

# THE ROCKFINDER

Michiana Gem & Mineral Society  
Tom Noe, Editor  
305 Napoleon Blvd.  
South Bend, IN 46617



# THE ROCKFINDER

MAY, 1998

# MICHIANA GEM & MINERAL SOCIETY

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 Field Trips  
 Membership All Members

The purpose of the Michiana Gem & Mineral Society is to promote interest in and study of the earth sciences and the lapidary arts, and the sharing of knowledge and techniques.

General meetings are held the fourth Sunday of each month, 2:00 PM, EST, at Our Redeemer Lutheran Church, 805 S. 29th St., South Bend, IN. Regular exceptions include May (third Sunday), June (field trip), July (no meeting), August (club picnic) and December (Christmas party).

Board meetings are held before the general meetings.

The annual club show is Labor Day weekend.

The Michiana Gem & Mineral Society, a not-for-profit organization, is affiliated with the Midwest Federation of Mineralogical Societies and with the American Federation of Mineralogical Societies.

*The Rockfinder* is published monthly except July and August. Staff: Editor, Tom Noe, 305 Napoleon Blvd., South Bend, IN 46617. Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617. Reporters, Bob Heinek, Herb Luckert, club members.

All contributions for publication should be in the hands of the editor by the 10th of each month. Call 289-2028 or 282-1354. Permission is hereby granted to reprint any original *Rockfinder* articles, as long as due recognition is given along with the reprint.



Yearly Membership Dues (Payable by January 1)

\_\_\_\_\_ Individual \$10.00 per year  
 \_\_\_\_\_ Family \$15.00 per year  
 \_\_\_\_\_ Junior \$1.00 per year  
 \_\_\_\_\_ Subscriber \$7.50 per year

(One-half these amounts after July 1)

Please indicate areas of special interest.

General Geology\_\_\_ Beads\_\_\_  
 Gems & Minerals\_\_\_ Silversmithing\_\_\_  
 Fossils\_\_\_ Artifacts\_\_\_  
 Cabochons\_\_\_ Rockhound\_\_\_  
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 Carving\_\_\_ Micromounts\_\_\_  
 Other\_\_\_\_\_ Jewelry making\_\_\_

Name\_\_\_\_\_

Address\_\_\_\_\_

City,ST.,Zip\_\_\_\_\_

Please send your dues and this form to  
 Michiana Gem & Mineral Society  
 c/o Margaret Heinek

7091 E. East Park Lane, New Carlisle, IN 46552

Will attend meetings?

Name\_\_\_\_\_ Birthday\_\_\_\_\_ yes\_\_\_no\_\_\_

Name\_\_\_\_\_ Birthday\_\_\_\_\_ yes\_\_\_no\_\_\_

Name\_\_\_\_\_ Birthday\_\_\_\_\_ yes\_\_\_no\_\_\_

Name\_\_\_\_\_ Birthday\_\_\_\_\_ yes\_\_\_no\_\_\_

Date of Wedding Anniversary\_\_\_\_\_

Phone\_\_\_\_\_

# THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

Volume 38, Number 5

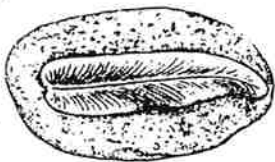
May, 1998

**Meeting:** Sunday, May 17, 1998  
Doors open at 1:30 p.m.  
Meeting at 2:00 p.m.  
Guests are always welcome.

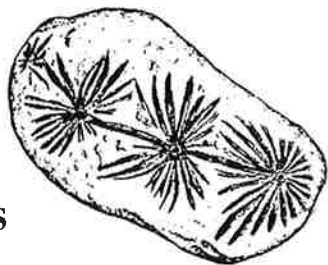
**Place:** Our Redeemer Lutheran Church  
805 S 29th (29th and Wall)  
South Bend, IN

