

# THE ROCKFINDER

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*Larry Hess, Editor  
Michiana Gem & Mineral Society  
15358 Kerlin Drive  
Granger, IN 46530*

*\* Update \*  
\* Our records \**

*Please remember  
to fill out and  
return the form on  
the back side back  
of this cover sheet.*

# MICHIANA GEM and MINERAL SOCIETY

## 1994 BOARD OF DIRECTORS

President	---- Margaret Heinek	7091 E East Park Ln, New Carlisle IN 46552
Vice Pres	---- Ed Miller	3431 East 18th B Rd, Tippecanoe IN 46570
Secretary	---- Pam Rubenstein	1316 Catherwood Dr, South Bend 46614
Treasurer	---- Marge Collins	3017 Niles-Buchanan Rd, Buchanan MI 49107
Liaison	---- Paul Godollei	1910 Ribourde Dr, South Bend IN 46628
Past Pres	---- James Russell	27911 North St, North Liberty IN 46554

## COMMITTEE CHAIRPERSONS

Programs	---	Ed Miller	3431 East 18th B Rd, Tippecanoe IN 46570
Hospitality	---	Lorraine Jordan	52087 Central Ave, South Bend IN 46637
Educational	---	Gordon Dobecki	11900 Laughlin St, Mishawaka IN 46544
Librarian	---	Paul Godollei	1910 Ribourde Dr, South Bend IN 46628
Historian	---	Ed Miller	3431 East 18th B Rd, Tippecanoe IN 46570
Sunshine	---	Molly Elwell	105 N Ironwood Dr, South Bend IN 46615
Publicity	---	Meg Auth	1308 E Monroe, South Bend IN 46615
Membership	---	All Members	

The Michiana Gem & Mineral Society, a non-profit organization, is affiliated with the Midwest Federation of Mineralogical and Geological Societies and with the American Federation of Mineralogical Societies.

## Regular Meetings

Time:	2:00 PM EST	Place:	Wesminster Presbyterian Church
	4th Sunday of each month		1501 W Cleveland Road
	June - Field Trip Meeting		South Bend IN
	July - No meeting		just west of the St Joseph River
	August - Annual Club Picnic		
	December - Christmas Party		

## ROCKFINDER STAFF

Editor	Larry Hess	15358 Kerlin Dr, Granger IN 46530
Co-Editor	Margaret Heinek	7091 E East Park Ln, New Carlisle IN 46552
Staff	Bob Heinek / Club Members	

All contributions for publication should be in the hands of the Editor by the 10th of each month. (219 272-5431) Permission is hereby granted to reprint, at any time, items published in the ROCKFINDER provided due recognition is given.

cut -----  
**Membership Dues are:**

Please send your dues and this form to  
Michiana Gem & Mineral Club, Treasurer  
Marge Collins  
3017 Niles-Buchanan Rd  
Buchanan MI 49107

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

Please make address corrections to the mailing label on the reverse side and fill in the optional information below. Your Birth Mo/Yr \_\_\_\_\_

**Check your SPECIAL INTERESTS:**

General Geology \_\_\_\_\_ Gems & Minerals \_\_\_\_\_ Fossils \_\_\_\_\_ Artifacts \_\_\_\_\_  
Cabochons \_\_\_\_\_ Faceting \_\_\_\_\_ Silversmithing \_\_\_\_\_ Carving \_\_\_\_\_ Crystals \_\_\_\_\_  
Micromounts \_\_\_\_\_ Beads \_\_\_\_\_ Other \_\_\_\_\_

**Family Members include information on spouse and children:**

Name	_____	Birthdate	_____	Will attend meetings	_____
Name	_____	Birthdate	_____	Will attend meetings	_____
Name	_____	Birthdate	_____	Will attend meetings	_____

# THE ROCKFINDER

Volume 34  
Number 3

March 1994

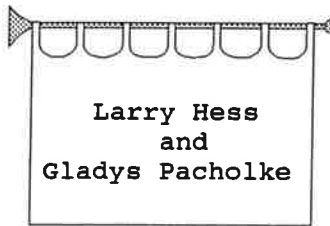
Published by:  
Michiana Gem & Mineral Society

**Meeting:** Meeting: March 27, 1994  
Doors Open 1:30 PM  
Meeting at 2:00 PM

**Place:** Westminster Presbyterian Church  
1301 E Cleveland Road

February Program: The sale of the century, a fantastic SILENT AUCTION -- bring in a few rock related items for sale. The club will keep a small percentage of the proceeds for a good cause.

