

THE ROCKFINDER

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



THE ROCKFINDER

APRIL, 1999

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Newsletter of the Michiana Gem & Mineral Society

Volume 39, Number 4

April, 1999

Meeting: Sunday, April 25, 1999
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

Hosts: Molly Elwell
Bess Wise

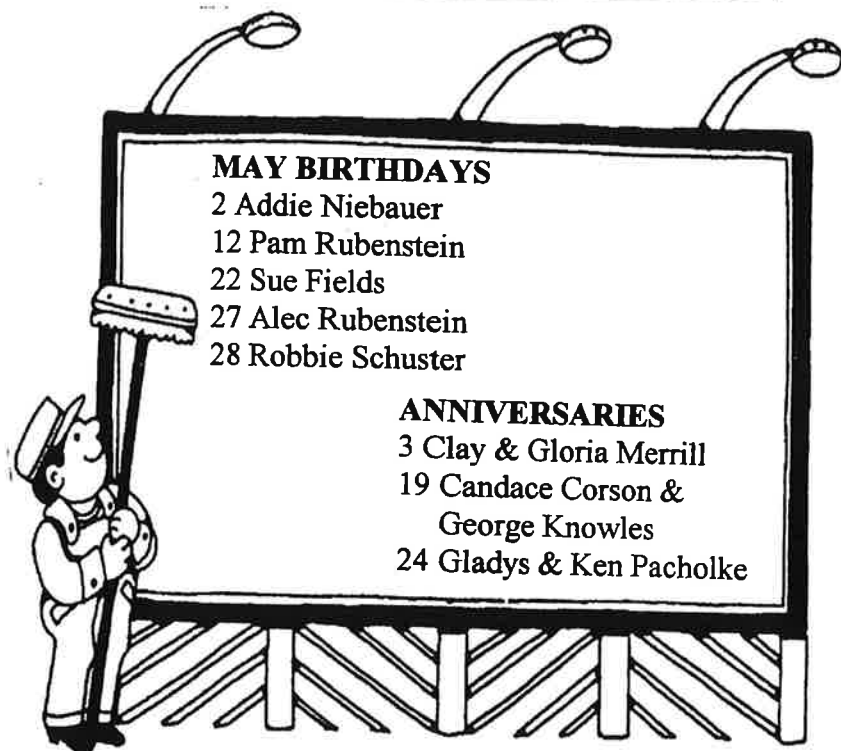
Program: Bring items for a silent auction. We'll also be putting together prizes for the kiddies' booth at the club's Labor Day show. You could also bring items you'd like to display or swap for.

MAY BIRTHDAYS

2 Addie Niebauer
12 Pam Rubenstein
22 Sue Fields
27 Alec Rubenstein
28 Robbie Schuster

ANNIVERSARIES

3 Clay & Gloria Merrill
19 Candace Corson &
George Knowles
24 Gladys & Ken Pacholke



PTERODACTYL

by Charles Connell

Please ptell me, Pterodactyl,
Who ptaught you how pto fly?
Who ptaught you how pto flap your wings
And soar up in the sky?

No prehistoric monster
Could ptake off just like you
And pturn and ptwist and ptaxi
Way up there in the blue.



UP AND COMING

- April 30-May 2--Kalamazoo Geological & Mineral Society show, Fairgrounds County Center Building, 2900 Lake Street, Kalamazoo, MI.
- May 21-23--MMLSD (Dearborn, MI) show, new location at Allen Park Civic Arena.
- May 22--Auction with lots of rock rough, North Village Mall. Check newspapers for details.
- June 19-20--25th Annual Rockhound Seminar, Southwestern Michigan College, Niles, MI.
- June 25-27--Lawrence County Rock Club 34th annual show, Monroe County Fairgrounds, Bloomington, IN.
- July 9-10--Combined SE Federation and American Federation convention and show, Nashville, TN.
- Aug. 8-13--Red Metal Retreat, Houghton, MI.