**May Hosts:** Sister Jeanne and Mike Slattery

**May Program:** David Peltz will present a video and a demonstration of flint (and obsidian) knapping.



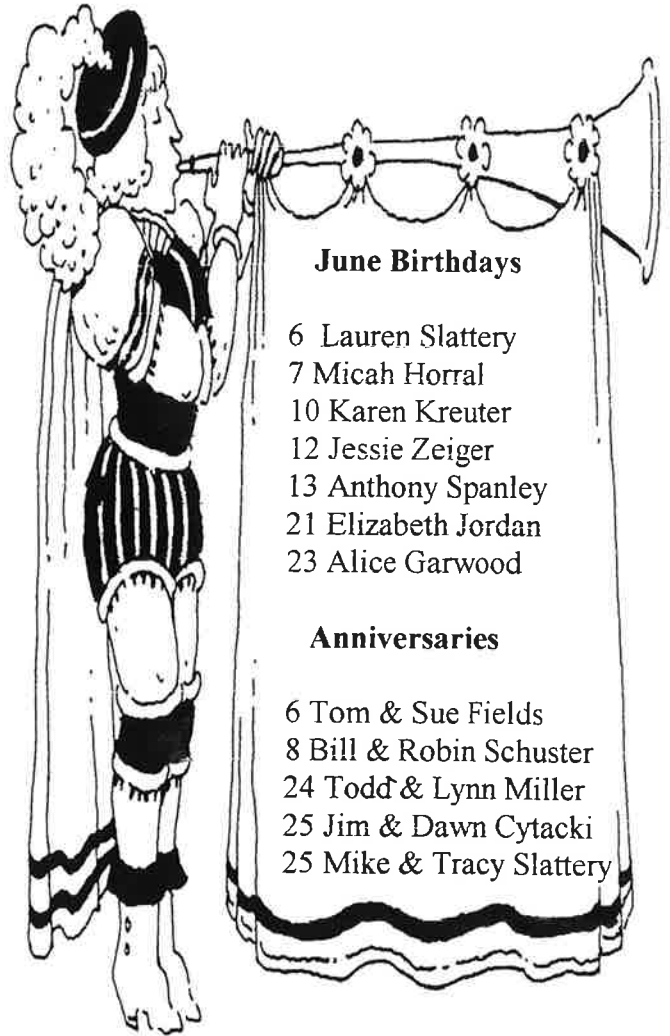
**MAZON CREEK FOSSILS**



MGMS members, if you would like to use the club's permit to hunt for leaf and other fossils in the Mazon Creek area of Illinois, be sure to contact Kathy Miller before you leave. She has the permit and all the necessary information.

## UP AND COMING

- May 15--17: Midwest Mineralogical & Lapidary Society of Dearborn show, 23400 Wick Rd., Taylor, MI.  
May 16--17: Parma Lapidary Club show, Cuyohoga County Fairgrounds, Berea, OH.  
May 22--23: Falls of the Ohio symposium on Illinois/Kentucky fluorspar district, 812-941-2684 for information.  
May 23--25: Chicagoland Gems and Minerals Association show, 2015 W Manchester Rd., Wheaton, IL.  
June 26--28: Show and swap, Bloomington, IN. 4-H County Fairgrounds.  
June 27--28: MGAGS Rockhound Seminar, Washtenaw Community College, Ann Arbor, MI.  
August 11-16: Combined Midwest Federation and American Federation convention and show, Michigan Tech University, Houghton, MI. (Upper Peninsula).  
Oct. 9--11: Greater Detroit show, 4400 E. Eight Mile Road, Detroit, MI.  
Oct. 23--25: Central Michigan show, Marshall Street Armory, Lansing, MI.



## June Birthdays

- 6 Lauren Slattery
- 7 Micah Horral
- 10 Karen Kreuter
- 12 Jessie Zeiger
- 13 Anthony Spanley
- 21 Elizabeth Jordan
- 23 Alice Garwood

## Anniversaries

- 6 Tom & Sue Fields
- 8 Bill & Robin Schuster
- 24 Todd & Lynn Miller
- 25 Jim & Dawn Cytacki
- 25 Mike & Tracy Slattery

## MARGARET'S COLUMN



Hello! Isn't it wonderful that spring is here and the world is alive with all the beauty of the trees and flowers? Makes one feel good all over.

