now.

Margaret

MINUTES OF THE MAY MEETING

The meeting of the Michiana Gem and Mineral Society was held May 21, 1995 at Our Redeemer Lutheran Church.

President Margaret Heinek opened the meeting at 2:00P.M.

George and Dorrie Morley from Laporte, were introduced along with our speaker, Timothy Keel, who was from Notre Dame. George joined the Society. Bonnie and Matt Brueske were introduced as new members. Matt is studying at Miami University in Ohio and will be a junior in the fall. Guess what he is studying? Geology!!!

A motion was entertained to accept the minutes as printed in the ROCKFINDER. Sister Jeanne motioned, seconded, all were in favor.

Pam Rubenstein gave the treasurer's report and it will be filed for audit.

Paul Godollei did not report on the Library, since he is having trouble with his back, and will be going to Ohio for treatment.

Hostesses were Phyllis Smallwood, Kathy Miller and Mollie Elwell.

Gordon Dobecki had nothing to report on his classes. President Heinek entertained a motion for Gordon to get a check to purchase the TV-VCR and stand. Motion made by Pam Rubenstein, seconded by Sister Jeanne Finske. Gordon has done a lot of research on this project. All were in favor of Gordon handling this since he has knowledge from school on this subject.

Bob Miller reported on the bus trip for September and Kathy must have everyone's money by June 3rd.

NEW BUSINESS - A discussion on the bean bag throw was discussed. The Board will discuss and figure out a new guide line for this sport for the children and for the Kids Korner.

DISPLAYS - will be handled by Bob Miller

for the September show and Gordon Dobecki will be in charge of the Demonstrators.

A very good program was given by Timothy Keel on the Great New Madrid, MO Earthquakes and it's effect on the area. We hope to have Tim back in the Fall as he was very interesting. (He has other programs that can be shown on a TV-VCR).

Door prizes were won by Sister Jeanne, Louis Jordon, Jr., Marie Crull, Bill Nelson, Jr., Loraine Jordon and Ozzie Kytta.

NEW MEMBERS ADDRESS -

George R. Morley
712 E. 18th Street
LaPorte, IN 46530

Refreshments were served and a social time was enjoyed by all after the program.

Adults present 26, Juniors 2 and Guests 2.

Submitted by
Marie Crull, Secretary

HINT-

After lapping flat stones, such as cut thunder eggs, with 600 grit, wash them and leave under a heat lamp or 100 watt light bulb for about five minutes. When the stones are warm, polish them on a felt wheel with tin oxide. By preheating the polish is almost instant.

Escom, via Stoney Statements 6/94
viaTheRockpile4/95

ADD TO ROSTER- NEW MEMBERS-
Scott & Catherine Maxwell Clifford
16395 Fox Chase Dr.
Granger, IN 46530

Joseph & Janet O'Tousa David
52227 Cloister Ct. Matthew
South Bend, IN 46637

Stanley Jacobs
9307 Pabs Rd.
Michigan City, IN 46360-9396

FINDINGS SUGGEST BEES EXISTED BEFORE FLOWERS---

An article, printed in a recent South Bend Tribune by John Noble Wilford, has suggested that before 220 million years ago, the fossilized logs of the Petrified Forest in eastern Arizona show traces of insect nests. Many scientist have found holes containing little chambers strung together in lines or clusters, nearly everything about them resembling the nests of modern bees.

The problem is that flowers date from only half as long ago. Are bees older than flowers? The idea is upsetting traditional theory about the early history of bees and their co-evolution with flowering plants, or angiosperms.

If confirmed, the findings at the Petrified Forest mean that bees were buzzing around some 140 million years earlier than previously thought. No fossils have been found in the wood, and the oldest known fossil of a bee is an 80-million-year-old specimen trapped in amber from present day New Jersey. Now scientist must be on the lookout for fossil bees to fill the huge gap.

