



# The Rostrum

The Newsletter of the Maryland Geological Society  
Baltimore, Maryland  
Established 1991

Volume 15, Number 6

November 2006

## President's Message

As 2006 draws to a close, I want to remind everyone of the three upcoming events which were announced at the September 17, 2006, meeting of the Maryland Geological Society (MGS) and are posted on the MGS webpage (<http://www.ecphora.net/mgs/>). Details on the events below and more are provided on page 3.

**November 11, 2006:** Calvert Marine Museum's 25th Anniversary Celebration and Miocene Symposium

**November 12, 2006:** Dr. Kenneth D. Rose will speak on "The Beginning of the Age of Mammals in Wyoming" at the American Fossil Federation (AFF) monthly meeting.

**November 19, 2006:** Wayne E. Clark will speak on American Indian archaeology in the Middle Atlantic states at the MGS monthly meeting.

Your Fearless Leader (and I have the photographs of me with a giant spider to prove it), **Brady E. Hamilton**

## Dates to Remember

### Sunday, November 19<sup>th</sup> - next MGS Meeting

Meeting Time & Location: 12 Noon to 4 PM

South Bowie Community Center, 1717 Pittsfield Lane, Bowie, MD 20716

Wayne E. Clark, Chief of the Maryland Office of Museum Services, Jefferson Patterson Park and Museum, will speak on American Indian archaeology in the Middle Atlantic States.

Also at the November meeting: Officer Elections, the Annual Pizza Party, and a great opportunity to pay your 2007 MGS membership dues.

Mineral of the Meeting: Gold. Bring a few choice specimens to the meeting.

Please submit material for the next issue of The Rostrum by December 10<sup>th</sup>



*"Science, in the very act of solving problems,  
creates more of them".....Abraham Flexner*



### The Rostrum V15 (6) Index

President's Message.....	1
Dates to Remember.....	1
MGS Information.....	2
Meeting Dates & Programs.....	2
Upcoming Events.....	3
Donations & Thanks.....	4
Mineral of the Meeting: Gold	4
MGS Field Trips.....	5
Finds by MGS Members.....	5
Stone Meteorites.....	5
Sept 17 <sup>th</sup> Meeting Minutes.....	6
MGS Auction Recap.....	7
Odds & Ends.....	7
Club Items for Sale.....	7
Federation News.....	8
Upcoming Events.....	8

### MGS Officers:

President	Brady Hamilton	301-562-8956
Vice President	Eric Seifter	410-203-1064
Secretary	Gary & Cindy Lohman	301-862-1957
Treasurer	Dave Andersen	301-869-2662
Assistant Treasurer	Eric Beach	301-602-8287
Newsletter Editor	Rick Smith	410-247-3961
Contributing Editor	Phil Schmitz	
Website Editor	Daryl Serafin	301-464-1659
Website Assistant	Mel Hurd	301-630-7054
Membership Chairman	Dick Grier, Sr	410-285-5554
Program Chairman	Eric Seifter	410-203-1064
Liaison Officer	Mel Hurd	301-630-7054
Ways & Means	Dick Grier, Sr	410-285-5554
MGS Sales	Chris Hurd	410-212-1177
Field Trip Chairman	Gerald Elgert	301-681-5720
AFMS/EFMLS Rep.	Gary Lohman	301-862-1957

### Board of Directors:

Mark Bennett	443-370-1325	Mike Folmer	410-850-0193
Bob Farrar	301-464-1137	Gary White	410-551-7826
Gary Grimsley	703-642-2824		

### **Maryland Geological Society**

Founded in 1991, MGS is comprised of both amateur and professional mineral and fossil collectors. MGS emphasizes collecting, identification, study and display aspects of the geological sciences. MGS is a nonprofit organization affiliated with the American Federation of Mineralogical Societies (AFMS) and the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS).

### **Dues**

Dues are \$15.00 per individual adult member. Applications for membership may be obtained from the MGS website or by contacting Dick Grier, Sr., Membership Chairman, 8052 Kavanagh Road, Baltimore, MD 21222, (410) 285-5554. Dues are payable by January 1st of each year.

