

Michiana Gem and Mineral Society
Tom Noe, Editor
305 Napoleon St.
South Bend, IN 46617



April, 2012 Volume 52, Number 4



**THE
ROCKFINDER**



We're on the Web! See us at: <http://www.sauktown.com/Michiana>

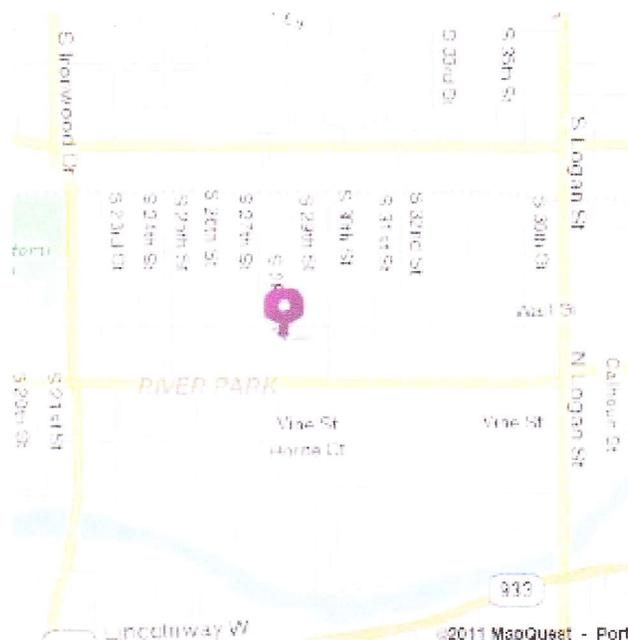
The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques. General meetings are usually held the fourth Sunday of each month at 2:00 p.m. at,

Our Redeemer Lutheran Church
805 S. 29th St.,
South Bend, IN.
Please see the map to the right.

Doors usually open at 1:30 for meet & greet time.

Regular meeting exceptions include May (third Sunday), July (Club Picnic), August (Club Show) and the November/December meeting and Christmas party.

Board meetings are held before the monthly meetings. The annual club show is in late August.



DUES

Yearly Membership Dues are payable by December 15th of each year. Please chose type of membership below.

- Individual \$15.00 Family \$20.00
- Junior \$1.00 Subscriber \$7.50

Please indicate areas of special interest.

- General Geology Gems & Minerals
- Fossils Micro mounts
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Please send your dues and the bottom half of this form to:



Please read and sign this section

With my signature I hereby release the Michiana Gem and Mineral Society, Inc., and its individual members and the owners of any premises upon which I enter under permit granted to the society, absolutely free of any liability whatsoever, to my person or property, and further I will respect the equipment and property of the aforesaid owners.

Signed _____ Date _____
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Family Information:

Name: _____ Birthday: _____
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Michiana Gem & Mineral Society
 c/o Marty Perry
 29154 Frailey Dr
 Elkhart, IN 46514

THE ROCKFINDER

Volume 52 Number 2
February 2012

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

Michiana Gem and Mineral Society
(www.sauktown.com/Michiana), is a not-for-profit organization affiliated with the Midwest Federation of Mineralogical Societies (<http://www.amfed.org/mwff/>) and with the American Federation of Mineralogical Societies (www.amfed.org)

The *Rockfinder* is published monthly except July and August.

Please note that all items for a given issue of the *Rockfinder* are due to the **Editor** no later than the 5th day of the previous month. This means that the due date for the March Issue will be February 5th. Advance items are appreciated. Material may be e-mailed to hefner_family@hotmail.com or submitted via the U.S. Mail.

Editor:
Jason Hefner
229 East State St
Etna Green, IN 46524

Permission is hereby granted to reprint any original *Rockfinder* articles as long as recognition is given along with the reprint.



Kathy's Column - President Kathy Miller

This is probably one of the shortest messages I have yet to write. Bob and I, our families, Todd, Linda, Ashley and Kaley Miller, Bill, Robin and Rob Schuster, Jim, Barb McHugh, Maggie and John Hawkins, Marilyn Meier and especially Tom McLaughlin (who are all members of MGMS) would like to thank **ALL** of you for the many cards, prayers, phone calls we received and your presence during Pat's (Tom's wife) celebration of life to LIFE. You folks are really special to us. Our God just felt it was time for her to come home. Alleluia. Pat was a member of MGMS for many, many years.