MARGARET'S COLUMN



The spring show is over and "Thanks" should go to several people for all the time and work that went into the silent auction. This was a money-maker for the club. Tom Noe and Don Church organized the tables, Herb and Phyllis Luckert went to the storage shed and picked up the rocks and magazines that were to be sold in the auction. I am not really sure who all worked at the sales tables, but I saw David and Sally Peltz, Bill Nelson Jr. and Emily Johnson, and of course, Don Church was there all of the time along with Tom Noe. Don Church took the leftovers and the four club cases (which he had cleaned and made presentable) and will return them to the shed. As you know, we are very lucky to have dedicated people like these to work and give their time to help the club with money for our field trips. This is what makes our club a good club.

Items to sell, to benefit the club, were donated by Betty Stout, Phyllis Smallwood, Fred Baker and Leo and Elma Heynssens. Many thanks to them.

We have several new members, and many applications for membership were handed out at the door during the show. Add the following names to your roster: Connie Schrock, 2500 Topsfield Rd #403, So. Bend 46614; Robert Ruble, 3430 Creekview Dr., So Bend 46635; Jim & Penny Hughes, 1918 Southern View, So Bend 46614; Henry Foster, 48 Holstein St., Niles, MI 49120; Lydia Lyn Lang 1306 E. Donald St, So Bend 46613; Samuel Shapiro, 305 Wakewa, So Bend 46617.

Don Church will take the other two empty club display cases and fix them up, but we need items to fill them. So if we all donate one item from our collections for this, we will have new things to show the patrons. Let Don know what you have and he will make the decision as to what he can put into them.

Now we will have a couple of months to get ready for the Labor Day Show. This month we will have a work session to make grab bags for the Kiddies Korner. So if you have small rocks or minerals or fossils to donate to this, bring them to the

next meeting and we will fill the bags. These rocks should not be too large, but larger than the ones that are to be used in the egg cartons. Also, please bring staplers, staples and the plastic from the pop cans and we will have the bags for this project. We also need the smaller rocks, fossils, minerals and such for the egg cartons. Come prepared to work!

I understand we will also have a silent auction and a swap session. This should be fun and interesting.

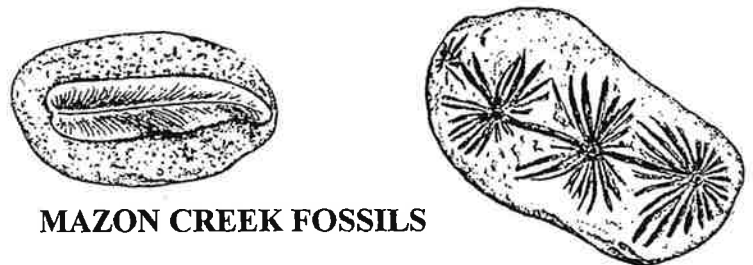
Our August picnic will be held at the Clay Township Park on August 22 at 12:30 and we will eat at 1 PM. We will have the larger southeast shelter, and we will have a short meeting to discuss any last-minute arrangements for the show.

Now is a good time to start planning for the show. If you plan on field trips this summer, see what you can collect to make an interesting display. Displays are a big part of any show.

We have firmed up all of our dealers for the show, but one dealer needs a salesperson for the booth, including set-up, sales and takedown. Whoever works in the booth will have to work all three days. Let me know if you are interested. If a man or woman has been a salesperson, this should be interesting.

Are you interesting in demonstrating? Let us know. Bob Miller is chairman of this.

We checked about our insurance, and anyone who goes on our field trips **MUST BE A MEMBER** of the club. Otherwise we are not insured. Remember this when mentioning the trips. See you at the meeting on April 25.



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.

MINUTES OF MARCH 28 MEETING

President Margaret Heinek called the meeting to order at 2:05 p.m. Present were 21 adults and two guests, Penny Hughes and Connie Schrock. The refreshment committee served wrapped chocolates, zucchini bread and creampuffs from a table decorated with a basket of pink tulips and an Easter bunny.

Door prizes went to Margaret Heinek, Gladys Pacholke, Karen Kreuter, Kathy Miller and Margaret Schultz.

Mrs. Debbie Eiswald presented a very informative program on the art of scrimshaw, a form of etching done on ivory, bone and teeth. She showed some antique examples of American scrimshaw work, which was often made by sailors in their spare time aboard ship, along with examples of her own work, which was much admired by the members.