Either flowers appeared much earlier than anyone can conceive, or the first bees did without flowers for a long time, feeding on and pollinating cone-bearing, woody plants known as gymnosperms, a group that includes conifers, cycads and ferns.

In this case, scientists said the discovery casts doubt on the theory that flowering plants and social insects like bees more or less evolved together, with the spread of flowers influencing the proliferation of the bees.

"This new evidence suggests it was probably the other way around, and that insects like bees and wasps may have facilitated the evolution and diversity of angiosperms," said Stephen T. Hasiotis, a paleobiologist at the U.S. Geological Survey in Denver and a doctoral student in geology at the University of Colorado State

University.

Hasiotis and other researchers have found the remains of several hundred nests and cocoons, and tests put their ages at 207 million to 220 million years. No bees or wasp bodies were found with the fossil nests, they said, the only creatures that make similar structures today are bees and wasps.

Other scientist, upon hearing these stunning implications, tended to react favorably, in part because the evidence seemed compelling and supported recent revisionist thinking about insect evolution. This stems from a growing thought that the greatest expansion and diversification of insects occurred many millions of years before the appearance of flowering plants.

AFMS SCHOLARSHIP FOUNDATION HONORARY AWARD WINNER, 1995 Midwest Federation:

June Culp Zeitner, Author, Lecturer, Rapid City, South Dakota.

June Zietner needs no introduction to those that have read the Lapidary Journal or visited her museum in So. Dakota.

June, a native of Bay City, Michigan, graduated from Northern State University in Aberdeen, South Dakota. A past president of the Midwest Federation, she has served in many positions in both the Midwest Federation and the American Federation. Her "Gem Trails" publications have been read by thousands of individuals; she founded the National Rockhound and Lapidary Hall of Fame, to recognize leaders in their fields; she has given many, many programs and lectures at club, regional, and national shows. She serves on the Editorial staff of the Lapidary Journal.

June has chosen two graduate students to receive AFMS scholarships.

GRANITE- by Paul Godollei: Michiana Gem & Mineral Society

Granite is by far the commonest of the intrusive igneous rocks. When basalt magma starts to crystallize in the upper mantle it forms rocks of different types depending on the composition of the liquid and crystals forming in the magma. One of these rock types is granite. Another way granite is formed is during mountain forming, when the crustal rocks are squeezed and large volumes of magma move up into the crust. The crust is heated high enough to melt the rocks, producing more new magma which has the composition of granite. It moves up into the higher levels of the crust and cools and solidifies as large granite intrusions.

Composition-granite is composed of quartz and feldspar, with mica and a few other minerals. Orthoclase feldspar and microcline are dominant, while plagioclase may be present in small amounts.

The texture is evenly granular and usually uniform throughout the rock. The color ranges from white to dark gray, and from pink to deep brownish. Some granites may even be yellow or green. The color of the feldspar may be white, pale green, yellow or pink.

The feldspar has a pearly luster and smooth faces.

The quartz fills the spaces between the other materials in the granite and forms irregular grains. It has a glassy luster and conchoidal fracture. The quartz may be colorless, white to dark gray or red if hematite is present. The mica flakes in granite may be biotite (black) or muscovite (white). If hornblende is present, it forms dark green or black grains or long prisms. It adds dark color to the granite. Magnetite, appearing as metallic grains, is found in some coarse granites.

The specific gravity of granites varies from 2.61 to 2.75, depending on their mineral composition. The granites containing dark minerals such as biotite and hornblende have the greater specific gravity.

Colors-Pink granites contain pink or reddish feldspars. The quartz is light gray or white and contains not much hornblende.

In Gray Granite, the feldspar is white or gray allowing the dark minerals to show plainly.

Hornblende Granite is a deep greenish gray.

Aplite, or Binary Granite contains no iron-bearing minerals. Its color is light yellow, white, gray or brown. It is composed of feldspar and quartz, with small amounts of muscovite and some biotite, hornblende, and black tourmaline.