Just a few reminders.

April's meeting is Sunday the 22nd of this month.

For those going on the 3-day bus trip in September, the price of the Saturday night meal is \$16.51 for adults and \$11.79 for children 10 and

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Up & Coming

Next Meeting April 22, 2012

Place:
Our Redeemer Lutheran Church
805 S 29th Street
(29th & Wall)
South Bend, IN.
This is in the River Park area.

April Program: Club member Fr. Larry Calhoun will be demonstrating how to make a cab ring.

Board of Directors

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219-778-2196

Kathy's Column continued from Page 1

under. This includes tax and gratuity. The itinerary you received originally is all right for everything but the meal price. **This corrected price** was put in the March newsletter. Please make out your check to Robert W. Miller, since we are using our credit card to pay for the meals prior. For more information on the bus trip, see last month's *Rockfinder*.

For the members who are going on the fluorite trip to Marion, KY, this month we would appreciate and anticipate having you bring in some of your collected specimens for display at this month's meeting.

Rock on,
Kathy

Michiana Gem & Mineral Society's 49th Annual

Jewelry, Gem & Mineral Show and Sale

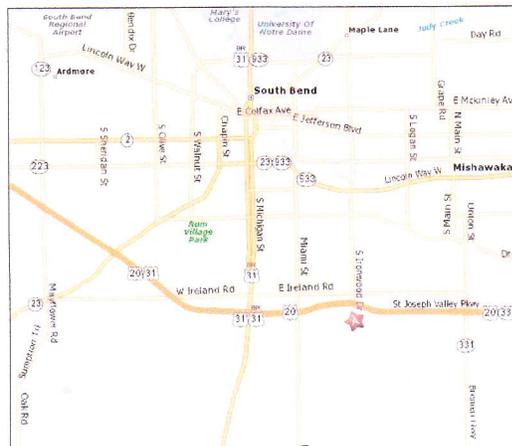
August 24, 25, & 26, 2012

Friday 2-7 pm * Saturday 10-6 pm * Sunday 10-4 pm



St Joseph County 4-H Fairgrounds
Esther Singer Building
5177 South Ironwood Road
(Ironwood and Jackson Road)
South Bend, IN 46614

For information contact:
(574)272-7209 or (574)291-0332
Show Chair Society President



Admission:
Adults: \$3.00
Kids 6-12: \$1.00
Under 6: FREE
Parking: FREE

*Quality Dealers
*Displays
*Demonstrations
*Kids Korner
*Door Prizes
*Silent Auction
*Exhibits and more!

What Is Marcasite?

Marcasite comes from the Arab word for pyrite. This mineral is mined throughout the world, especially in southern Africa and South America. Joplin, MO, and Guanajuato, Mexico, have produced distinguished marcasite deposits. Marcasite is typically found in sedimentary deposits, such as coal beds.

Marcasite is yellowish-white in its natural state, with a metallic finish. When tarnished, marcasite takes on a dark brass or brown color. It is a brittle stone, with a hardness of 6.5 on the Mohs scale. Marcasite can contain sulfuric acid in trace amounts, so wash hands after handling marcasite stones and do not drink or eat anything containing marcasite in any form.

Pyrite and marcasite share an identical chemical makeup, but different structure. Often X-ray testing is required to distinguish marcasite from pyrite. Adding to the confusion, marcasite has the ability to pseudomorph, whereby a mineral changes its chemical makeup completely to form an entirely different stone. Marcasite has been shown to pseudomorph into goethite.

Marcasite has few commercial uses. There has been limited success with using marcasite as a source of sulfur, and the stone is occasionally used for decorative purposes. It is never used as a gemstone; jewelry that is labeled as containing marcasite actually uses pyrite.

From eHow.com

Collecting Excellent Fossils in Sylvania, Ohio

Fossil Park, in Sylvania, Ohio, is open to the public for the collection of fossils. Hanson Aggregates Midwest has donated part of an old quarry to the local park department, and regularly trucks in fossil-bearing shale. The shale, which is quite soft and easy to break apart, contains superb Devonian fossils, from 350 to 400 million years old. You can keep what you find.