### **Meetings**

Meetings are held bimonthly, beginning in January at the South Bowie Community Center, located at 1717 Pittsfield Lane, Bowie, MD. The doors open at 12 noon and the meetings are completed by 4:00 PM. Club meetings will be held as scheduled so long as the South Bowie Community Center is open. Call 301-249-1622 after 11:00 AM to find out if the Center is open.

## **Meeting Dates & Programs for 2006**

**January 15:** General meeting - no program

**March 19:** Four Stories by Eric Seifter

**May 21:** Joint MGS & AFF Meeting

**July 16:** Radioactive Minerals

**Sept 17:** Annual Auction

**Nov 19:** Elections & Pizza Party

### **Correspondence**

Direct mail to Gary & Cindy Lohman, Secretary, 21995 Barkentine Court, Great Mills, MD 20634. Phone: (301) 862-1957.

### **The Rostrum**

Published bimonthly beginning in January. Submit material for publication electronically to john.richard.smith@us.army.mil or by mail to Rick Smith, 1253 Brewster St., Baltimore, MD 21227.

### **Website**

(<http://ecphora.net/mgs/>)  
Material for the website should be sent to Daryl Serafin at [dkjjserafin@comcast.net](mailto:dkjjserafin@comcast.net). Note: this is a new email address for Daryl as of September, 2006.

## Important Upcoming Events

Submitted by Brady Hamilton, President

Please mark these events on your calendar:

**November 11, 2006:** Calvert Marine Museum's *25th Anniversary Celebration & Miocene Symposium* (see "President's Message" in *The Rostrum*, V15 N5). Information is available at [www.calvertmarinemuseum.com/cmmfc/schedule.html](http://www.calvertmarinemuseum.com/cmmfc/schedule.html) or [www.ecphora.net/mgs/cmm\\_symposium\\_2006.htm](http://www.ecphora.net/mgs/cmm_symposium_2006.htm).

**November 12, 2006:** Dr. Kenneth D. Rose, professor at the Center for Functional Anatomy and Evolution, Johns Hopkins University School of Medicine, will speak on "The Beginning of the Age of Mammals in Wyoming" at the American Fossil Federation (AFF) monthly meeting (Tysons-Pimmit Regional Library, 7584 Leesburg Pike Falls Church, Virginia, 22043). This presentation is sponsored by the AFF and is open to the public.

**November 19, 2006:** Wayne E. Clark, Chief of the Maryland Office of Museum Services, Jefferson Patterson Park & Museum, will speak on American Indian archaeology in the Middle Atlantic States at the MGS monthly meeting. You are **STRONGLY ENCOURAGED** to bring your archeological finds (arrowheads, pottery shards, etc.) to the meeting.

In addition, I want to mention several, noteworthy events in 2007:

**January 27 - February 10, 2007:** The Arizona Mineral and Fossil Show, Tucson, Arizona.

**March, 2007:** The public opening of the Gray Fossil Site Visitor's Interpretive Center, Gray, Tennessee. Information is available at <http://www.etsu.edu/grayfossilite/>.

**March-May, 2007:** Spring season at the PCS Lee Creek Phosphate Mine and the opportunity of better Yorktown deposits.

**May 3-6, 2007:** Second Mosasaur Meeting (International), Fort Hays State University, Sternberg Museum of Natural History, Hays, Kansas. Information is available at <http://www.oceansofkansas.com/2ndMosaMtg.html>.

**Spring-Summer, 2007:** A possible fieldtrip to Sharktooth Hill, California. Information is available at [http://www.sharktoothhill.com/sharktooth\\_hill\\_dig.html](http://www.sharktoothhill.com/sharktooth_hill_dig.html).

I look forward to seeing you at these events.

## 2007 MGS Membership Dues

It's time to think about renewing your MGS membership dues for next year. Dues are \$15.00 per individual adult member. Dues can be paid at the November meeting or payment can be sent to Dick Grier, Sr., Membership Chairman, 8052 Kavanagh Road, Baltimore, MD 21222, (410) 285-5554. Dues are payable by January 1st of each year.

## November Meeting - Elections & Pizza!

Officer elections and the annual pizza party will be held at the November meeting.