**Hosts:**



March Birthstone - *Aquamarine*:  
Aquamarine, is a transparent green to blue gemstone, the most highly prized beryl. It's said to be associated with cleansing, meditation, and promoting love of married couples.

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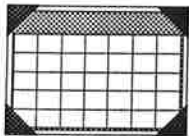


## March Happy Birthdays

- |                   |                     |
|-------------------|---------------------|
| 6 Gladys Pacholke | 22 Gloria Merrill   |
| 7 Barbara McHugh  | 22 Jim Cytacki      |
| 11 Marie Crull    | 24 Joe Kossack      |
| 11 Abby Moffitt   | 27 Elspeth Johnson  |
| 15 Jane Kile      | 28 Kevin Klodzinski |
| 16 Ronald Douglas | 30 Margaret Heinek  |



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## Calendar of Events:



- |           |   |             |  |
|-----------|---|-------------|--|
| Mar 26-27 | Gem & Mineral Show<br>Des Plaines Valley Geol Soc<br>Rand Park Field House<br>Des Plaines, IL     | June 17-19  | 29th Ann. Gem & Mineral Show<br>Lawrence County Rock Club<br>Bloomington IN<br>Margaret Kahrs (812) 522-6093 |
| April 6-9 | Indian Mounds Rock & Mineral<br>Gem & Mineral Show<br>Grand Rapids MI - Eastbrook Mall            | June 25-26, | MGAG - Rockhound Seminar<br>Southwestern Michigan College<br>Niles Michigan (313)664-8985                    |
| Apr 9-10  | Central Ohio Show<br>Columbus Rock & Mineral Soc<br>Columbus Ohio<br>Calrton Davis (614) 451-3252 | April 8-10  | California Federation, DelMar CA   |
|           |   | June 3-5    | Northwest Federation, Ogden UT   |
|           |   | June 23-26  | South Central / AFMS, Houston TX   |
|           |   | July 8-10   | Rocky Mountain, Rapid City SD  |
|           |   | Sept 2-4    | Midwest Federation, South Bend IN  |

## MARGARET'S COLUMN

March came in like a lamb, and hope it goes out the same way! We have had enough winter weather, but as I am writing this I hear we may have some snow. Oh well, we can't do any thing about the weather, just wait for spring.

I want to thank all of the members that filled the envelopes with our convention material. It was done in a very orderly manner, and many hands made the job go fast. Even the juniors helped, they put the labels and return addresses on after the envelopes were stuffed.

We have some good workers in the club!!! Tom and Pat McLaughlin have volunteered to find out about a club field trip. Pat called with the news that there are no busses available during April, May or June, with the exception of April 8, 9 and 10th. Which is probably too early to plan a trip. Buses are available in August, but Pat said they had been down there during that time period, and it was very hot and buggy. Her suggestion is that we go after the show, September 16, 17 and come home the 18th. She has made a tentative hold on a bus for those dates.

The cost for a 41 passenger bus will be \$1440.00 plus 2 nights for the driver at a motel (\$38.95 per night). 47 passenger bus, \$1512.00 plus the two nights. The Budgetell motel for a 2 bed, double occupancy, is \$38.95 (probably plus tax) and can have 4 to a room, 18 yrs and under free. This includes a continental breakfast. Best Western has offered us a rate of \$36.00, 2 people, 2 beds: \$40.00, 3 people: \$44.00, 4 people. For every 15 rooms used, one complementary room, which would take care of the bus driver. So think about it and let them know how you feel about this for September. We would leave on Friday evening and come back on Sunday evening.

Congratulations to Paul Godollei on his

article "Computerizing Your Collection". It has been picked up by many bulletins. We have an author in our midst! Larry says Paul has really been busy writing articles, on cleaning fossils, the computer ones (more to come) and hunting areas.

More volunteers are needed for the "Earth Day Celebration" to be held at the Scottsdale Mall on April 22nd and the 23rd. The school children are expected to come in by bus from 10:00 to 1:30 pm the 22nd. Saturday the 23rd time will be 10:00 to 5:00.