I am so glad to be back in Indiana after the storms in Georgia. The tornado in the Atlanta vicinity hit an area about 1 mile from our son's home. We knew the storms were coming, but stupid us, went to bed about 11 PM. The storm hit about 12 midnight, the lights went out, and we still did not go to the basement. Most of the damage was done by trees being knocked down or broken off about 15' above the ground. We were very lucky and thanked the Good Lord.

We were sorry to have missed the April meeting. I heard it was a very interesting program. Thank you, Sister Jeanne, for taking over. Unless something happens, we will see you this month. Oh yes, we have some new members:

Tim & Lou Ann Robbins, PO Box 826, Goshen, IN 46527.

Florian and Kathie Bieschke, Joey & Laurel, 23777 Adams Rd, So. Bend, IN 46628.

William H. Clark, 411 Franklin St, Valparaiso, IN 46383.

## WELCOME!

Tom gave me a short report on some of the ideas the members had on publicity for our show. Some ideas were: free passes to school children (this we do every year, but they are never used). I have talked to Mike Slattery and he has talked to the school corporation about giving out passes to 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> grades. Mike has said he will take care of seeing that they are passed out to schools. He will also take the kiddies' area during the show. He needs small fossils, minerals, rocks and anything you might have that will be good for "starting a collection." He asks that we start saving egg cartons that can be used for these "collections." Mike will need help in preparing the Petoskey stones for the youngsters to polish at the Labor Day Show. It will make the job much easier if 4 or 5 of our members who have wheels will volunteer to pregrind them. We were fortunate to have been given quite a few Petoskeys by

Betty Stout. Thank you, Betty!

A suggestion was made about getting a spot in a mall over the summer to set up displays and advertise the show. That is a wonderful idea! We will have to have workers to man any booth we have. Do we have volunteers to chair this? Permission will be needed to set up, so who will make arrangements for this?

Our show publicity currently consists of TV ads on channels 16 and 22, ads in the *Tribune* for 3 days and fliers which are sent out to area clubs. We send out 800+ cards to people who have attended the shows the last few years. If the cards are brought to the show, there is a discount of 50¢ on each adult ticket. We get about 20% of the cards back. Anyone who has any other ideas, please come forward with them.

Phyllis Luckert has volunteered to send the fliers to the area clubs. We will need volunteers to address the 800+ cards and put stamps on them. Bob and I will see that they are printed, and labels will be ready to go on the cards.

Kathy Miller tells me she has made arrangements for a bus trip to Chicago to the Field Museum, for us on Sunday, Nov. 8th. More on this later.

Remember to mark your calendars for August 23 for our annual picnic.

Does anyone have a suggestion on a field trip in June--something that is close and can be taken on a Sunday?

I want a Board of Directors meeting before the start of the regular meeting, so the officers should come early. I will be at the church by 1:10 or so, to open the doors.

\* \* \* \* \*

The early bird gets the worm, but the second mouse gets the cheese.

When everything is coming your way, you're in the wrong lane.

\* \* \* \* \*

Plain Old Baking Soda... The perfect cleaner for gold, silver and pearl jewelry.

Makes a sore throat disappear.





## MINUTES FOR APRIL 26, 1998 MEETING

The meeting was called to order by Vice-President Sr. Jeanne Finske in the absence of President Margaret Heinek. In attendance were 19 adults, 2 juniors and 1 guest.

The minutes of the March 22 meeting had been lost in the mail. As a consequence, we recollected the main topics which were discussed: Since no one has volunteered to be field trip director, Kathy Miller had some ideas for a short trip which she will bring up at the May meeting.

Tom Noe asked for volunteers to help him man the silent auction booth at the show on March 27-28-29 at Century Center. Several members indicated that they would help out.

As members of the American Lands Access Association (ALAA) we discussed what we could do to support their issues.