## Donations & Thanks

Submitted by Dick Grier, Sr., Ways & Means Chairman

MGS would like to thank the following members for their donations to the silent auctions and raffles:

**Bob Asreen Jr.** for the following specimens to the regular auction on 9/17/06 which netted \$85.50 to MGS:

1. 3 *Baculite* segments from the Pierre Shale South Dakota,
2. Calcite in *Mercenaria* from Lake Okeechobee, Fla.,
3. 2 mosasaur vertebrae from North Sulphur River, Texas.
4. A large agatized coral from Fla.
5. A large fern fossil from St. Clair, Pa.
6. Petrified wood from Odessa, Del.
7. A book: *Conodonta* by Walter C. Sweed

## Mineral of the Meeting: Gold

submitted by Bob Farrar

The mineral theme for the September meeting of the MGS was pyrite, also known as fool's gold. For the next meeting, we will cover the "opposite", genuine gold, or, more properly, native gold. Through the centuries, gold, and the quest for it, has had a greater influence on history than just about any other mineral. It has always been popular with collectors as well as treasure hunters, and continues to be so today.

"Native gold" refers to material that is essentially pure gold. However, many specimens contain varying percentages of other metals, including silver, copper, mercury, and platinum. Gold with 20 to 50% silver is known as electrum. Gold is readily distinguished by its color, its low hardness (2.5 - 3.0), and its high specific gravity (19.3), and its malleability. While the color of gold is similar to that of pyrite, gold is almost four times as heavy. Gold will flatten when pressed or struck, while pyrite will shatter. Gold crystalizes in the cubic system, though recognizable crystals are rare. Most commonly, gold crystals will be octahedral. It also occurs as wires, flakes, and nuggets. Gold is almost inert chemically, which allows it to survive weathering which might destroy other minerals. As a result, gold persists in the environment long after being weathered out of its host rock. Recognizable gold specimens most commonly occur in quartz veins, and in alluvial, or placer, deposits derived from these formations. Trace amounts of gold can also occur in deposits of sulfides such as pyrite.

Unlike some other minerals, the value of gold requires no further explanation. Gold has been mined in many places around the world, and there are many localities known for fine collectable specimens, including Brazil, South Africa, and New Guinea. In North America, localities in California, Alaska, Colorado, and Nevada are particularly noteworthy. Perhaps of more interest to collectors in this part of the country is the Eastern Gold Belt, which runs in the Piedmont region roughly from Georgia to Maryland. While minor in comparison to some other localities, the Eastern Belt has produced some spectacular discoveries. For example, in 1799, a kid in North Carolina found a pretty rock that turned out to be a 16 pound gold nugget. Gold is also found in Maryland. After the Civil War, there were several mines in Montgomery Co. And, it's still there; gold can still be panned from streams in the Potomac area. Don't go there expecting to strike it rich, but with a little effort one can add Maryland gold to his or her collection.

*Editor's note: The American Museum of Natural History in New York City has a new exhibit on gold that will open later this month. More information can be found at [http://www.amnh.org/exhibitions/gold/?src=h\\_h](http://www.amnh.org/exhibitions/gold/?src=h_h). The following excerpt is taken from the website: "Gold, a spectacular exhibition that will explore the historical fascination with this enduring icon of wealth, beauty, and power, opens November 18, 2006 at the American Museum of Natural History. This exhibition will continue a series the Museum has developed on precious and semi-precious materials such as Amber: Window to the Past, The Nature of Diamonds, and Pearls."*

## **MGS Field Trips**

**submitted by Gerald Elgert, Field Trip Chairman**

Please note that the position of field trip chairman has been passed from Mark Bennett to Gerald Elgert.

He can be contacted via email at [isaiah.423@juno.com](mailto:isaiah.423@juno.com) or by telephone at 301-370-1325.

The Maryland Geological Society is an advocate of responsible collecting. The society has permission to collect in all of the sites listed below that require such permission. Some sites allow only organizations to attend, while at others individuals are welcome to go on their own. Most trips are weather dependent and some require at least an average level of physical fitness. Check each individual listing.