Our reservations have been sent for the dates, they will furnish a covered table. We man the booth with handouts, fliers, bookmarks and polished stones to give out. Some members have signed up to work, but we need more. You can call Bob Heinek, he will take your names and hours you can be there. I will be unable to attend, but there are many others that can do the job. We have the club cases which Bob will take for display, so no one will have to take displays, just yourself.

The MWF Newsletter editor will put something in the next edition about getting some Petosky stones. We need them for the junior's demonstration booth in September. Gordon Dobecki has used all we had during the last few shows and Science Alive programs. HELP!!!!

I have ordered the AFMS Updated Rules Books and they are available for purchase. Bob Miller will have them, so if you are in need of one, let him know. I did order one for the club library, but you may want one for yourself. It is a good book to have, even if you do not intend to compete, but to make labels and what to put in your cases for display. Bob and I, after looking into the rules, found we had a good display of petrified wood, with unusual features. We assembled the display and won a national award. So invest in a copy for yourself.

See you at the meeting on March 27.

*Margaret*



SECRETARY'S REPORT

MINUTES OF THE FEBRUARY 1994 MICHIANA GEM & MINERAL SOCIETY

President Margaret Heinek opened our regular meeting. Jo Kytta's sister, Marge Greenwald, was welcomed. The January minutes were accepted as printed in The Rockfinder. The treasurer's report was dispensed with as Marge Collins was not present. Please note that annual dues are payable now; those that wish to be included in the new roster need to get dues in immediately.

Committee Reports

Program - We will stuff envelopes with information for the September show.

Display - Paul Godollei brought in some very impressive fossils, and Tom Noe brought a nice display of geodes.

Sunshine - Keep Molly informed!

Old Business

Field trip - Tom and Pat McLaughlin volunteered to chair a field trip. They will look into the availability of a bus May 28-30 or June 3-5 for a trip to southern Indiana.

Science Alive - Thanks to everyone who volunteered at the St. Joe County Library's Science Alive program. It was a tremendous hit, and the children loved polishing Petoskies - so much so, in fact, that we need to buy more! If you know of a good source for more, please contact Gordon Dobecki or Margaret Heinek.

1994 show pins - We saw Meg Auth's lovely design and voted on a 1 1/4" diameter size. Margaret will send off to have them made.

Motor - Gordon Dobecki had to purchase a

new motor for the polishing machine which he uses at Science Alive and our fall show. We voted unanimously to reimburse him \$90.90 for the new motor.

Historical Society - The Historical Society sent an acknowledgement of our purchase of a brick and showed us how it would be inscribed.

New Business

We were approached to have a table for the Earth Day celebration at Scottsdale Mall on April 22 from 9:00am to 1:45pm and April 23 from 10:00am to 10:00pm (we don't have to stay until 10:00 pm). We voted to attend and discussed various displays and handout materials. We still need volunteers, so if you can work a 2-hour shift on either day, please let Margaret know.

We needed a new master for the copy machine at a cost of \$304.50.

1 guest, 3 juniors, and 24 adult members were present.

Respectfully submitted,

Pam Rubenstein

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Michiana Gem & Mineral Society Membership Roster Update.

(New members, renewals, roster errors, address changes, etc.)

Bruce Wolfe
317 N Hawthorne
South Bend IN 46615

Dick & Joan Rosback
1984 Creebank Ln
South Bend IN 46635
277-9291

(We apologize to the Rosback's, according to recently discovered records they should have been in the 1993 Roster.)



Editor's Notes

Hello! Another month has passed and our March meeting is rapidly approaching. This month I'd like to pass on excerpts from two recent items. First, Ed Pedersen's article "Rx for Attracting New Members". This originally appeared in the Lincoln Gem and Mineral Club bulletin, September 1993,

"The following statements are gross oversimplifications based on real and perceived attitudes of rockhounds and the general public: 1) Mineral collecting is only for people with money. 2) Lapidary work is the only part of rockhounding that you don't need a college degree for. 3) Lapidary work, especially faceting, take lots of expensive equipment and space. 4) You have to be retired to have enough time to cut and polish rocks (the most nearly true).

The net result of these attitudes is that many individuals who might be prospective new members are scared off...

What factors are important to these individuals. 1) A wide range of hobby activities and opportunities to learn. 2) Club meeting times that fit schedules. 3) A minimum of work requests. 4) A maximum of field trips and exciting events. 5) A minimum of club business conducted at the meetings. 6) A strong emphasis on "show and tell" meetings."