We selected Bob Heinek to serve as the club's delegate at the convention in Houghton, MI, in August.

Sister Jeanne presented a beautiful and very informative video program on telling geologic time by the rock walls of the Grand Canyon. Present were 17 adults, 1 junior member and 2 guests.

Now to the April meeting.

Committee reports:

Treasurer's report: We are now paying \$4 per month for service charges on our checking account. Would it be more practical to transfer funds from our savings account to our checking account to eliminate this charge, even though we would lose interest on the amount transferred? The treasurer will check with the bank and report at the May meeting.

Sunshine report: Bob and Margaret Heinek have returned from Georgia. Their son is now between chemotherapy treatments.

New business: The treasurer brought to our attention a bill from the Chamber of Commerce for \$255 in dues, plus a "lobby donation." The question is, do we derive enough benefit from the Chamber to warrant membership in the organization? David Peltz made a motion that we reconsider whether we retain membership in the C. of C. at our next meeting. Tom

Noe seconded the motion. All voted "yes."

Tom Noe has complete information on registration for the combined national AFMS and regional MWF conventions. Preregistration is due July 11. Please get in touch with him.

Tom Noe reported on Betty Stout's sale of materials and equipment which is extended to next Saturday, May 2. Club members may make an appointment with Betty by calling Tom for time, etc.

Kathy Miller will be organizing the admissions table during our next show. She would like 3 people at the door to handle tickets, money and stamping, and she passed around a sign-up sheet for volunteers.

It is time to plan publicity for this show. Some questions which members discussed were: Should the present format of the newspaper ad be changed? Flyers? WNDU or WSBT? Outlets such as public (or other) schools? Should there be paid TV and radio spots in addition to PSA's? Sr. Jeanne made a motion that all these suggestions be considered. Sr. Georgia seconded the motion. The publicity chairman will meet with the board of directors to work on the mix of this year's publicity.

Kathy Miller agreed to chair a one-day bus trip to the gem rooms at the Field Museum in Chicago in November. This one-day (only) bus trip will be open to all dues-paying members regardless of whether they work at the show or not. David Peltz made a motion to this effect. Sr. Georgia seconded the motion. All voted "yes." This may be a way of attracting new members.

David Peltz volunteered to present a program on flintknapping at the May meeting.

Door prizes went to Pat McLaughlin, Bill Nelson and Lauren Slattery.

Our speaker, Robert C. Frank, gave a compelling and first-hand-knowledge talk on misconceptions surrounding nuclear power and waste disposal.

Gladys Pacholke  
Secretary

**1998 FEDERATION SHOWS**

CFMS: Monterey, CA - July 3-5  
 EFMLS: Stamford, CT - Nov. 6-8  
 AFMS/MWFMS: Houghton, MI - Aug. 14-15  
 NFMS: Billings, MT - June 12-14  
 RMFMS: Tulsa, OK - Oct. 23-25  
 SCFMS: Corpus Christi, TX - Feb. 28- Mar. 1  
 SFMS: Charleston, SC, Nov. 14-15

**TOTE THAT ROCK -- LIFT THAT TOOLBAG**

By Mel Albright, AFMS Safety Chair

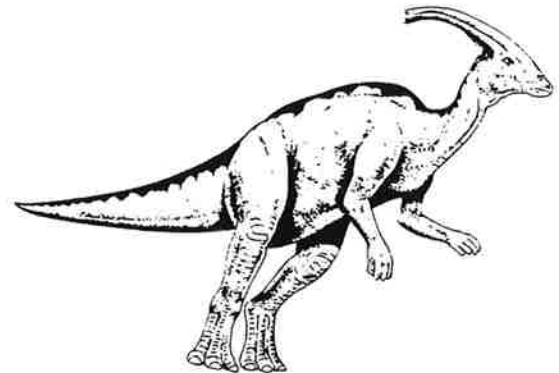
One thing that we rockhounds do a whole bunch is pick up rocks: little rocks, bigger rocks and big rocks. Rocks by themselves, rocks in boxes, rocks in buckets, rocks in sacks -- all are ways we collect and move rocks. Heavy tool bags are lifted all too often. The classic joke picture of rockhounds is a bunch of people standing with straight legs, bent over at the waist, and touching the ground with their hands. It is too often true, unfortunately. Another thing we rockhounds do is put those heavy tools and rocks into a vehicle or take them out, often by swinging things.

