

MAGS  Rockhound News

Volume 58 ◊ Number 01 ◊ January 2012 ◊ A monthly newsletter for and by the members of MAGS

# Fluorescent Minerals

Alan Schaeffer



For the January adult program, we will be discussing fluorescent minerals. Why can certain minerals fluoresce while other specimens of the same mineral will not? Why do minerals fluoresce in different colors?

In addition to seeing some amazing fluorescent specimens (many from the McPherson Collection), we will learn why minerals fluoresce. We will discuss the physics and chemistry of fluorescence.

If you have *Continued, P. 3*

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## DECEMBER 2011 HOLIDAY PARTY

The article above tells you about the upcoming program for the January meeting. Last month's "program" was the annual MAGS Holiday Party. The company was great, the food was great, the table decorations (thanks, Bonnie Cooper) were great. Everyone had a great time. Look for more pictures from the party throughout this issue.



# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ♦ A monthly newsletter for and by the members of MAGS

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## MAGS Notes

A few month ago (July 2011 issue), Charles Hill proposed initiating a once-a-year field trip to sites in locations too far to cover in a weekend. For the first trip, he suggested the North Carolina mountains. The dates are June 16 through June 24, 2012.

In August 2011 Charles gave more detail, in an article about the Sheffield Mine. This is a ruby and sapphire mine that was once owned by Tiffany's. We're talking star sapphires and rubies.

For more information, MAGSters can contact Charles Hill directly. His email address is [hunter3006@aol.com](mailto:hunter3006@aol.com), and his phone number (between 7:00 P. M. and 9:00 P. M.) is (901) 626-4232.

## Show Committee Meeting Dates

1/9/12

2/6/12

3/5/12

4/9/12

All are in the Agricenter board room at 6:30 pm.

*The deadline for submissions to the February MAGS Rockhound News is January 15, 2012.*

## Can You Identify?

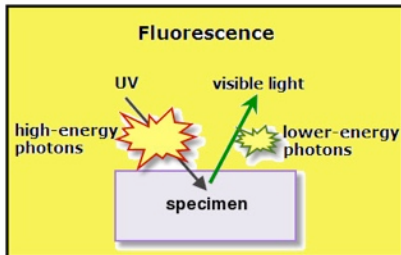
This is a test! Who can identify the mineral with the following characteristics (answer next month)?

- ❖ Color: Colorless, white, gray, brown.
- ❖ Streak: White.
- ❖ Hardness: 1.5.
- ❖ Crystal System: Hexagonal.
- ❖ Crystal Forms and Aggregates: Massive, stalactitic, stalagmitic, crusty, and in fibrous veins.
- ❖ Transparency: Transparent to translucent.
- ❖ Specific Gravity: 0.9
- ❖ Luster: Vitreous.
- ❖ Cleavage: None.
- ❖ Fracture: Conchoidal to uneven.
- ❖ Tenacity: Brittle.

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*Continued from P. 1* some fluorescent minerals or think something may fluoresce, please bring them for us all to see. The display prizes will be fluorescent aragonite specimens from Mexico.



## Countdown To Show

**118** days and counting (as of January 1, 2012). The 2012 Memphis Mineral, Fossil, and Jewelry Show will take place April 28 and 29 at the Agricenter International.



## The Earth Wide Open

*Presents*

Several field trips in one day

Saturday, January 14 ("bad" weather day, Saturday, February 18)

10:00 am

Show's Storage Facility

Cooper Moving and Storage

5161 Wilfong Rd (near Covington Pike and Raleigh-Lagrange)

Free Food

## Juniors Corner

*Carol Lybanon*

Hi, Juniors,

Hope you had a great holiday. I did. I spent time with my daughter in Florida. The weather was great. We hunted for shark teeth, fossilized coral, and shells.

I am looking forward to our January meeting. Sherri Baldwin is going to show us how to clean fossils. We will also have the opportunity to try our hand at fossil cleaning.

In February the University of Memphis Egyptology Graduate Student Association is presenting a program for us. In March we will have Show activities and in April Mike Baldwin will teach us Indian drum language.

See you soon,

*Carol*



## Help sort and inventory several collections for:

- Gem dig
- Grab bags(will not pack grab bags)
- Rocks Around the Clock
- Geode Bowling
- Auctions
- Education program
- Display
- Door prizes

*Some material may be available for sale that day*



**2012 Show Grand Prize (half shown)**

## “Jurassic Pick”: The American Pickers pick a winner!

by

George Phillips, Paleontology Curator, Museum of Natural Science, Jackson, Mississippi



Ever pick a bone with someone? In 2011, a now famous TV dynamic duo ‘picked a bone’ for the Mississippi Museum of Natural Science in Jackson, Mississippi. On November 28th, a very popular reality television series revealed a noteworthy discovery about Mississippi’s ancient past. Most readers of this newsletter are pretty savvy and know that dinosaurs once lived in Mississippi and Tennessee (during the Cretaceous Period), but now so do millions of *American Pickers*™ viewers!