There is a parking lot, and the hunting areas are easy to walk to. Children are welcome, and the site is safe for all ages. The fossil-bearing shale is dumped on concrete pads, and you simply make your way through the piles looking for fossils. Hard hats, hammers and chisels are not required. There are temporary rest rooms on the site. You can find various species of trilobites, brachiopods, crinoids, fossilized worm trails, coral, etc.—most are beautifully preserved. Typical hours in summer are Saturdays from 9 to 6, Sundays from 11 to 6 (open until October 20). After Labor Day, the park closes at 5.

INFORMATION: For current information about times and open dates, contact the Olander Park System at olanderpk@aol.com or phone 419-885-8313. The Olander Park web site is not very helpful. Search for “Fossil Park” and Sylvania to get more information. There may be a small fee.

Summer Days: The Geology of Lakefront Property

By Heath Shive, Three Rivers Gem & Mineral Society, Fort Wayne, IN

As summer looms ahead, the season of beaches begins! But enjoy it while you can. To a geologist, beaches are very temporary things.

Any beach you find today didn't exist fifteen thousand years ago. During that time, the peak of the last glacial cycle, sea level was at least ninety meters (three hundred feet) lower than it is today. That would put the Ice Age beaches miles farther out to sea! There was no such thing as an English Channel, a Bering Strait, or even the Great Lakes (as we know them today).

Going to the lake this summer? Most likely, that lake didn't exist during the last Ice Age. Most lakes in the Midwest are "kettle lakes"--lakes created by great chunks of retreating glaciers that broke off and melted in place.

Some glacial lakes were truly enormous! Glacial Lake Wisconsin was born when the Green Bay Lobe (a glacial lobe over present-day Green Bay) created a dam on the Wisconsin River. Glacial moraines north and south of the Baraboo Hills sealed in the rising waters. Glacial Lake Wisconsin would eventually grow as large as the Great Salt Lake.

In Montana a glacial dam would create the legendary Lake Missoula. Lake Missoula at its peak covered two thousand square miles and contained over five hundred cubic miles of water (half the volume of modern Lake Michigan).

However, glacial dams are made of ice. Since ice has only nine-tenths of water's density, rising water levels will create a buoyant force that tries to lift an ice dam (like how ice cubes float in your iced tea). When that happens, glacial lakes will empty violently! When the dam broke on Lake Missoula, over five hundred cubic miles of water suddenly raced to the ocean. This created the eerie landscape known as the Channeled Scablands of the Columbia Plateau. In Wisconsin, when the southern moraine collapsed, the explosive draining of Glacial Lake Wisconsin carved out the Wisconsin Dells, which today are a major tourist attraction.

Some Ice Age lakes were created by changes in climate. Lake Bonneville was a lake that covered over twenty thousand square miles (almost as big as Lake Michigan) and stretched from Idaho through Utah. Lake Lahontan in Nevada's Great Basin Range grew to cover 8,570 square miles (bigger than Lake Ontario's 7,540 square miles). Both Bonneville and Lahontan were over nine hundred feet deep, deeper than any Great Lake except Lake Superior.

What created these monsters? It was Ice Age weather! The jet stream is a zone of high-velocity wind that carries moist air from the Pacific into the American Northwest and Canada. This wind pattern strongly influences the humid climate in coastal Washington and Oregon, making it quite different from the arid Southwest. But during the Ice Age, the fierce cold of the continental ice sheet split the jet stream and

established a strong region of high pressure, called an anticyclone. This anticyclone drove part of the jet stream north and the other part south, a deflection of as much as three degrees of latitude. This detour brought the moisture-laden jet stream into the arid Great Basin, which created huge pluvial lakes. But with the ice sheet's retreat, precipitation decreased. Lakes Bonneville and Lahontan slowly shriveled up. The Great Salt Lake (and its little sister, Utah Lake) is all that remains of the mighty Bonneville. Tiny Lake Walker in Nevada is all that remains of Lahontan.

Beaches may come and go, but these processes take thousands of years. In the eye of geology, that's a blink. Maybe it's all relative. After all, doesn't every summer go by in a blink too?