The result is a lot of bad backs, sore backs, back strains, sometimes even permanently damaged backs. So, we need to learn--AND PRACTICE--the proper way to lift and lower heavy stuff (actually, light stuff, too) without hurting ourselves. To lift and move something, several steps should be followed. We'll pretend we're picking up a rock, but the rules are the same for anything we pick up, even our dirty socks.

1. Stand with your feet apart about shoulder width, the rock between your feet, and one foot slightly in front of the other (for balance).
2. Lower yourself by bending your knees until you can grab the rock. The rock should be close to your body. Keep your back straight and your chin tucked in.
3. SLOWLY lift the rock by straightening up your knees, pushing with your leg muscles. Keep the rock in close to your body. Do NOT twist sideways.
4. Once standing, DO NOT TWIST your back. To move the rock sideways, turn with your feet. Keep the rock in close to your body.

5. Once you get where you are going with the rock reverse the steps you used to lift the rock. Remember to **KEEP YOUR BACK STRAIGHT!!**
6. If the rock must go into a trunk or car or whatever, set it down on the edge, keeping a straight back. Then slide it into the vehicle. Most of us will bend over at the waist and swing it in—a sure way to get a bad back!
7. You aren't SUPERMAN OR SUPERWOMAN! If the rock or bucket or bag is too heavy for you to carry easily, do it another way! Get help. Use a skid made from a heavy cloth or a wood slat with a rope tied to the end. Roll the rock using a long-handled tool to pry with. Use your ingenuity!

*AFMS Newsletter (April, 1998)*

**FOSSIL TERMITES**

Paleobotanists at the Sul Ross State University in Alpine, Texas, recently restudied a collection of petrified wood in their storage cabinets. They discovered a fossilized termite nest in a small limb section. The limb had been collected from Big Bend National Park area during the 1960s. They dated evidence of termites actually chewing wood. A limb had been bored out and the bore was partially filled with fecal pellets. Since the pellets were mostly cellulose, they were preserved the same as the wood. When the termites were alive the Big Bend area of Texas was a swampy delta with rivers and forests.

(From *Kiskigem Journal* 8/97 via *GLACIER GRAVEL* 8/97)

# Earth won't change much by 3000

*Mother Nature expected to transform little in 1,000 years, geologist say.*

By Malcolm Ritter, Associated Press

NEW YORK — In the 3000, lovestruck newlyweds will still have Niagara Falls to visit. It'll just be in a different place.

Later, when they take the kids on a family vacation, Mt. Rushmore and the vistas of the Grand Canyon will look as they do now.

In fact, geologically speaking, not much is going to change in this country over the next 1,000 years.

The hullabaloo over the millennium makes 10 centuries seem like a long time — it's 250 presidential elections and more than 400,000 Broadway performances of Cats.

But for Mother Nature it's just a blink, barely time to clear her throat before doing something world-class like producing a mountain range.

Consider these predictions from the U.S. Geological Survey for the next 1,000 years.

- The coastal mountains that run through Malibu in southern California will edge upward only about 15 inches. "That's rather impressive change for a mountain," says survey geologist Diane Noserale.

- Los Angeles and San Francisco will move about 170 feet closer to each other, thanks to slippage along the San Andreas fault.

- North America and Europe will be all of 82 feet farther apart as new sea floor emerges and spreads in the Atlantic Ocean.

- The restless Earth will also twitch so fast on occasion that people will notice. The southern San Andreas fault will probably have about half a dozen big earthquakes by the year 3000. And there's a good chance of a repeat of the powerful New Madrid, Mo. earthquakes of 1811-12, which rang church bells in Boston 1,000 miles away.