David Peltz made a motion to accept the minutes of the last meeting as printed in *The Rockfinder*, seconded by Tom Noe, and it was passed by all the members.

Bob Heinek read an abbreviated treasurer's report, which will be filed for audit.

New Business: Margaret explained that we had been asked by the organizers of Youth Fest to staff a booth again this year. We participated last year, handing out books related to earth science and displaying rocks and minerals. The event will be held July 17 at the College Football Hall of Fame, but no one was available to work that day, so we decided to decline the invitation.

Earth Day, held at Howard Park, also extended an invitation for us to set up a booth, but no one was available.

Margaret briefed us on the situation regarding our storage shed which we rent for \$111 quarterly. She noted that this is quite high when you consider that we are only storing surplus rocks and various show supplies. She suggested that we think about finding another location at a cheaper price, and asked members for ideas.

It was suggested that the club have a cleaning-out party at the shed to reduce the amount of rocks here and to get things more organized.

Don Church has completed a much-needed renovation of our green display cases which we set up at the show. He had to replace a few minerals which had disintegrated. Many thanks, Don.

The South Bend Gem Show will be held April 9, 10 and 11. The club will again sponsor a silent auction for fundraising, and Margaret mentioned that she and Bob will also have a booth in which they will be selling some of their jewelry and minerals. If anyone wants to make arrangements with them to sell anything at the show, contact them soon.

The program for the next meeting will include a silent auction and the assembly of materials for the kids' prizes at the Labor Day show. Members might also want to bring items for trade with other members.

Old Business: Kathy Miller reported that a few spots are still available on the bus for the September field trip to hunt fossils around Oxford, OH. Information has been printed in the last few *Rockfinders*. Members should contact Kathy if they wish to sign up.

Gladys Pacholke brought in for display a box of fossilized bones which she received from a relative in Alaska about 30 years ago; this fit in nicely with the program on scrimshaw. David Peltz brought a selection of his recent finds at local sites. Kathy Miller brought some of Bob's scrimshaw work and we enjoyed the photos of the last two meetings and the Christmas party.

Gladys Pacholke
Secretary

LOCAL AUCTION OF ROCKS

On May 22, auctioneer Britton Knowles will auction some rocks, minerals and fossils as part of an estate sale at North Village Mall. Check newspapers for details the week before. Included will be thundereggs, Brazilian agates, petrified wood, rose quartz, Kona dolomite, Wyoming agates, Montana agates, South Dakota prairie agates, a nice piece of dinosaur bone, some Indiana cave formations, amethyst crystals from Thunder Bay, drusy quartz cave formations from Wyoming, small fossils, lots of miscellaneous cutting rough and garden rocks, alabaster, assorted debris from a collector who is cleaning out the garage. Very little in the way of finished or polished material--mostly rough.

ON THE ROAD AGAIN!

The Michiana Gem & Mineral Society has a Cardinal coach chartered for **September 24, 1999, through September 26, 1999.**

Our destination is once again Oxford, Ohio, and nearby areas. The field trip will be for *Ohio fossilized marine animals and Indiana Ordovician fossils.*

I have reserved a block of rooms at the Oxford Inn at a very reasonable rate, including a continental breakfast. This includes tax. As follows; per night; we will be staying two nights.

Room - 2 D.B. - \$57.98

Room - 1 King - \$50.17

I must stress that you reserve ASAP, as rooms are limited. Bonnie Brueske has arranged a Saturday night dinner (buffet style) at the Miami University Union with a room all our own. The menu is outstanding!

3 Entrees/2 Salads/4 Side dishes/2 Breads/2 Dessert Coffee/Ice Tea (Beer and Wine are cash.)

The price for the buffet is \$12.95.

We ask that when you make your reservation for both the motel and buffet, please make two separate checks to the Michiana Gem and Mineral Society.