*Please check the MGS web site at <http://ecphora.net/mgs/> to get the latest field trip updates*

**Saturday, December 9<sup>th</sup>:** Field trip to the C&D Canal. MGS members John and Joan Wolf live just a few miles from the canal and John makes regular visits there. They will lead us to some of the lesser know localities including one where fossil cypress wood is to be found. Those interested can contact me for further details.

## **Finds by MGS Members**

**submitted by Phil Schmitz, Contributing Editor**

This section is open to all MGS members. If you would like the fossils that you have found listed in The Rostrum, please e-mail [Paschmitz@hotmail.com](mailto:Paschmitz@hotmail.com) or send a postcard briefly identifying the specimen(s) to: **Phil Schmitz**, 2708 Gibbons Avenue, Baltimore, MD 21214-2128.

Phil was unable to attend the September 17, 2006 meeting, consequently there is not a Finds Report in this issue of The Rostrum.

## **Part Four: The Stone Meteorites**

**Submitted by Phil Schmitz**

The stone meteorites make up the majority of all meteorites, clearly 93% fall into this category. There are two main sub classifications. Chondrites make up 85% of the stone meteorites and achondrites make up the balance of 8%. Chondrites are from undifferentiated parent bodies (The minerals in these meteorites have not separated, the iron and stone are mixed together). Chondrites contain chondrules, small spherical shaped inclusions (Note there are some isolated exceptions to this rule) that average about a third of an inch across. Almost all chondrules formed at the beginning of the solar system, some 4.5 billions years ago. No one knows for sure how chondrules formed, but they are mostly made up of olivines and pyroxenes.

There is a scale called the petrologic scale that helps in determining the condition of the chondrules within the various stony meteorites. A petrologic type 3 shows well defined and plentiful chondrules while a petrologic type 6 shows less defined to almost non

existent chondrules, intermediate types 4 and 5 show sparse chondrules. The type 3 chondrules show little if any alteration of the nature of the chondrule. Another words, the original structure or formation of the chondrule is virtually unchanged. Petrologic type 3 chondrules are less common. Petrologic type 1 and 2 only appear in carbonaceous chondrites, both types are due to aqueous alteration.

The "H" chondrites contain up to about 27% iron. The "H" stands for high iron content. They contain between 15-19 percent free metal. These are easily attracted to a magnet. These meteorites show quire a bit of metal flake mixed in the stony matrix. After the iron is accounted for, the remainder of the meteorite is about a 50-50 mix of olivine and pyroxene.

The "L" chondrites contain up to about 23% iron. The "L" stands for low iron content. They contain only about 4-10 percent free metal. They do not attract a

magnet as well as the H chondrites. They show a lot less metal flake than the H chondrites. These are the most common of the stone meteorites.

The "LL" chondrites contain up to about 20% iron. The "LL" stands for very low iron content, only about 3 percent free metal. These are the rarest of the three types of ordinary chondrites, H, L and LL.

The "E" or enstatite chondrites are rather rare, only about two dozen are known. These meteorites must have formed in an oxygen depleted environment, possibly inside the orbit of the closest planet, Mercury, to the Sun. The reason for this is that most of their iron occurs either as metal in combination with sulfur, forming the iron-sulfide mineral troilite. Their pyroxene contains no iron, only magnesium. This is called enstatite (hence the classification E). The petrologic scale is the same scale used in the three ordinary chondrites (H, L & LL).

The "R" chondrites are brecciated with light clasts embedded in a dark matrix. These are the rarest of ALL types of chondrites. They do not attract magnets very well as iron nickel metal is almost non-existent in them. They get their designation from

Rumuruti, Kenya, where a shower of stones, of this type, fell in 1934.

The "C" or carbonaceous chondrites apparently formed in an oxygen rich environment according to some studies. One important characteristic of these chondrites is the presence of water bearing minerals. The hydrated minerals make these chondrites very fragile, they break rather easily.