I believe that our club is, to a great extent, consistent with Ed's suggestions for attracting new members. Ed Miller's recent suggestion that more programs be member demonstrations is an excellent idea. I brought subject up so we can keep the above items in

mind when speaking with prospective new members, at the gem shows for instance. This is an exciting and easy hobby for young and old to enjoy.

On a second subject, the St Joseph County Library's Clipboard newsletter reports:

"The 1994 Science Alive! program has been declared a major success! Best estimates put attendance at about 5000 students, parents and teachers who attended the event on Saturday, February 5, 1994 at the main library."

Margaret received a letter of appreciation from the Science Alive. They wrote, "Students loved the hands on approach. A student survey cited your display as one of the most enjoyable and educational."

Our thanks again to all of our Science Alive workers for making the hands on possible. And, we need to remind everyone that the kids "polished off" all of Gordon's petosky stones. Please help us locate more.

As a follow up on Margaret's column, I'll try review the exchange bulletins and report on the reprints of Paul Godollei's excellent articles. He is becoming very popular!

Thanks for all of your inputs. Best wishes,



Think Spring !!

### *The 3,000 Year Old Mystery of the Ancient Miners*

Unknown people mined copper here and then the simply disappeared.

That copper occurred in this region has been known since the Jesuit missionaries first penetrated there by way of the St. Lawrence, according to Professor Egglestop of the school of mines, Columbia College, New York. The Catholic explorers sent fabulous accounts of it to Rome. Nothing was known about it with certainty, though, until the time of Dr. Houghton, whose discoveries were followed by America's first mining boom.

Two years more elapsed in an eager struggle for wealth, so that it was not until 1847 that it was discovered that there had been an earlier mining of copper in that region. Float-copper is to be found in great abundance there, and probably the first utilization of the metal was made of such pieces picked up on or near the surface. It was soon found that a series of unaccountable depressions could be traced across the country, more or less connected for a mile or two in a line.

One of these pits after another was cleaned out in the course of prospecting, and the digging always revealed five or ten feet of sticks, leaves and dirt. Under that was a deposit of red clay. In the bottom of the pit there were always traces of mining, and copper would be found in amounts varying from small pieces up to masses many tons in weight. Systematic efforts were then made to ascertain the age and extent of this early mining. The result of this study concluded that it was entirely pre-historic.

The copper district of the Upper Peninsula of Michigan consists, as a whole, of three separate basins, each of which forms a mineral district with characteristics of its own, necessitating peculiar processes of mining. Each of these divisions is found to have been

similarly separated by the ancients, who went over the whole territory of each of these three productive tracts. They mined each after a different plan, setting the example for us who have succeeded them.

At Rockland, for instance, they began on an outcrop and followed veins, sometimes making a short tunnel. There are nearly vertical escarpments of rocks 300 feet high. Yet these ancient miners, finding a ledge of copper in the perpendicular face of this cliff, somehow managed to get at it, and worked it until a sort of cave or niche had been formed. On the northern side of Portage Lake they dug pits into the outcrop, uncovering a new part of the vein in advance.

In the Eagle River district they had chipped and scratched the outcrop of copper for a mile. But these traces are hidden, not only because originally insignificant excavations have become filled up, but because a forest whose trees are two or three hundred years old have grown densely over the surface, the filled-up pits and trenches. The age of these trees proves the great antiquity of this old mining.

Such traces are to be found everywhere throughout the copper region. Hundreds more, no doubt, are still concealed in the forest. Whenever the traces show extensive ancient mining, the most enumerative modern ventures have been made. All the famous mines of the region were discovered by following these indications of ancient work.

The supposition of the great age and entirely prehistoric character of these operations is founded upon ample evidence. The pits are choked with a filling in of slow accumulation, and over these grows a heavy forest. There is no mining tradition whatever among the Indians here. They do not do it themselves, and know of no race before them that ever did. This work, therefore, antedates the occupation of the region by the present

Indian race.

