



## EARTH SCIENCES

THE ROCK CLUB DEDICATED TO THE SERIOUS STUDY OF GEOLOGY, MINERALOGY,  
PALEONTOLOGY

### THE TUMBLER

March 2009

#### March MEETING

NORTH EASTWOOD  
CHRISTIAN CHURCH  
9425 EAST 30TH STREET  
INDIANAPOLIS, INDIANA

#### 2009 OFFICERS

President	Ann Richardson
Vice President	Jim Yarber
Secretary	Marge Begeman
Treasurer	Gail Hall



#### 2009 CLUB MEETING DATES AND PROGRAMS

March 8	Visit to Indiana State Museum
April 12	Ron Everhart
May	TBA
June 14	TBA



Membership dues for 2009 are now due. Please give or send to Treasurer Gail Hall. Rates are:

\$20 Single	\$25 Family
\$10 Subscription (newsletter only)	



#### CLUB WEB SITE

[www.geology.iupui.edu/Outreach/500\\_Earth\\_sciences/](http://www.geology.iupui.edu/Outreach/500_Earth_sciences/)  
Please send pictures and information you would like to share on the website to Len Gritzer at [leng@indy.net](mailto:leng@indy.net)



#### PRESIDENT'S MESSAGE

It feels good to be back in the president's chair. To begin my term as president, I would like to welcome our four new members and to send everyone who has volunteered to work on a committee or to bring refreshments a great big "Thank You! As I think about those novice days when one rock looked just like another and where I am today in my knowledge of earth science I can't help think about the friends I have met and the great experiences I have had. It was possible due to my extended family of rock hound friends and the experiences we have shared. I hope by the end of this year we will continue to make new friends and grow in our knowledge of geology



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## ***MINUTES OF THE MEETING***

**February 7, 2009**

Vice President James Yarber opened the meeting by welcoming the 1 guest and 17 club members in attendance. Vice President then introduced our speaker, Dr. Gary Rosenberg, Associated Professor of the Dept. of Earth Sciences at IUPUI. Dr. Rosenberg then presented a slide program on the "Renaissance and Baroque Art and Origin of Modern Geological Thought". Dr. Rosenberg has had an interest in Baroque art and how it helped evolve geological thought. His slides included artwork of Nicolaus Copernicus and Leonardo Davinci. The presentation certainly added a new perspective on how artists evolved in their artwork from a style of point centered perspective to a more modern sprawling landscape.

**TREASURER REPORT:** The balance for the club stands at \$10,664.13

**MONTHLY GIVE-AWAY:** Cassie Kremer was the winner of the Give-Away and chose an Arsenopyrite from Hunan Province in China.

### **OLD BUSINESS:**

**MWF Stamp Project:** Ann is collecting commorative stamps. Bring them to the meeting ASAP.

**CORRESPONDENCE:** Sheila Riley, Indianapolis Children's Musuem Director of Collections sent the club a Thank You. Dallas Evans, Indianapolis Children's Museum sent a thank you note.

**Paleontological Sign Up Sheet:** Refer to Dee Slater for more information.

**FIELD TRIPS:** James Yarber went geode collecting at Bryan's Creek located south of Martinsville. The geodes appear to be solid but he has not investigated that possibility yet. More information is forthcoming.

\*In addition to the State Fairgrounds for the Richmond Mineral Show. Club members can also swing by the Joseph Moore Museum at Earlham College on US40 in Richmond. The admission is FREE! Adjacent to the museum is Dennis Hall, which is the Science Hall at Earlham. On the third floor, the geology department has three mineral display cases and several posters about the geology program and student research. If you have extra time stop by! To get to the museum turn on College Avenue toward the college, and then a right onto the "G Street Entrance". Take a right toward the admission building. Parking is free and it is a very short walk.