Sources: Alt, David. *Glacial Lake Missoula and its Humongous Floods*. Missoula, MT: Mountain, 2001.

Dott, Richard H., and John W. Attig. *Roadside Geology of Wisconsin*. Missoula, MT: Mountain, 2004.

Orndorff, Richard L., Robert W. Wieder, and Harry F. Filkorn. *Geology Underfoot in Central Nevada*. Missoula, MT: Mountain, 2001.

Orndorff, Richard L., Robert W. Wieder, and David G. Futey. *Geology Underfoot in Southern Utah*. Missoula, MT: Mountain, 2006.

Reprinted with permission from the April, 2012, *Strata Data*.

CORVA vs. the US Forest Service

By Amy Granat

For many years CORVA, the California Off-Road Vehicle Association, worked side by side with the US Forest Service as partners, without a thought that this relationship would be tried and subsequently lost because of Forest Service policy. The Travel Management Rule did away with all this good will born of years of hard work, discarded along with thousands of miles of road and trails that the public traditionally used for access throughout the national forests in California.

The Forest Service was created and mandated by Congress to manage the national forests for multiple use . . . including logging, mining, all types of recreation including rockhounding, driving for pleasure and OHV use. Rural residents depended on forests for everything from firewood to heat their homes in winter to hunting for organic sources of protein to feed their families. Before the Travel Management Rule was enacted, all the above activities were possible, but afterward everything was changed. By concerted effort through the Travel Management Rule, an extensive analysis was conducted that drastically limited access by motorized means, and no commenting, protesting and arguing by CORVA changed the inevitable outcome.

The most drastically impacted by the new limitations to motorized access in our forests are the elderly and disabled community. Those who are most vulnerable were the most overlooked. The need for motorized means of travel by the elderly and disabled, whether vehicle, ATV or side by side, to hunt, fish, rockhound or collect firewood was not considered, and was dismissed out of hand when brought to the attention of the Forest Service. It was this disregard, together with all the other limitations and closures, that convinced CORVA to file suit against the Forest Service.

Although not an easy decision, CORVA is proud to represent the needs of the greater OHV community, and, together with our partners Sierra Access Coalition and Butte and Plumas Counties, are filing suit against the Forest Service to force them to right all the wrongs committed during the Travel Management analysis. Rural residents, the elderly and disabled, and all those who use motorized means to access public land have been treated with complete disregard, and CORVA is committed to standing up for the people we represent. Our members know we can't do this without their support, but also realize the positive results of this lawsuit will reverberate throughout the country, and positively influence all future decisions regarding travel on public lands, whether Forest Service or BLM. What happens in California can change subsequent decision in the entire country, and though we can't predict judicial outcomes, we are confident in our allegations and the skills of our attorneys.

At CORVA we sincerely thank the American Land Access Association for their support and understanding of these issues. ALAA has consistently proven a willingness to learn and work together towards the common goal, reaching across boundaries to see the commonalities among all those who enjoy motorized access. ALAA deserves recognition for the willingness to stand together and fight for the right of public access to public land, and we are proud to have them as partners.

Amy Granat

Managing Director, CORVA 916-710-1950

from the ALAA Newsletter

Jan Feb Mar, 2012

FOSSIL TURTLES

Ken Samulski has two good-sized fossil turtles for sale. Both are almost complete. A few pieces of the bottom shell are missing from both but the tops look great. They were professionally prepped, sandblasted and are beautiful. One is 9.5 x 8 x 4.75 and weighs 15 pounds. The other is 9.5 x 7.25 x 4 and weighs 11 lbs. \$450 each. Soon he also will be getting 2 unprepped turtles. Contact Ken for more information.

OFFICIAL STATE FOSSILS

From the National Park Service

And why doesn't Indiana have one?

Don't we have a gazillion fossils to choose from???