- A rising sea level could also bring big changes to coastal lands in the next 1,000 years. But for the most part, the processes that cause a wholesale reshaping of a regional landscape need much longer than a mere millennium.

"A Thousand years is really a short period for a geologist," says Parker Calkin of the State University of New York at Buffalo. "This is more like archeological time, I guess."

Nonetheless, Calkin has some ideas of what Niagara Falls, one of two falls tumbling side-by-side there, is

migrating upstream at about two feet a year, the geologist says. At that rate it'll move some 2,000 feet, less than half a mile, by the time those future newlyweds show up.

Its next-door neighbor, American Falls, handles far less water and might move only 10 to 20 feet total.

There's a chance Horseshoe Falls could recede much faster. That would happen if the lip of the falls, now a long curve if viewed from above, develops a notch. like the blade of a buzz saw, and cut upstream at maybe 15 feet a year.

That could create a big change in the next 1,000 years. Horseshoe Falls would retreat far enough to steal the water flow from American Falls, There could be only one falls left.

Calkin isn't predicting a quick march, and he figures water management officials would probably make sure American Falls continues to flow anyway.

So his best bet is little change. Still your basic Niagara Falls.

There sure won't be any reason to update those postcards of Mount Rushmore. Just ask Dan Wenk, superintendent of the Mount Rushmore National Memorial, how much he expects the four faces to change in the next 1,000 years.

"Not much, if at all. I think the public perception will be really no change at all."

Erosion is thought to eat away only 1 inch every 10,000 years.

Taking a long view, the monument's caretakers are studying three of the mountain's huge granite blocks. One is below George Washington's right ear, another in Theodore Roosevelt's hairline, and the third on the right side of Lincoln's face. These blocks have less natural support than others and someday they may fall out.

But not in the next 1,000 years.

The Detroit Free Press

M. M. S. CONGLOMERATE

MAY 1998



## ON THE ROAD

### Geologic Road Log - Bloomington to Indianapolis

by Anthony Fleming and Todd A. Thompson

State Highway 37 from Bloomington to Indianapolis crosses several geologic terrains that formed under widely varying climatic conditions and by glacial and coastal processes that are separated by 300 million years of time. This road log points out several features and deposits along the route that illustrate these conditions and processes. Buckle your seatbelt--we are on a ride through time.

#### Beanblossom Creek

The valley that Beanblossom Creek occupies is cut into limestone and siltstone that accumulated in Indiana about 340 million years ago. At this time, Indiana was about 10 to 15 degrees south of the equator in the equatorial tropics. The siltstones are part of a large delta that spread sediment westward into a shallow sea from rivers in the east and northeast part of the state. After the rivers stopped supplying sediment, the abandoned lobes of the delta were colonized by shelled and hard-bodied organisms that preferred to live in warm shallow seas. The remains of these organisms became the limestones. Road cuts along Highway 37 show these rocks south and north of Beanblossom Creek. Geologists rely on these road cuts and exposures along the banks of rivers and streams to view the rocks. Where there are no exposures, geologists bore holes and examine cores and rock chips that come from the hole.

#### Morgan-Monroe County Line, Bryants Creek

The county line marks the approximate extent of glaciers in south-central Indiana during the Ice Age. The slope to the west of the road is underlain by up to 50 feet of glacial deposits plastered in the lee of a bedrock hill. Bryants Creek formed along the margin of this glacier and contains abundant far-travelled rocks, such as granite, that were carried from Canada by the ice.

#### Martinsville

Martinsville is situated in a several-mile-wide plain of sand and gravel deposited by glacial meltwater flowing down the White River Valley. Somewhat elliptical bedrock hills of siltstone can be seen

protruding through the outwash at several places as you traverse the plain. Many other similar hills are completely buried beneath the sand and gravel. The sand and gravel are a major source of ground water for many communities, such as Martinsville and Indianapolis. The large ridge that the road ascends just north of Martinsville is the remnant of a large outwash fan deposited by an ice sheet of Illinoian age, some 300,000 years ago.