Send reservations and checks to
Kathy Miller
1106 Clayton Drive
South Bend, IN 46614







MICHIGAN GEOLOGY & GEMCRAFT SOCIETY

25th ANNUAL
**ROCKHOUND
SEMINAR**

JUNE 19 & 20, 1999

**SOUTHWESTERN MICHIGAN COLLEGE
NILES, MI**

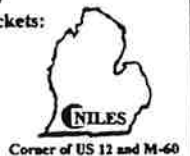
Learn how to facet Learn how to string beads
into necklaces Learn how to do "wirewrapping" 
.....Learn how to make a gem tree Learn how to make a
cabochon Learn how to make silver jewelry 

.....AND MUCH, MUCH, MUCH MORE!!!

TICKETS: \$15.00 per day. Advance \$12.00
For further information/schedule and advance tickets:



Cathy Hodgson
1360 Roods Lake Road
Lapeer, MI 48446
(810) 664-8985 5-9 pm



Members, the flyer above gives you information about an excellent and nearby (it's in Niles!) opportunity for learning about the various lapidary arts. Topics which will be covered also include micromounting, solderless jewelry, gem pictures, basic mineral identification, beginning lapidary, geology of Michigan, etc. Our own Bob Miller will teach about sculpture. You can choose from 5 or 6 topics presented each hour throughout the day, 9 a.m. to 5 p.m. Advance registration is cheaper but is not required. You can just show up on June 19 or 20 (or both).



Archaeopteryx

Red Metal Retreat

August 1 - 7, 1999



Photo from the MTU Archives & Copper Country Historical Collections

Over 20 Field Trips!

- Rock Swap
- Auctions
- Underground Collecting
- Underground Mine Tours
- Geological Tour of the Keweenaw Peninsula
- Historical Tour about the Copper Country's Mining Era
- Seminars on Rocks, Minerals, Mining History and more

RED METAL RETREAT

This is a fun-filled week of activities for mineral collectors and rockhounds, in the Lake Superior Copper District of Michigan's Keweenaw Peninsula. Over 20 collecting tours are offered, plus a geological tour, historical tour, museum workshops, a mineral swap, slide presentations and a benefit auction. Herb Luckert has a registration form you can copy, or write to:

Red Metal Retreat
 Michigan Technological University
 1400 Townsend Road
 Houghton, MI 49931-1295

The dates for this year's retreat are August 8 through 14. Fees are \$40 per adult and \$20 for kids 14 and under. Some additional activity fees are charged, such as \$7 for bulldozing charges on field trips (this uncovers new material from the dumps). This is explained on the registration form.

The web site for the retreat administration is www.portup.com/~swhelan/rmr99/.

E-mail is ci@mtu.edu.

A Colorado pack burro wandered into a prospector's cabin and chewed on a stick of dynamite. The prospector said, "It blew my cabin into a million bits, killed my wife, wrecked my barn, started a landslide, flattened 24 trees and besides that I had a mighty sick burro on my hands!"

IGNEOUS ROCK LIST

By Jane Huelsmeyer

Igneous rocks form from cooling magma. If magma erupts from a volcano and cools on the surface, extrusive rocks form. If the magma is trapped in the crust and cools there, intrusive rocks form.

INTRUSIVE ROCKS

(cools slowly underground, crystals are visible)

- PERIDOTITE - see olive green crystals
- GABRO - all or mostly black crystals
- DIORITE - mixture of black and white crystals
- GRANITE - three types of minerals (see quartz, white or pink feldspar and other mineral like mica or hornblends)

EXTRUSIVE ROCKS

(cools fast on the surface, microscopic crystals)

- BASALT - dull black or reddish brown, heavy rock, some may have bubble holes.
- ANDESITE - dull gray, heavy rock, may be light or dark gray.
- RHYOLITE - dull light-colored rock (any color but dark gray or black), heavy rock. Water solutions may form bands of color or color patterns.
- OBSIDIAN - shiny, glassy black, rock with smooth surfaces and sharp edges. Used by Indians out west for arrowheads.
- PUMICE - white to light gray rock, light weight, so full of holes it may float.
- ASH - sand to flour size particles, usually light gray. Ash cemented to TUFF.

AFMS Newsletter
 @@@@



granite



basalt



obsidian



pumice

YOUR HOUSE COMES FROM A MINE

The FOUNDATION is probably concrete (limestone, clay, shale, gypsum and aggregate mining).

The EXTERIOR WALLS may be of brick (clay mining) or stone (dimension stone mining).