Occurrence-Granite is found on all parts of the earth and in intrusive formations of many ages, and makes the cores of many mountain ranges. Eastern Canada, New England, Appalachia from New Jersey to Georgia. In the West, the Rocky Mountains, the coast ranges of Canada and other western mountains are of granite.

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Uses-Granite is a very strong and durable rock, capable of withstanding great pressure. It may be cut into pieces of almost any shape, and takes a high polish. It is used for monuments, buildings, bridge piers, ornamental columns, and steps and railings

Its chief defect lies in the fact that the quartz and feldspar grains, when subjected to repeated heating and chilling, tend to expand or contract at different rates, sometimes making the surface crumble or peel.

References-The Rock Book, by Carol Lane Fenton and Mildred Adams Fenton, Doubleday & Co., New York, 1956.

The Larousse Guide to Minerals, Rocks and Fossils-by W. R. Hamilton, A. R. Wooley and A. C. Bishop-Larousse & Co, Inc., New York, 1974

Thin section of granite, magnified. Hornblende (thin lines) crystallized first, feldspar (thick lines) second, and quartz (dots) last. Its grains do not have crystal shape.



INDIANA FOSSIL COLLECTING SITES : by Paul Godollej, club member.

ORDOVICIAN FOSSILS-There are four miles of Ordovician fossil exposures along Elkhorn Creek south of Richmond between Liberty Pike and Indiana 227. Liberty Pike crosses Elkhorn Creek 5 1/2 miles South of Richmond. Highway 227 is about 2 miles Southeast of South Richmond in Wayne County. More Ordovician fossils can also be found north of Brookville on the east side of route 101.

Another favorite fossil area is the river bluffs near Madison. The Ordovician marine fossils occur in road cuts along Highway 7 where the road climbs the Ohio River bluff northwest of Madison in Jefferson County. Other cuts along Highway 62 west of Madison reveal honeycomb corals opposite the power plant. The steep Pennsylvania railroad cut west of Highway 7 yields trilobites, brachiopods and cephalopods. It is also overgrown. Don't go alone. The road cut up to Clifty Inn has some nice fossils on the east side at the curve in the road, but there is no place to park. You have to walk from a narrow stopoff.

Road cuts along the east side of Indiana 56, 3 miles south of Rising Sun, Ohio County, have yielded many species of well preserved marine Ordovician fossils., especially bryozoas.

The old Railroad cut between Weisburg and Guilford in Dearborn County used to be easy pickings for tons of Ordovician fossils, but the sides are now overgrown and it is more difficult to find the trilobites and cephalopods. They are still there ,though! In 1960 a man found a complete Isotelus trilobite over a foot long !

BIBLIOGRAPHY: Adventures with Fossils by Robert H. Shaver Indiana Dep't of Conservation, Geological Survey, Circular #6, 1959, lists 34 collecting sites..

INDIANA FOSSIL COLLECTING SITES : by Paul Godollei, club member.

SILURIAN FOSSILS—Silurian reef fossils can be found in Carroll County near Delphi. The reefs are also exposed on the banks of the Wabash River between Huntington and Delphi. Trilobites and cephalopods have been found in the reef structures. Look in cuts, quarries and natural exposures.

The old quarry on the northwest side of Indiana Highway 46 at the southwest edge of Hartsville in Bartholomew County is another place to find good Silurian fossils. The roadcuts on the southeast side of the highway has fossils in the gray-blue shale, too. Look between the two limestone layers for the blue-gray shale fossil layers.

The same shale can be found in southeastern Shelby County near St. Paul, Indiana. A secondary road out of St. Paul going south southeast leads along a creek. Keep to the right at the road junction 0.5 mi. south of town. A roadcut one mile further along this road exposes the fossiliferous shale.