#### Waverly

For several miles in either direction, the road traverses rolling to hummocky topography that flanks the flat valley of the White River just to the west. This topography reflects the most recent ice sheet to invade this area, during the Wisconsin age, some 21,000 years ago. The margin of the ice stabilized parallel to the White River, resulting in deposition of ridges and hummocks of sediment.

#### Marion-Johnson County Line

The large ridge that lies along the east side of the road just north of the county line is a remnant of a massive outwash fan deposited about 20,000 years ago. The fan is originally thought to have extended almost completely across the White River Valley to the west, but catastrophic outbursts of meltwater from the disintegrating glacier scoured the valley, leaving only the high-standing head of the fan remaining. It is interesting to note that the river here follows an unusually arcuate course that appears to be radially symmetrical about the fan, apparently marking the former edge of the fan. The fan is contiguous with a long, low ridge that lies to the east, locally known as the Greenwood Moraine. The fan and moraine mark the location where the ice margin stood for a long period of time.

From the Indiana Geological Survey  
(<http://pyrite.igs.indiana.edu>)





## FROM THE INSIDE OUT-BASALT

By Jennifer Adams

The most abundant volcanic material is Basalt. Pouring from vents and fissures in the earth's crust, it is a dense dark-gray or black rock composed of pyroxene, calcium-rich plagioclase feldspar, and minor amounts of magnetite and olivine. At a temperature of about 1,200 degrees C., basalt has a low viscosity and may flow freely, traveling huge distances until it begins to solidify at a temperature of 900 degrees C. Excellent examples of slow cooling basalt flows, sometimes called flood basalts, are the Deccan Plateau of India, which covers tens of thousands of square miles, and the Columbia Plateau, which stretches from California to Wyoming.

To understand the role of basalt within the earth, it is necessary to look closely at the makeup of the earth's interior and exterior. The crust can be thought of as a thin, rocky veneer that consists of the continents and the ocean floors. Two distinct zones make up the crust: the area below the topography of the ocean floors which consists of basaltic, basement rock and accounts for 1/3 of the total volume of the crust, and the lighter continental crust that is not only thicker than its ocean counterpart, but less dense.

Below the continental crust and above the dense metallic core at the center of the earth is the mantle. The mantle is not merely a thick, homogeneous layer surrounding the core, but is comprised of differing densities of materials rich in oxygen, silicates, iron and magnesium. Within the mantle, solid blocks of magma move in an ocean of hot gases and liquids.

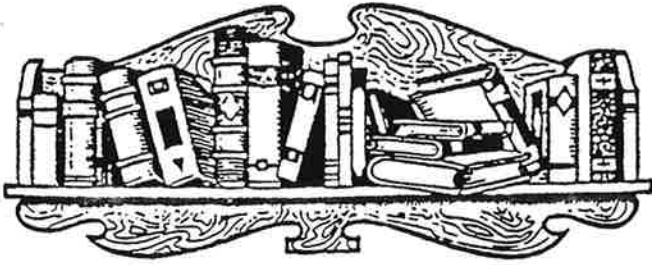
For many years researchers believed that basaltic lavas originated in the lower part of the crust. However, recent evidence suggests that basaltic lavas come from molten pockets in the upper part of the mantle. Volcanic activity, associated with deep earthquakes that occur within the mantle far below the crust, creates fractures which serve as passageways for molten lava to reach the surface. Earthquakes are often associated with volcanic activity.

Rocks formed by the cooling and solidification of magma or lava are called igneous rocks. Some of the world's most spectacular scenery was created from igneous activity, such as the Hawaiian Islands, formed as a result of volcanic eruptions in which lavas came from pockets of molten material released from the upper mantle. Magmas that have been forced up from the mantle and congeal before reaching the surface are called batholiths. The size and shape of these intrusive guests will vary depending on the size of the mass and its relation to the surrounding rock. When a batholith is subjected to metamorphic processes, i.e., an increase in temperature and pressure, granitic rocks are formed. The crust of the earth is actually made up of these two major components. The crust beneath the oceans is basaltic in composition, and the continental crust is composed of granitic rocks.