Season 4 of *American Pickers* began with dynamic hosts Mike Wolfe and Frank Fritz picking a couple of collectibles shops in Henderson, Tennessee. Who knew that within one of the shops, among the recently historic bric-a-brac, the *Pickers* team would unearth an important prehistoric fossil from Missis-

sippi? The bone in question consists of most of the tibia, or shin bone, of an ornithopod dinosaur, most likely a hadrosaur, or duck-billed dinosaur. The owner of the shop from where the bone was ‘picked’ had purchased the bone at the First Monday Trade Day in Ripley, Mississippi. Recognizing its ancient appearance and heavy, mineralized condition, the shop owner, Bobby Howell of Henderson, learned from the original seller only that the bone was found in “north Mississippi.” The bone lay ‘reburied’ among many of Mr. Howell’s sundry (and considerably more recent) collectibles for ten long years, that is, until the *American Pickers* arrived on the scene in June of last year.

After purchasing the dinosaur bone from Mr. Howell, the *Pickers* called me at the Mississippi Museum of Natural Science for an opinion about a more precise identity and age for the fossil. Toward the end of the televised consultation, I urged Mike and Frank to repatriate the bone to Mississippi by donating it to our

state natural science museum, which they and their parent company Cineflix Corporation did very gladly. Unfortunately, however, as is so often the case with merchandised collectibles, the exact origins of the bone still remained a mystery, so the fossil was of limited scientific value...for the time being anyway. Both the *Pickers* crew and I were hopeful that the collector(s) would see the show and come forward with more specific information on the fossil’s provenance...which occurred within 24 hours of the original broadcast! We now know that the bone was found near Baldwin, Mississippi, in an approximately 82 million year old marine deposit called the Coffee Sand. It was collected by Eldon Boman and Karan Riffle, who now reside in Alabama, and they were very excited to have learned about the ultimate fate of the bone, which is slated for display at the Museum of Natural Science by January. Having hoped the mystery of its origins might possibly be solved in the wake of a national broadcast, I was comfortably reassured of my original appraisal of the fossil, which was a bit out of the ordinary for a *Pickers* episode—that such a discovery is absolutely “priceless.”

Many thanks to the wonderful folks of *American Pickers*!

**Editor’s Note:** MAGSters can see the relevant segment of the History Channel show on YouTube at [www.youtube.com/watch?v=mUJN19rZuUw](http://www.youtube.com/watch?v=mUJN19rZuUw).



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# PARTYTIME!



## HELLO MAGSTERS !!!

**IT'S ALREADY THE NEW YEAR,  
SO, IT'S TIME FOR YOUR DUES, DEAR !  
SO TO MAKE EVERYTHING PERFECTLY CLEAR,  
AND SO WE WON'T HAVE TO RATTLE OUR SPEAR,  
PLEASE SEND MONEY, AND SKIP ALL THE FEAR  
OF MISSING THE FUN, AND THE TRIPS  
AND THE CHEER !**

**Individual dues are \$20.00, Family dues are \$25.00.  
You can mail dues to MAGS, 3982 Glendale Dr.,  
Memphis, TN 38128, or bring them to our monthly  
meeting.**

**THANKKEW VURRY MUCH !!!**

*Your Membership Director*

### **Chucalissa This Month**

*Robert Connolly*

Join us for our first Volunteer Day of 2012 on Saturday, January 14th from 9:00 A. M. to 1:00 P. M. at the C. H. Nash Museum at Chucalissa. We will continue the inventory of all of the artifacts curated in our repository. Weather permitting we will also continue landscaping in our medicinal plant sanctuary. Are you handy with a paint brush? Well, we have some of that work too! Contact Robert Connolly, Museum Director, for more information at

[rcnnolly@memphis.edu](mailto:rcnnolly@memphis.edu) or (901) 785-3160.

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### **Collecting Opportunity**

**Editor's Note:** Thanks to Charles Hill for passing along this tip.

The Standard Mineral Company (Standard Mineral, R.T. Vanderbilt Company, Glendon, NC) offers two trips per year to visit their active pyropequartz quarry to collect large pyrite cubes, fluorite, etc. This site is only open to mineral collecting organizations that

can provide liability insurance for their members.