These prehistoric miners were men of much intelligence, and it may be said that the prosperity of the region in its present days has been dependent upon the skill with which these old miners picked out the veins which were really valuable. The fidelity with which their lead had been followed is illustrated in one of the first pits opened here. When the laborer got down below the loam and dead, broken wood and substratum of red clay, they found a single piece of metallic copper weighing six tons. The ancients, with their crude tools, had vainly endeavored to raise the mass. It was raised upon skids, which were of a sort of oak not known to grown in this latitude. But though the pit was only 15 feet deep, they could not apply force enough to lift or drag the mass out.

The largest mine at present in the regions - Calumet & Hecla was discovered by working on a similar depression, to which some men were attracted in their efforts to catch a wayward pig. At the bottom was found a piece of copper nine inches thick and many feet long and broad, only eighteen inches of which had been exposed by the ancient miners. The ancients abandoned it because they saw the mass was too unwieldy for them to move. In this case, as before, they had hammered and chopped off every angle and projection which they could possibly detach, until the surface was perfectly smooth.

When they found a vein of copper, they dug down into it by softening the rock with fire and water, and picking and shoveling it away. Their shovels were of wood, and resembled in shape a canoe paddle. Having exposed the copper, they softened it by fire, broke and cut off what they could by means of axes of hardened copper, driven by mallets of stone of various weights. Then they abandoned the mass for a new outcrop.

It is most interesting that by the use of split hickory stick, green sinews and gut, they were able to fasten these very heavy stone hammer heads to the wood handles. They chose for these sledges stones, not hard, but tough, and so saved the heads of their copper wedges. When they got to a depth where water troubled them, they made wooden bowls, arranged channels of bark outside of the pit, and kept the water out of the way simply by persistent bailing. Very small pieces of copper were thrown aside, for these prehistoric people had no knowledge of smelting and casting. They knew fire would soften copper, and seem to have understood how to harden it, but did not know it would melt.

When these mines were abandoned, they were deserted suddenly and forever. There is everything to show that the work ceased with the expectation of resumption. It is also evident that the men who worked them were not inhabitants of that region. All their tools and machinery are to be seen, but there are no traces of burial or human bones in any of these pits, but plenty of animals bones with signs of cooking.

There is no evidence of women or children. It is plain that these miners were all mature men who came there in the summer, sustaining themselves by hunting and fishing, and worked at mining out copper, which they took away with them.

They did not stay through the winter, for the depth of snow and severity of frost would put a stop to their operations. It has been suggested with much plausibility that they were of the same race who built the Ohio valley mounds, and that they had gone to Lake Superior year after year to get the copper which their nation used in their arts. They were at last prevented from these expeditions by the advance of warlike Indians from the north.

-- Reprinted with permission of Copper Country History 1/93



### STAR STONES

**Asterism** is the display of a mobile star of light on the top of the dome of a stone when cut as a cabochon. It is an optical effect caused by the reflection of light by fibers, needles or channels oriented in various definite directions. The star is usually 6-rayed, but may be 4-rayed or, rarely, 12-rayed.

Some stones displaying asterism are:

**Corundum** (Ruby, Sapphire) - may be 6 or 12 rayed stars.

**Diopside** - black colored stone with 4-rayed star.

**Rose Quartz** - pink shades may be transparent or translucent with 4, 6 or 12-rayed stars.

**Chrysoberyl** - rarely, green shade transparent 6-rayed star.

**Garnet** (Almandine) - 4 or 6-rayed stars.

**Quartz** - white-grey transparent to translucent with 6-rayed star.

**Beryl, Spinel, Enstatite** - brown, black with 6-rayed star.

The rough crystal of corundum, producing such a stone, consists of three sets or series of parallel silk inclusions (rutile needles) each extending throughout the stone and intersecting each other at angles of 60°. These inclusions are parallel to the lateral axis of the crystal and at right angles to the vertical axis. The stone is cut into a cabochon so that the silk is parallel to the girdle plane of the stone. The vertical axis of the stone passes through the top at the point where the silks intersect. If the cabochon orientation is incorrect the star will be off-center and the effect less obvious. The stars of other materials are similarly produced, but the sets of silk occur in other crystallographic directions; e.g. in garnet, parallel to the sides of the dodecahedron.

- From The Dopstick 2/91 via the Arkansas Rockhound News.

### The Candle of Life

A candle is such a simple thing  
It starts with just a piece of string.  
Yet, dipped and dipped by patient hand,  
It gathers wax upon each strand.  
Until complete and snowy white,  
It sheds at last a lovely light.