Within the earth, magma is the life-blood of the planet. Basalt is formed when lava is thrust to the surface or magma is forced up from the mantle into the crust to slowly cool and harden. Many geological formations occur because of this process. Although basalt formations can be obstacles of tremendous proportion, humankind has been enjoying the fertile environment left behind by the processes of continental formation and plate tectonics throughout the history of man.

### REFERENCES:

- Contemporary Physical Geology**, Harold L. Levin, CBS Collage Publishing, © 1981  
**Agents of Chaos**, Stephen L. Harris, Mountain Press Publishing Co, Missoula, MT© 1990  
**The Earth**, Arthur Beiser, Time Inc, NY, © 1962



### FOR FURTHER READING....

Researchers have finally had their first view of carbon dioxide crystals, but don't look for samples at the local rock show. CO<sub>2</sub> normally evaporates above minus 210° F., and these crystals formed only within a special scanning electron microscope chilled to minus 320° F. Oh, and they were only .13 microns across.

*Scientific American* (May, 1998)

Was Australia the first place reached by early seafaring humans? Not if you consider some newly discovered stone tools on the island of Flores, east of Java, where the 11-mile crossing from the mainland would have required boats or rafts. Australian settlers probably made their crossing about 40,000 to 60,000 years ago. The sailors who landed on Flores and left their tools did so about 800,000 years ago, which means that the crossings were made not by *Homo sapiens*, but by *Homo erectus*.

*Nature* (Mar. 12, 1998)



### SHARING OF FOSSIL RESOURCES

By Herb Luckert

While recently at the MAPS Expo in Macomb, I stopped to admire a beautiful piece being offered by a German dealer. It consisted of a very dark, almost black substrate, about 18"x24", and had on it, in high relief, various cylindrical bones about 1 or 2 inches in diameter, as well as a few small bones of various shapes. The label read "Mososaur - Wirbel und Padelknochen." Not much accommodation to the American market. It was vertebrae and flipper bones of a mososaur.

The dealer told me how she came by the

piece. It was found by a friend of hers in an area under the control of a Bavarian museum. He was allowed to keep it since it was incomplete. Had he found an entire mososaur, it would have belonged to the museum. She explained further that any find by a collector was examined by museum personnel. If incomplete, it belonged to the finder. If rare, or an item not already in the museum collection, the piece would be taken for the museum but they would then give the finder a piece judged to be of equal value from the museum duplicates. There were also regulations governing the amount of excavation at a find, in order to protect the unknown from improper excavation.

This strikes me as a great way to provide for the conflicting needs and requirements of the professional paleontologist and the amateur collector. It seems similar to the arrangement made by Jack Horner in digging for dinosaurs in competition with commercial collectors on private property. Why can't we come up with a similar arrangement for digging on federal and state lands? Everyone wins in a situation like this.

### LIZZADRO MUSEUM SCHEDULE

Here is a listing of some upcoming events at the Lizzadro Museum of Lapidary Art in Elmhurst, IL (greater Chicago). For more detailed information, call 630-833-1616.

June 13--Fossil collecting field trip to Braidwood, IL, for Mazon Creek type fossils. Fee charged.

June 27--Searching for gemstones and minerals in a pile of common stones--an activity for kids through adults.

July 11--Expert will identify artifacts and show the difference between genuine and fake ones.

July 25--Create a bead necklace under direction of a jewelry designer. Fee charged.

August 1 & 2--Tour of geology sites in southern Illinois. Fee charged.

August 15--Film explores the mysteries and mystique of gemstones.

Normal opening hours for the museum are 10 to 5 (Monday through Thursday) and 1 to 5 (Sunday). Admission \$2.50 adults, \$1.50 seniors, \$1.00 teens, free under 13.