The INSULATION in the walls may be glass wool (silica, feldspar and trona mining) or expanded vermiculite (vermiculite mining).

The INTERIOR WALLS are usually wall-board (gypsum mining).

The LUMBER will be fastened with nails and screws (iron ore and zinc mining).

The ROOF is covered with asphalt shingles. The surface of the shingles is from a variety of colored silicate minerals from mining.

The FIREPLACE is probably brick or stone, lined with a steel box (iron ore mining).

The SEWER PIPING is made of clay or iron pipe (clay mining or iron ore mining).

The ELECTRICAL WIRING is of copper or aluminum (copper mining or bauxite mining).

Your PLUMBING FIXTURES are made of brass (copper and zinc mining) or stainless steel (nickel and chrome mining).

Your GUTTERS could be galvanized steel (iron ore and zinc mining).

The PAINT is manufactured with mineral fillers and pigments (from minerals obtained from assorted mining).

The WINDOWS are made from glass (trona, silica, sand and feldspar mining).

The DOORKNOBS, LOCKS AND HINGES are brass or steel (copper, zinc and iron ore mining).

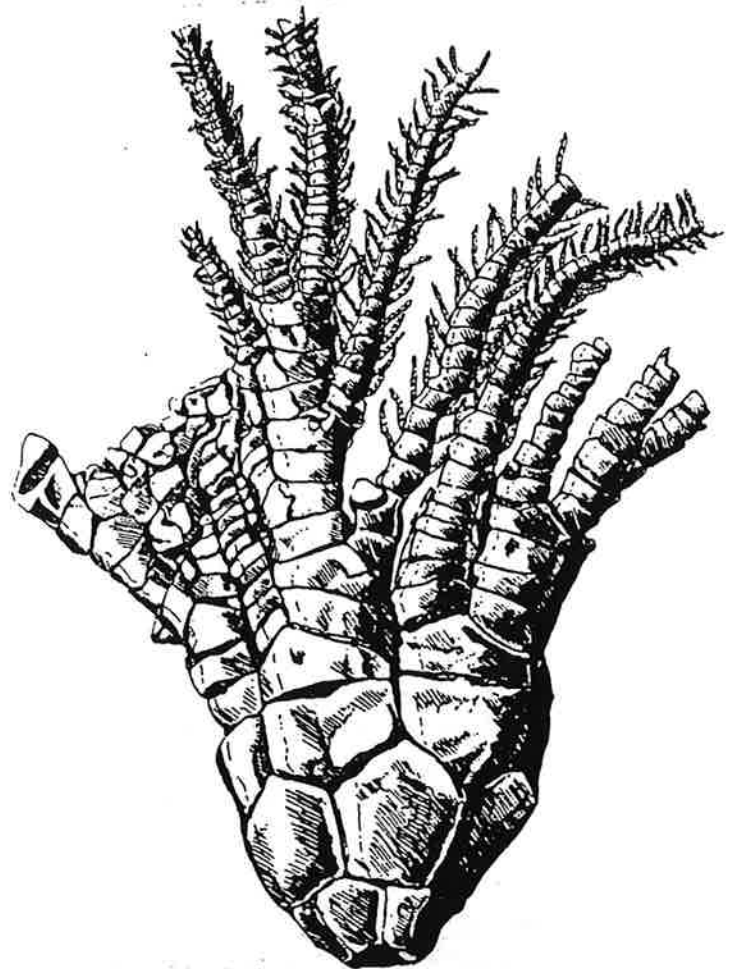
Finally, your MORTGAGE is written on paper made from wood or cloth fibers, but the fibers are mixed with clay (clay mining).

The Shawmish Roktawk (Feb., 1999)

"ROCKHOUND" - WHERE DID THE WORD ORIGINATE?

According to the American Geological Institute Glossary of Geological Terms, "rockhound" is a term first used by oil drillers for geologists, who often smell rock samples taken from well cuttings for the odor of oil. They said, "He hunts for oil like a hound dog, thus he is a rockhound." Since then, anyone who picks up rocks is called a "rockhound."