The digs are limited to the first 120 people who sign up. For information on a trip for 2012, check the MAGMA website at [www.wncrocks.com](http://www.wncrocks.com) at the "M.A.G.M.A." link for information as it is available.



## Borax Crystal Decorations

Everybody at the MAGS Holiday Party enjoyed the outstanding table decorations (see picture on P. 1, bottom center) that were provided by Bonnie Cooper. What could be more appropriate than decorations made out of crystals? And they were beautiful!

The decorations consisted of borax (sodium borate or sodium tetraborate decahydrate) crystals grown on frameworks made of pipe cleaners. Here is a brief description of how to make them:

Twist three 5-inch pieces of pipe cleaner together to form a snowflake, then add a 1 1/2-inch piece to each point. Tie the flake with string to a pencil. Find a big enough jar so the suspended flake won't touch the sides. Fill with 3 tablespoons borax and 1 drop blue food coloring per 1 cup of boiling water. Hang the snowflake in the jar. Let sit overnight; remove.



MAGSters can find more detailed instructions at [www.marthastewart.com/print/297092](http://www.marthastewart.com/print/297092). Another useful website is [www.instructables.com/id/How-to](http://www.instructables.com/id/How-to)

[-make-Borax-crystal-decorations-to-impress-a/](#), and a Google search will turn up others.

Looks pretty simple, but anyone who has tried growing crystals knows that some unexpected problems may pop up. Here are some tips from Bonnie on what she actually did.

1. The size of your snowflake (or other design) is only limited by the size of your container since the snowflake can't touch the sides or bottom of the container.
2. If using a larger container you can use a chopstick, bamboo skewer or dowel to lay across the top of container to suspend your ornament from.
3. If possible use a glass container that will fit into your microwave. This will make it easier to reheat your water & "melt away" any crystals that have grown on the inside of the container.
4. For the "ornament hanger" instead of the wire that was suggested in the directions I used "Christmas ornament hangers".
5. When making your pipe cleaner snowflake you can twist them as the directions call for, however, I preferred to hot glue all my pieces together. If you do use your hot glue gun go light on how much glue you use. I don't know if everyone saw the borax creations that the youth group did but all of them were just twisted together.
6. The borax solution can be reused over and over. Each time you'll have to heat your water and dissolve the borax crystals. You will also need to add additional water and borax as needed.

7. The crystals grow due to evaporation so the time needed to grow crystals can vary. On your original batch it will probably take as many hours as the directions mention but on later batches where you've added additional water and/or borax the time could vary. What I usually do is start checking the snowflake after 2-3 hours. Don't remove the snowflake when checking its progress because you could stir up the solution. Just observe the progress by viewing thru the side of the container.

8. The directions didn't mention where to get the borax but you can find "20 Mule Team Borax" in the laundry area at most stores. It's considered a laundry booster so you'll find it usually with the bleach alternatives. I've compared prices at Walmart, Kroger's and the commissary at the Navy base. The base was the best price but the next best price was Walmart (around \$3.00 a box).

9. If you have any problems feel free to contact me. The snowflakes were time-consuming but a lot of fun to make and grow.

**Editor's note:** You can reach Bonnie at (901) 377-0900 or [rocks4us@hotmail.com](mailto:rocks4us@hotmail.com). Not only are the decorations beautiful, but they have a practical value. Borax can be used as a slow-acting insecticide. MAGSters should be aware that it takes large quantities of borax to be poisonous, but it's a good idea to keep it away from small children.

**It's dues time again.  
See P. 6 for details.**

# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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## October 2011 Board Minutes

Marc Mueller

The MAGS Board of Directors met October 6 at the St. Clare Room in St. Francis Hospital, 5959 Park Avenue. The meeting was called to order at 6:30 P. M. Present were: Doris Johnston, Carol and Matthew Lybanon, Alan Schaeffer, Marc Mueller, Ron Brister, Neville Mayfield, Bob and Bonnie Cooper, Mike Baldwin, W. C. McDaniel, and Nannett McDougal.

Ron Brister: see new business.

Secretary: September minutes were approved as corrected.

Treasurer: The show money went into the club fund. Rent of Shady Grove, \$985; Chucalissa Grant of \$1000 paid.

Field Trips: Turkey Creek was enjoyable; about a dozen people attended. Dixie Mineral Council field trip on October 15 will include a cookout and rock swap. Wells Creek November 19.

The DMC trip will be at the Memphis Stone and Gravel Coldwater, MS, gravel pit. A lunch will be supplied. MAGS will cover drinks and cups, etc.