Life is so like this bit of string,  
Each deed we do a simple thing.  
Yet day by day if on life's strand  
We work with patient heart and hand,  
It gathers joy, makes dark days bright,  
And gives at last a lovely light.

- from a Church Newsletter, via BRECCIA.

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MINERAL OIL: is an excellent cleaner for selenite crystals. It seems to loosen the tiny particles left after washing in water and brightens too. It has several other uses: It is fine for protecting Borax crystals from hydration; It makes variscite a deeper green; and it improves the appearance of fluorites and calcites.

- via GEMS and Eureka News.

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Scratches on Silver: Anyone who works with flat silver in making jewelry will soon discover that sooner or later every scratch in the metal has to be removed. Common transparent contact paper from the dime store, the sticky kind with a removable backing paper, is the answer. Place it on each side of the silver sheet for protection. What's more, it accepts and holds India ink pen lines and it will not come loose when you are sawing the silver.

- From Strata Data, via GEMS

**COMPUTERIZING YOUR COLLECTION - Part 3**  
**by Paul Godollei, Michiana Gem & Mineral Society**

With Microsoft "Word", you can create labels such as the ones I used in my Specimen File. The specimen data is entered into a table, in rows and columns. The first column lists the specimen number. The second column is for identifying the type of specimen. The third column is for identifying the species. The fourth column is the locality number. And, the fifth column lists the species. See the example tables below and on the following page.

When using Microsoft "Word" the headings at the top of the computer screen are: Apple Symbol, File, Edit, Format, Font, Document, Utilities, and Window.

If you open (click on this option with the mouse) the Document heading you will find "Insert Table" as the 9th item from the top of the list. An insert table menu will appear which asks for your entry of the "Number of Rows" and "Number of Columns". Type in the number of rows (I usually start with 20) and the number of columns (I usually start with 5). A mouse click on the OK box will then create your table.

Now you can type in a specimen number and then TAB to the next column, continuing this process until your table is full. When you wish to add more tables, open the Edit window (heading) and click "Table". This lets you insert (or delete) columns or rows; typically we insert "empty" rows allowing more specimen entries.

You control the width of the columns by opening the "Format" window (heading) and clicking on "Cells". You choose the column number and type in the width of the column in inches, such as 1.0 in. or 3.4 in., etc. You then choose the next column and repeat the process setting the width desired. You must select "Whole Table" if you want all rows in the table to be the same, otherwise only the cell in the row and column you are working on will be altered.

When you have proceeded this far, click "Borders" to have the borders show up on the completed document. Follow the guidelines in the manual for setting up the borders, since to do it here would take an extra page. When you have the format the way you want it click "OK" and you will be returned to your page for further editing.

My computer has a "Print Preview" option listed under the "File" heading so you can see if any final corrections need to be made before printing. Before you print, be sure to save your table with the "Save as" (also under File) and list the title of your document. My title was "Index".

You can then click on "Print" (also under the File heading), and with your printer turned on you will get a copy of your table! If you have worked with tables before, this shouldn't be too difficult. Good Luck!!

TRILOBITES

PHYLUM: ARTHROPODA 2.1 - Class: Crustacea TRILOBITES

2000	2 B-17	2.1	L-1.6.1	unknown glabella
2000.1	2 B-17	2.1	L-1.6.1	glabella
2000.2	2 B-17	2.1	L-1.6.1	pygidium
2000.3	2 B-17	2.1	L-1.6.1	glabella
2000.4	2 B-	2.1	L-1.8	Crytolithus tessalatus Green-Cephalon
2001	2B-1	2.1.3	L-14	Elrathia kingi (Meek)-Trilobite
2002	2B-2	2.1.2	L-14	Agnostus Wheeli - Agnostia
2002.1	2 B-17	2.1	L-14	Agnostus montis Matthew-trilobite
2003	2B-3	2.1.3	L-3	Calymene platys (Green) -Trilobite
2003.1				Calymene
2004	2 B-4	2.1.3	L- 1.1	Flexicalymene meeki Foerste
2005	2 B-5	2.1.3.2	L-2	Phacops rana var milleri n. var.-Trilobite
2005.1	2 B-6	2.1.3.3	L-2	Phacops rana mileri Stewart