The achondrites come from the surfaces of the parent body, these are differentiated meteorites. Differentiation is the process in which the heavier metals sink to the center and lighter minerals rise to the surface of the parent body, hence the parent bodies differentiated into mineral zones (Only the chondrites are not differentiated meteorites). Here we find the Lunar and Martian meteorites, as well as the diogenites whose spectra closely match the asteroid Vesta. Achondrites show evidence that igneous processes took place throughout the parent body, melting all the chondrules. The achondrites are pieces of planetary bodies similar to the Earth. Achondrites are rather rare, and the ones from the Moon and Mars are substantially younger than the chondrites from the asteroid belt.

*Next article in this series - some famous carbonaceous chondrites.*

## **Minutes of the September 17<sup>th</sup> Meeting**

**Submitted by Gary Lohman, Secretary**

The September meeting of the MGS was called to order by Vice President Eric Seifter at 1254. Eric had two opening announcements. (1) Lee Creek has been severely limited in numbers of people allowed in this fall - 20 per Saturday or 200 total for the season - so that it will only be open to "Friends of the Aurora Museum." As such, there are no MGS trips to Lee Creek this season. (2) There are two noteworthy speaker events coming up. On 19 November, Dr. Wayne Clark will be speaking about Indian artifacts at the November MGS meeting, which is also the annual pizza party. Then on 20 November, Dr. Kenneth Rose will be speaking at the AFF meeting - all are welcome.

Articles for the next Rostrum are due by 10 October. Dick Grier Sr. reported that membership is currently at 175. The membership breakout is: 128 adults, 47 juniors, 1 honorary, 7 life and 3 new members. Mr. Grier also pointed out that many juniors may have been juniors for many years now and asked all to make sure that their "juniors" are still really juniors.

*The Rostrum 15 (6) November 2006*

Under new business, all were reminded of the upcoming Calvert Marine Museum's 25th Anniversary Celebration and Calvert Cliffs Symposium. The museum has assembled an impressive slate of speakers, such as Buck Ward, on the Maryland Miocene fauna. Registration is not required to hear the speakers, but registered attendees will receive lunch and the published proceedings. Registration is \$30 per person, or \$20 for CMM members, or \$15 for students. Our own Eric Seifter is presenting a poster at the symposium.

The general meeting was closed at 1335 with a reminder that the November meeting was both the annual pizza party and the election of next year's officers.

Following the general meeting, the annual auction was held featuring material from the club and several members. The auction started a bit slow with some attempts at 25-cent increments, until Dick Grier reminded all of the 50-cent minimum. Once it picked

up, the bidding got fierce for great fossil and mineral items. In fact, two young boys pushed the bids for one carved lizard to over \$30! Probably the best

quote overheard was "...I could buy a lot more, but they would have to be centerpieces at my daughter's upcoming wedding!"

## **MGS Auction Recap**

**Submitted by Dick Grier, Sr., Ways & Means Chairman**

### ANNUAL REGULAR AUCTION 9/17/2006:

Once again the regular auction was a huge success for MGS as well as for our members who entered specimens to be auctioned. The MGS netted \$412.10 from specimens of the MGS and the donations from **Bob Asreen Jr.** The members who brought specimens to be auctioned also did very well and almost all of them were sold. Their payments at the end of the auction which were by check which we gladly accepted, but we did not have sufficient cash money received in the auction so that three members had to be issued checks mailed to them. The bidding at times was fierce and everyone had a great time.

If you weren't there you missed the fun! I would personally like to thank **Marc Griffin, Charlie Shyab, and Dick Grier Jr.** for assisting the auctioneer and the wrapping up of the money handling at the close of the auction. If you didn't make it this year, please come and join the fun in September 2007 when we will be having the next regular auction.

## **Odds & Ends**

**Compiled by Rick Smith - Editor**

### Correction to September, 2006 issue of The Rostrum:

Under the article titled *MGS Picnic Recap*, the name of Kathy Young's companion was stated incorrectly. Kathy attended the picnic with her husband Marc Griffin.