The Rockytier (Nov., 1998)



The crinoid crown above is probably the finest example of the early Permian species *Nebraskacrinus tourteloti* Moore, 1939. This example was collected by Gordon Baird in 1968 from outcrops of the Grant Shale Member of the Winfield Limestone Formation near Odell, Gage County, Nebraska. This example is a topotype as it was collected from the same area at which R. C. Moore collected the holotype specimen. The species was subsequently re-described by Pabian and Strimple in 1974. Illustration by Frances Gould.

RKP

Roger K. Pabian

THE PICK & SHOVEL

January 1999

TOP TEN REASONS TO GET INTO MICRO-MOUNTING

Micromounting is the study of minerals that require magnification for best appreciation. Micromounters use low-power (10-60x) binocular microscopes, and mount specimens in micromount boxes about 20 mm. on an edge. You know you're a micromounter when you find yourself mounting a 1 mm. crystal on a toothbrush bristle!

Storage. While you probably can't fit a thousand micromounts on the head of a pin, you can fit them in a small box under your bed, making micromounting ideal for apartment dwellers or anyone who has heard that phrase, "Get those rocks out of here!"

Easy collecting. Field collecting superb 10 cm. crystals of a rare mineral isn't particularly easy, but the micromounter can find something of interest almost anywhere.

Perfection. Microcrystals are perfectly formed and undamaged far more often than cabinet specimens. Aesthetically, they are the peak.

Variety. There are only a few hundred minerals out there that come in nice, big crystals, and almost no new species are found in sizeable crystals. Go to any mineral show and what do you see--table after table of aquamarine, quartz and fluorite: boring, indeed. Micromounters work with far more species than hand-specimen collectors, and with far more rarities. It's where the real mineralogy is!

Low prices. Average micromount price: \$3. Really expensive one: \$20. The initial expense of a good microscope and proper light is pretty steep, but after that you're set.

No fakes. When a lot of money is changing hands for a fine cabinet piece, one has to beware that the specimen hasn't been altered or faked in some way. Faking micromounts is not only extremely rare, it's nearly impossible, as a microscope easily reveals glue where it shouldn't be.

Cheap shipping. Air-mailing 100 micromounts costs less than 100 cabinet pieces.

365 days a year. The micromounter doesn't have the constraints of a field season. No matter what the weather is like, he can pull some rocks out of storage, trim them down, and find fantastic crystal-

filled vugs never before seen by man. It's a year-round hobby.

Weird and wonderful. The micromounter seeks things that aren't even imagined by "macro" collectors. Things like spiral millerite crystals, Sweet Home rhodochrosite crystals with moving bubble inclusions, or rutile, pyrite or boulangerite in ring crystals.

Free stuff. You'll find that, at micromount symposia, give-away tables are standard practice. Micromounters are a generous lot.

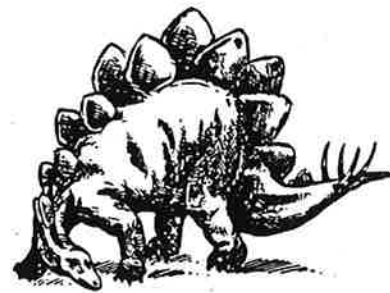
Kyana Gemscoop (Mar., 1998)

BENEFITS OF BEING CLOSER TO THE GROUND

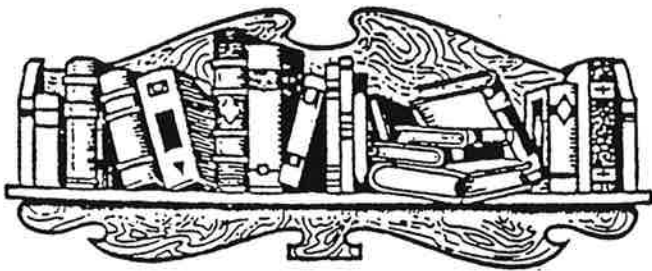
Back in the 1920s, while picking cotton on a farm near Searcy, Arkansas, a 10-year-old girl named Pellie found a "pretty stone." During her growing years she visited the Crater of Diamonds State Park 150 miles away in Murfreesboro and thereafter suspected she had found a diamond.