**Dues:** Individual Dues are \$20.00. Subscriber Dues are \$10.00. **DEADLINE FOR PAYING DUES IS MARCH 21**

**NEW BUSINESS:** Dr. Nelson Shaffer, Section Head Coal and Industrial Minerals at the Indiana Geological Survey, Bloomington, informed us of the up and coming tour of Indiana's limestone regions, sponsored by the Friends of Mineralogy Club in June. Dr. Shaffer will conduct a geode field trip as part of the activities. Two new books are now available at the Geological Survey: Natural Heritage of Indiana published by the Academy of Science and Early History of Indiana Limestone by Ron Bell. The Indiana State Museum will be setting up a display at the main show in the Convention Center in Tucson, Arizona, February 12-15, featuring Mineral Oddities. They are looking for specimens to take with them. If interested in entering specimens, contact Peggy Fisherkeller at the Indiana State Museum. Len Gritzer

has purchased a projector for power point presentations. It will be available for club use. Jamison Brizendine has volunteered to be the editor of the newsletter through May at least.

## COMMITTEE REPORTS:

PROGRAM: We will be having our next meeting March 8 at the Indiana State Musuem

FIELD TRIPS: The March 8 meeting will include a field trip behind the scenes of the Indiana State Museum. Dora Folz has volunteered to contact various quarries for possible field trips.

SHOW COMMITTEE: The next show will be the Richmond Show March 6-8, 2009 at the Richmond Fairgrounds.

PUBLICITY: No report.

MIDWEST FEDERATION: No report

LIBRARY: No report.

WEBSITE: Len Gritzer asked members to submit material for the website to him.

MICROMOUNTERS: No date was available at this time.

TREASURES OF THE EARTH SHOW: March 27-29 at the Indiana State Fairgrounds. We need volunteers to work all three days. The Cricket Creek Plays band will be entertaining us on Saturday, March 28, 1:00-4:00.

NEXT MEETING: February 8, 2009.



## LITTLE KNOWN FACTS Submitted by Ann Richardson

Welcome back to the Little Known Facts column about our club members. This month we are featuring club member **James Yarber**. Did you know that James is a collector of life experiences? He began his collection in the late 1950's as a stock boy at the Stansi Scientific Co. (in 1959 it became the Fishers Scientific Co.) in Chicago. James continued his stock boy experiences at the Goldsmith Brothers Co. in the Wall Street District of New York City. In 1962-63 he moved to Custer, South Dakota, where he led cave tours and explored caves at Jewel Caved National Monument during the summer. He says he "got lost only once." He also worked at McCormick's Creek State Park in Spencer, Indiana, leading cave tours, giving astronomy talks, leading square dancing events, hay rides, watermelon fests, church services, song fests (his favorite song was "Do your Ears Hang Low?") and snake talks. In his spare time James worked in his father's old fashion drug store in Salem, Indiana. In 1964 James worked as a teacher at Howe Jr. High School and Tech High School during the day and at Manuel (Indianapolis) in the evening as a biology teacher and earth sciences teacher. When not busy teaching he was training to run in marathons. He ran seven different marathons: two in North Carolina, one in Chicago, one in Dublin, Ireland, one in Louisville, and two in Terre Haute. In all, he has run over two hundred races and somehow survived running twenty-nine mini races in a row. One of his greatest accomplishments occurred during a triathlon race when he beat the "guy that dropped out."