The Erie Stone Co. quarry near Huntington also has Silurian fossils, but they are hard to extract. Take a hard hat and go to the office and sign a release form. They will only let you look in the dump area, but it is a mile long and almost a hundred feet high., on a secondary road to the west. Chain and honeycomb corals are abundant. It's located one mile east on US 24 from the Erie Railroad tracks in Huntington, South on North Broadway, after 0.5 mi turn on Sabine street and it leads to the quarry on the left.

The Stuntz-Yoeman quarry 0.8 mile northwest of junction Ind. 25 & 39, just east of 39 west of Delphi in Carroll County, has a coral reef with fair fossils in it.

The old France Stone Co. Quarry two miles east of Logansport in Cass County has been turned into a county fair grounds, and the fossils are hard to find. The lower levelled area on the north side seems to have better promise of fossils. The Silurian is below, with Devonian limestone containing corals in the upper part at the southeast end of the quarry.

BIBLIOGRAPHY: "Adventures with Fossils ", by Robert H. Shaver Indiana Dep't of Conservation, Geological Survey, Circular #6, 1959, lists 34 collecting sites. "Midwest Gem, Fossil and Mineral Trails", GREAT LAKES STATES, by June Culp Zeitner-Gem Guides Book Co. Pico Rivera, California-1988

BIRTHSTONES FOR ALL SEASONS AND ALL REASONS

<u>For the Seasons</u>		<u>For Days of the Week</u>	
Spring:	Emerald	Sunday:	Topaz
Summer:	Ruby	Monday:	Pearl/Rock crystal
Autumn:	Sampphire	Tuesday:	Ruby/Emerald
Winter:	Diamond	Wednesday:	Amethyst/Lodestone
		Thursday:	Sapphire/Carnelian
		Friday:	Emerald/Cat's-Eye
		Saturday:	Turquoise/Diamond

For the Hours:

1 AM	Smoky Quartz	1 PM	Zircon
2	Hematite	2	Emerald
3	Malachite	3	Beryl
4	Lapis Lazuli	4	Topaz
5	Turquoise	5	Ruby
6	Tourmaline	6	Opal
7	Chrysolite	7	Sardonyx
8	Amethyst	8	Chalcedony
9	Kunzite	9	Jade
10	Sapphire	10	Jasper
11	Garnet	11	Lodestone
12 Noon	Diamond	12 Midnight:	Onyx

For the months

January	Garnet	<u>APOSTOLIC STONES</u>
February	Amethyst	St Peter (January) Jasper
March:	Bloodstone/ Aquamarine	St Andrew (February) Carbuncle
April	Diamond/Rock Crystal	Sts James & John (March) Emerald
May	Emerald	St Philip (April) Carnelian
June	Pearl/Moonstone	St Bartholomew (May) Chrysolite
July	Ruby	St Thomas (June) Beryl
August	Peridot/Sardonyx	St Matthew (July) Topaz
September	Sapphire/Lapis Lazuli	St James (August) Sardonyx
October	Opal/Tourmaline	St Thaddeus (September) Chrysoprase
November	Topaz/Citrine	St Simeon (October) Jacinth
December	Turquoise/Zircon	St Matthias (November) Amethyst
		St Paul (December) Sapphire

ZODIACAL SIGN STONES

Aquarius	(Jan 20-Feb 18)	Garnet
Pisces	(Feb 19-Mar 20)	Amethyst
Aries	(Mar 21-Apr 19)	Bloodstone
Taurus	(Apr 20-May 20)	Sapphire
Gemini	(May 21-June 20)	Agate
Cancer	(June 21-July 22)	Emerald
Leo	(July 23-Aug 22)	Onyx
Virgo	(Aug 23-Sept 22)	Carnelian
Libra	(Sept 23-Oct 22)	Chrysolite
Scorpio	(Oct 23-Nov 21)	Beryl
Saggitarius	(Nov 22-Dec 21)	Topaz
Capricorn	(Dec 21-Jan 18)	Ruby

from Owyhee Gem via Rock Rattler 11/93
and The Roadrunner 1/94