It wasn't until she became Mrs. Howell that Pellie convinced her husband to take the stone to the American University Geology Department. Their advice: "Try Tiffany & Co. in New York City." She did, and Tiffany paid her \$8,500 dollars. At this writing, the pretty stone, still uncut at 27.21 carats, is being displayed at that prestigious jewelry store as the third largest diamond ever found in the United States.

Blue Grass Gem and Mineral Club of Central Kentucky Bulletin (Nov., 1997)



Stegosaurus



FOR FURTHER READING....

A new chemical element with 114 protons in its nucleus has been created in a Russian lab. Besides being the heaviest element known, the new fellow on the block is staying longer: it lasted a phenomenal 30 seconds before decaying.

Science News (Feb. 6, 1999)

Lately, DNA comparisons have been used to establish genetic and evolutionary links between various critters. Such studies have suggested, for example, that whales share a common ancestor with hippos. Yet this is not supported by the fossil record, say paleontologists. They note that there is a 32-million-year fossil gap dividing whales from hippos, and that whales appear from the fossil record to be closely related to mesonychians, not arteriodactyls like hippos. Recent fossil finds of very old whale ankle bones do not appear to relate very well to either group.

Scientific American (Jan., 1999)

Similarly, paleontologists are still shaking their heads at new genetic studies which indicate that crocodiles are closer to turtles than they are to lizards. Go figure.

Science News (March 6, 1999)

Zirconium tungstate is an unusual compound which shrinks when it is heated, rather than expanding. Scientists have recently figured out what happens, but not why. When oxygen atoms in the molecule vibrate, they pull the surrounding metal atoms closer together. No one yet has a clue why it happens, but they're working on it.

Science News (Feb. 20, 1999)

New DNA studies of human origins have cast doubt on the "mitochondrial Eve" suggestions of several years ago. Suspecting that mitochondrial DNA might not be as stable as first thought, some of the same researchers have examined nucleotides on the X chromosome of male subjects. The results indicate that anatomically modern *Homo sapiens* sprang from a 200,000-year-old African population, then split into African and Asian branches, which interbred somewhat and evolved together into modern humans. Stay tuned.

Science News (March 20, 1999)

Hadrosaurs were supposed to have originated in Asia and then migrated to North America about 90 million years ago. The recent find of a 99-million-year-old hadrosaur ancestor in Texas will require some rethinking of the old theory.

Science News (Feb. 20, 1999)



AMAZONITE AND SMOKY QUARTZ

The association of amazonite and smoky quartz has long delighted both professionals and amateurs of the mineral world. Specimens of this nature are known exclusively from the Crystal Peak area of Colorado. The most aesthetically pleasing specimens are found as plates of fine amazonite crystals in combination with elongated smoky quartz crystals and globules of pure white albite crystals. In addition, one may find amazonite associated with colorless to purple fluorite cubes and metallic goethite sprays. Technically, amazonite is the green to blue variety of microcline or, simply speaking, a feldspar. The blue-green color is caused by trace amounts of lead in the mineral's crystal structure, causing it to reflect back only the green and blue parts of the spectrum. The color of amazonite does not fade. It occurs in pegmatites in Virginia, New Mexico, North Carolina, Brazil, Russia, etc. The finest known crystals of amazonite are found in small belts of pegmatite in Colorado.

SIES Club News (Jan., 1999)

MICHIANA GEM & MINERAL SOCIETY

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 Field Trips Kathy Miller 291-0332
 Membership All Members

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 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 (ph. 289-2028). Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617 (ph. 282-1354). Reporters, Bob Heinek, Herb Luckert, club members.

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

MEMBER NAME ADDRESS PHONE NUMBER BUSINESS ADDRESS CITY STATE ZIP COUNTRY

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 _____ Fossils _____
 Cabochons _____ Field Trips _____
 Faceting _____ Crystals _____
 Carving _____ Micromounts _____
 Other _____ Jewelry Making _____

Name _____

Street _____

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

Additional names:

Name _____
 Birthday _____

Name _____
 Birthday _____

Name _____
 Birthday _____

Name _____
 Birthday _____

Date of Wedding Anniversary _____

Phone _____

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 my property, and further I will respect the equipment and property of the aforesaid owners.

Signed _____ Date _____