## **COMMITTEES FOR 2009**

**REFRESHMENTS:** Dee Slater & Dee DeGraw

**PROGRAM:** James Yarber, Chair

**NEWSLETTER/EDITOR:** Jamison Brizendine

**FIELD TRIPS:** James Yarber, Chair; Dora Foltz  
(Quarries)

**LIBRARIAN:** Nora Hovee. Chair

**ARCHIVES:**

**SHOW:** Don Mahoney & James Yarber, Chairs

**Every member is expected to help with the show.**

**PUBLICITY:** Chair, Dee DeGraw  
(Committee Member)

**FUND RAISING:** Don & Nancy Mahoney, Chairs

**WEB SITE COORDINATOR:** Len Gritzer

**TREASURES OF THE EARTH:** Ann Richardson,  
Chair

**GEOFEST:** Ann Richardson, Chair

**MIDWEST FEDERATION LIASON:** Dee Slater

**MIDWEST FEDERATION DELEGATE:**

**MICRO MOUNTERS:** Ann Richardson, Chair  
James Yarber (Committee Member)

## **2009 REFRESHMENT SCHEDULE**

**FEBRUARY 8:** Maurine Marchani

**MARCH 8:** Jamison Brizendine

**APRIL 5:** Cassie & Laura Creemer

**MAY 3:** Marge & Robert Begeman

**JUNE 14:**

**July 12:**

**AUGUST 9:** Harold & Shirley Grigdesby

**SEPTEMBER 10:** \* **SHOW** (club furnishes refreshments)

**OCTOBER 11:** Cheryl Hamilton

**NOVEMBER 8:** Nora Hovee

**DECEMBER 13:** \***CHRISTMAS PITCH – IN**



500 Earth Science Members share their recipes!

## Ganky Cake

Thank you to Mr. and Mrs. Marchani for the recipe

### Melt Together:

- 1 stick butter
- 1 cup water
- 2 oz. unsweetened baking chocolate
- Dash salt

Pour over: 2 cups sugar

### Let Cool, and then add:

- 2 well-beated eggs
- 2 cups sifted all purpose flour
- ½ cup buttermilk
- 1 ½ teaspoons baking soda
- 1 teaspoon vanilla

### Bake at 350

- ~35 min. rectangular pan
- ~25 min. 9" rounds
- ~20 cupcakes



## Tiny Hidden Treasures: The Microfossils of Ohio

Rock Pickings, May 2003, Pg 4-6

These hidden treasures are not only fascinating and beautiful but also can be used to solve a wide range of geological problems. Because most microfossils require good laboratory facilities to be extracted from the rocks and specialized equipment to be studied, it is only during the past 50 years or so that micropaleontology has become an important research field and, as discussed below, a highly applicable science.

### Microfossil Extraction and Preparation (Part 1 of 3)

Microfossils are prepared using several different techniques depending on the origin and composition of the fossil and on the chemistry and hardness of the enclosing rock (matrix). Microfossil preparation basically consists of the following steps: breaking up (disaggregating) the sample, removing fine sediment through sieving, drying the residue and hand-picking under a microscope.

A general rule is that the harder the sample, the harsher the treatment. For soft and porous sediments, wet or dry sieving is generally the simplest and most efficient method and is inexpensive. If the specimens are embedded in harder rock, such as limestone, sieving will not be of much use, at least not initially. Instead, the rock must be dissolved or crushed without damaging the fossils. "Semi-hard" rock, such as shale, can be saturated with water and then put into a freezer. The formation of ice breaks up the rock. This freeze-thaw method can be repeated several times until the rock is disaggregated. Shale also can be soaked in kerosene. **(Note: kerosene is highly flammable and must be used with great care and only in a well ventilated location.)** After soaking for a few hours, the kerosene is poured off and the sample is covered with water. The water forces the kerosene out of the pores in the rock and in the process disaggregates it. Although some of the fossils may be damaged during these processes, rocks generally break at their weakest points, which are the contact between the fossils and the matrix.

Many microfossils are insoluble in acids. If they are embedded in a carbonate-rich rock such as limestone, an acid solution (commonly acetic acid) can be used to dissolve the rock without damaging the fossils. The residue of acid-resistant minerals and fossils is generally free of adhering sediment particles. When studying the sieved and dried residue for the first time under a regular reflected-light microscope, a whole new exciting world of minute fossils appears. If greater magnification is required, a scanning electron microscope (SEM) commonly is used. SEM produces beautiful and highly detailed images of the fossils.



## WE NEED YOU!

**A major component of the profitability of our Annual Show has been the donations we have received from commercial suppliers and manufacturers for door prizes and silent auction. George Wagner handled this for many years. Now, we need someone to step up and take responsibility for this solicitation. What does this entail? Before the show – sending the letters to the list of donors, receiving and recording the responses and donations, preparing silent auction bid sheets, storing the donations (they can be stored in the Club's storage locker near Washington Square), transporting them to the Show, and later, sending thank-you's to the donors.**

**You say, "But I've never done this!"**

**That's okay. We'll help you learn. It can be done in small blocks of time during the late spring and summer.**

**Please contact Don.**