Alabama--*Basilosaurus cetoides* (Eocene age, whale)

Alaska--*Mammuthus primigenius* (Pleistocene age, woolly mammoth)

Arizona--*Araucarioxylon arizonicum* (Triassic age, wood)

California--*Smilodon californicus* (Pleistocene age, sabertooth cat)

Colorado--*Stegosaurus stenops* (Jurassic age, plated dinosaur)

Connecticut--*Eubrontes giganteus* (Jurassic age, dinosaur track)

Delaware--*Belemnitella americana* (Cretaceous age, belemnite)

Florida--agatized coral (Eocene age, coral)

Georgia--shark tooth (Cretaceous to Miocene age, shark tooth)

Idaho--*Equus simplicidens* (Pliocene age, horse)

Illinois--*Tullimonstrum gregarium* (Pennsylvanian age, soft-bodied animal: "Tully Monster")

Kentucky--brachiopod (Ordovician to Mississippian age, shellfish)

Louisiana--petrified palm wood (Oligocene age, palm)

Maine--*Pertica quadrifaria* (Devonian age, plant)

Maryland--1) *Ecphora gardnerae gardnerae* (Miocene age, snail); 2) *Astrodon johnstoni* (Cretaceous age, sauropod dinosaur)

Massachusetts--dinosaur tracks (Jurassic age, trace fossil, tracks)

Michigan--1) *Mamut americanum* (Pliocene to Pleistocene age, mastodon); 2) Petoskey Stone (Devonian age, coral)

Mississippi--1) *Basilosaurus* (Eocene age, whale); 2) *Zygorhiza* (Eocene age, whale); 3) petrified wood (Oligocene age, wood)

Missouri--1) *Delocrinus missouriensis* (Pennsylvanian age, crinoid)

2) *Hypsibema missouriense* (Cretaceous age, dinosaur)

Montana--*Maiasaura peeblesorum* (Cretaceous age, duckbilled dinosaur)

Nebraska--1) *Archidiskodon imperator* (Pleistocene age, mammoth); 2) mammoth (Pleistocene age, mammoth)

Nevada--*Shonisaurus popularis* (Triassic age, ichthyosaur)

New Jersey--*Hadrosaurus foulkii* (Cretaceous age, duckbilled dinosaur)

New Mexico--*Coelophysis bauri* (Triassic age, theropod dinosaur)

New York--*Eurypterus remipes* (Silurian age, sea scorpion)

North Dakota--*Teredo* petrified wood (Paleocene age, shipworm-bored wood)

Ohio--*Isotelus* (Ordovician age, trilobite)

Oklahoma--*Saurophaganax maximus* (Jurassic age, theropod dinosaur)

Oregon--*Metasequoia* (Miocene age, conifer leaf)

Pennsylvania--Phacops rana (Devonian age, trilobite)

South Dakota--Triceratops (Cretaceous age, horned dinosaur)

Tennessee--Pterotrigonia thoracica (Cretaceous age, bivalve)

Texas--1) Pleurocoelus (Cretaceous age, sauropod dinosaur); 2) petrified palm wood (Oligocene age)

Utah--Allosaurus (Jurassic age, theropod dinosaur)

Vermont--Delphinapterus leucas (Pleistocene age, white beluga whale)

Virginia--Chesapecten jeffersonius (Miocene to Pliocene age, bivalve)

Washington--1) Mammuthus columbi (Pleistocene age, mammoth); 2) petrified wood (Miocene age, wood)

Washington, D.C.--Capitalsaurus (Cretaceous age, undetermined theropod dinosaur)

West Virginia--1) Megalonyx jeffersoni (Pleistocene age, ground sloth); 2) fossil coral (Mississippian age)

Wisconsin--Calymene celebra (Ordovician to Silurian age, trilobite)

Wyoming--1) Knightia (Eocene age, fish); 2) Triceratops (Cretaceous age, horned dinosaur)

No State Fossil

Ten states (and five territories) have not yet named an Official State Fossil: American Samoa, Arkansas, Guam, Hawaii, **Indiana**, Iowa, Kansas, Minnesota, New Hampshire, North Carolina, Northern Mariana Islands, Puerto Rico, Rhode Island, South Carolina and Virgin Islands. In most states, any resident can get involved in nominating iconic things for official state recognition. If your state does not have an official state fossil, consider nominating one. Your state officials may want to issue a proclamation as part of your organization's next National Fossil Day celebration.

*Promote the club's big show
coming up August 24-26!*