1

FOSSIL INDEX RECORD  
4000 MOLLUSCA-PELECYPODS

CAT. #	Type	Species	Locality	Name of Species
4000.1	4F-2	4.3.1.3.1	L-1.9	Byssonchia radiata
4000.18	4F-2	4.3.1.3.1	L-1.9	Byssonchia radiata
4001	4F-1	4.3.1.3.1	L-1	Pterinea demissa
4001.1	4F-2	4.3.1.3.1	L-1.9	Byssonchia radiata
4001.2	4F-1	4.3.1.3.1	L-1.6.1	Pterinea demissa
4001.3				Pterinea demissa
4001.4				Pterinea demissa
4001.5				Pterinea demissa

1

FOSSIL INDEX RECORD  
4400 GASTROPODS

## CATALOG OF SPECIMENS GASTROPODS 4400

No.	Type	Species	Locality	Name of Species
4401	4E-1	4.4.2.1.1	L-1.1	Cyclonema belix
4402	4E-2		L-1.4	Clathrospira conica
4403	4E-3		L-1.1	Sinuities cancellatus
4404	4E-4		L-2	Platyceras bucculentum
4405	4E-5		L-1.15	Lophospira bowdeni
4406	4E-6		L-1.8	Holopea obliqua
4407	4E-7		L-1.4	Cyclonema gracile
4408	4E-8		L-1.3	Cyclonema inglatume
4409	4E-9		L-1	Cyrtolites ornatus
4410	4E-10	4.4.2.1.1	L-1.18	Cyclonema conicum
4411	4E-11		L-17	Cyclonema belix
4412	4E-12	4.4.2.1.4	L-13	Turritelli hilli
4413	4E-13		L-38	Phragmolites
4414	4E-14			Pycnomphalos

2

FOSSIL INDEX RECORD  
4000 MOLLUSCA-PELECYPODS

4036	4F-35	4.3.3.10	L-13	Cyprimera
4037	4F-36		L-13	Plicatula dentonensis
4038	4F-37	4.3.3.1	L-13	Astartella concentrica
4039	4F-38	4.3.1.1	L-2	Grammysia bisulcata
4040	4F-39		L-13	Ostrea carinata
4041	4F-40	4.3.1.4.1	L-47	Pecten (Lyropecten) estranellus Conrad
4042	4F-40	4.3.1.4.1	L-47	Pecten (Lyropecten) estranellus Conrad
4043	4F-41		L-1	Psiloconcha grandis (Waynesville)
4044	4F-42		L-1	Opisthoptera
4045	4F-43	4.3.1.3.2	L-1	Ambonychia
4045.1				Ambonychia
4046	4F-44	4.3.2.2.2	L-12	Astarte perplana Conrad
4047	4F-45	4.3.2.2.2	L-12	Cardita granulata (Say)
4048	4F-46	4.3.2.2.2	L-12	Canditamera protracta (Conrad)
4049	4F-47	4.3.1.4.2	L-12	Anomia aculeata Gmelin
4050	4F-48		L-12	Callocardia sobnasuta Conrad

To: Field Reps. Date: January 23, 1993

**Bill Clinton's Medical Technology**

Due to the recent change in administration, it will be necessary for all persons calling for physicians, etc., to be familiar with the following medical terms (for at least the next four years):

- Artery: the study of paintings.
- Bacteria: the back door of a cafeteria.
- Barium: what doctors do when patients die.
- Bowel: a letter like a, e, i, o or u.
- Caesarean Section: neighborhood in Rome.
- Cat Scan: searching for Chelsea's cat.
- Cauterize: made eye contact with.
- Colic: a sheep dog.
- D & C: where Washington is.
- Enema: not a friend.
- Fester: quicker.
- G. I. Series: military ball game.
- Hangnail: a coat hook.
- Mammogram: a letter to your mother.

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**1994 CONVENTION & SHOW REPORT**

As you know by reading last months Rockfinder, "The American Gemstone Collection" will be featured at our September show. At our request the Smithsonian is in the process of photographing the collection's theme piece, a seahorse shaped broach entitled "To Shining Sea". The broach consists of aquamarine from Georgia (7.02 carats), an opal from Mexico (2.77 carats), a diamond from Arkansas (0.25 carats) and two Maine tourmalines (0.45 carats each). The photograph is scheduled to be to us within 45 days.

In the interim, the show flyers are being updated, by Bob Heinek, to feature the Smithsonian exhibit.

Chuck Collins.



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