### Jefferson Patterson and Park and Museum:

Do you know where the largest naval battle in Maryland's history took place? Surprisingly (to me at least), it took place during the War of 1812 near this 560-acre park located on the Patuxent River in Calvert County. Archaeological surveys of the park area have revealed over 70 sites that span a period of 9,000 years of human history. The archaeology museum within the park examines human history over the entire Chesapeake Bay region and covers of period of the past 12,000 years. Information on the Park and Museum can be found at <http://www.jefpat.org/>. An interesting link under the archaeology subheading is about diagnostic artifacts in Maryland - <http://www.jefpat.org/diagnostic/index.htm>. In particular, there is a large amount of information to help identify prehistoric ceramics. (submitted by **Rick Smith**)

## **MGS Club Items for Sale**

**MGS** has decals, coffee mugs, hats and t-shirts with the club logo for sale at very reasonable prices.

See **Chris Hurd** at the next meeting!

## News from the Federations

The Annual Convention of the AFMS was recently held in Nashville, Tennessee. One of the primary activities at the convention was the Annual Editor's Contest to recognize editors of outstanding newsletters and also excellence in individual contributions. Once again The Rostrum, under the guidance of MGS Editor Bob Asreen, was recognized at the national level of competition. The Rostrum was awarded 7<sup>th</sup> place in the Small Bulletin category. Please congratulate Bob on another outstanding job at the next MGS meeting. In addition, Rick Smith received a 2<sup>nd</sup> place award in the Adult Poetry category for his poem *Astrodon johnstoni*, the Maryland State Dinosaur (V14, N3, May 2005). In a reversal of order, the regional EFMLS Editor's contest results have not yet been announced due to the fact that the EFLMS Convention will not be held until later this month.

## Upcoming Shows & Events - 2006

Extracted from the EFMLS November newsletter

**November 18-19:** Annual Gem & Mineral Show and 56<sup>th</sup> EFMLS Convention sponsored by the **Gem and Mineral Society of the Palm Beaches**, South Florida Fairgrounds, West Palm Beach, FL, EFMLS Annual Meeting on November 17.

**November 18-19:** 14<sup>th</sup> Annual Gem, Mineral & Fossil Show sponsored by the **Northern Virginia Mineral Club**, George Mason University, Student Union II, Fairfax, VA.

**November 24-26:** 27<sup>th</sup> Annual Show & Sale sponsored by the **Roanoke Valley Gem & Mineral Society**, Salem Civic Center, 1001 Boulevard, Salem, VA.

**March 03-04:** 44<sup>th</sup> Annual Earth Science Gem & Mineral Show sponsored by the **Delaware Mineralogical Society**, Delaware Technical & Community College, I-95 at Exit 4B, Churchmans Road (Rt 58), Newark, DE.

**March 10-11:** 43<sup>rd</sup> Annual Show sponsored by the **Gem, Lapidary & Mineral Society of Montgomery Co. MD**, Montgomery County Fairgrounds, 16 Chestnut St, Gaithersburg, MD.

**March 24-25:** 2007 Annual Show & Sale sponsored by the **Philadelphia Mineralogical Society** and the **Delaware Valley Paleontological Society**, Lu Lu Temple, 5140 Butler Pike, Plymouth Meeting, PA.

**March 24-25:** 29<sup>th</sup> Annual Gem, Mineral & Jewelry Show sponsored by the **Franklin Co. Rock & Mineral Club**, (note: new location), Quality Inn & Suites, Interstate 81 at Exit 14, Wayne Ave, Chambersburg, PA.



## Dates to Remember

### Sunday, November 19<sup>th</sup> - MGS Meeting

**Meeting Time & Location:**

12 Noon to 4 PM

South Bowie Community Center  
1717 Pittsfield Lane, Bowie, MD 20716  
301-249-1622

Right (west) on Mitchellville Road to Pittsfield Lane (one block)

2.7 miles south of US 50 on US 301/3

Detailed directions are available on the MGS website.

**Mineral of the Meeting: Gold.** Bring a few choice specimens to the meeting.

Wayne E. Clark, Chief of the Maryland Office of Museum Services, Jefferson Patterson Park and Museum, will speak on American Indian archaeology in the Middle Atlantic States at the November 19<sup>th</sup> meeting.

Also at the November meeting: Officer Elections, the Annual Pizza Party, and a great opportunity to pay your 2007 MGS membership dues.

---

### The Rostrum

Rick Smith, Editor  
1253 Brewster Street  
Baltimore, Maryland 21227

### First Class Mail