Adult Programs: Relayed for Paul Sides by Matthew Lybanon: For October, Dr. Rick Major will present "Modern Carbonate Sediments". For November, Dr. Gary Patterson, University of Memphis, "Fossils and Earthquakes in the Mid-South". For February, Dr. Susan Kus from Rhodes College will talk on Madagascar. Paul is looking for info on Richard A. Batey. He was the Millard Professor of Religious Studies at Rhodes College. He is

the author of *Jesus and the Forgotten City*.

Junior Programs. In October, Dr. Connolly will give a program on stone tools. In November, Bob Cooper is presenting Fluorescent Minerals and Bonnie will do something on holiday decorations. December is the holiday party. January may be a library program. In February, University of Memphis graduate students will present Egyptology. In March, Mike Baldwin will conduct the Indian drums workshop again. Please collect coffee cans for drum construction.

Membership: Please send Neville any saved files with MAGS letterhead and artwork. He needs to reload his hard drive.

Webmaster: Coon Creek and Devonian Fossil articles have been linked.

Historian/Rock Swap: Big Scoop Fundraiser; MAGS was very popular. Lines formed for Rocks Around the Clock. 42 applications given out. All cards distributed.

Lou's Rock Swap has been switched to Nov 13, 2-6.

Newsletter: Matthew Lybanon said the September newsletter is out. Deadline is October 15 for the November newsletter. Please send any schedules.

Rock Show: September 26, first meeting. Next Meeting, October 17. 27 contracts sent out. Two returned so far. November: start firming up plans.

New Business: Van Cleef collection included 20 boxes of books. Some will be donated and some will be sold to raise money

for the collection. Some 20 boxes of specimens were included. For the youth programs there are fish and trilobites that need preparation. Cabinets and drawer units will be for sale to the club. Ron Brister is working on Chucalissa a couple of days a week. A MAG poster would be useful.

Memphis Rocks on Friday, October 14, 10-12, at Memphis Botanic Garden. Last year, the club made about \$500 off of sales and share of tickets. Lou, Neville, Nannett, Bob, and W. C. are signed up.

## November 2011 Board Minutes

Marc Mueller

The MAGS Board of Directors met November 3 at the St. Clare Room in St. Francis Hospital, 5959 Park Avenue. The meeting was called to order at 6:30 P. M. Present were: Lou White, Doris Jones, Carol and Matthew Lybanon, Alan Schaeffer, Marc Mueller, Ron Brister, Neville Mayfield, Bob and Bonnie Cooper, Paul Sides, Charles Hill, W. C. McDaniel and Nannett McDougal.

Ron Brister: Some of the Van Cleef books can be sold, maybe at a club meeting. Chucalissa has room for one of our posters. Extensive discussion took place regarding what a MAGS poster should be.

Secretary: October minutes were approved as corrected.

Treasurer: Report presented and accepted.

Field Trips: Wells Creek meteor impact site trip will take place on *Continued, P. 9*



*Continued from P. 8*

November 19.

**Adult Programs:** For November, Dr. Gary Patterson, University of Memphis, "Fossils and Earthquakes in the Mid-South". Alan Schaeffer will present Fluorescent Minerals in January 2012. For February, Dr. Susan Kus from Rhodes College will talk on Madagascar. March Program is still open. In May, Dr. Mike Gibson will do something about Colorado.

**Junior Programs:** In November, Bob Cooper is presenting Fluorescent Minerals and Bonnie will do something on holiday decorations. December is the holiday party. January, Sherry Baldwin will do fossil cleaning. In February, University of Memphis graduate students will present Egyptology. March, Mike Baldwin will conduct the Indian drums workshop again. Please collect coffee cans for drum construction.

**Membership:** No new memberships.

**Webmaster:** Coon Creek and Devonian Fossil articles have been linked.

**Historian/Rock Swap:** Big Scoop Fundraiser; MAGS was very popular. Lines formed for Rocks Around the Clock. 42 applications given out. All cards distributed.

Lou's Rock Swap has been switched to November 13, 2-6.

**Newsletter:** Matthew Lybanon: October newsletter is out. Deadline November 15 for December newsletter. Please send any schedules.

**Rock Show:** Matthew Lybanon was approved to be the treasurer of the Show. 7 dealer contracts have been submitted. A lapidary supply company has given verbal agreement to attend. Next meeting is Monday, November 14.

**New Business:** Paul Sides met a regulatory compliance representative for Frito-Lay. They donate snacks to non-profit organizations. Discuss further at show meeting.

The Lybanons noticed the Dallas Paleontological Society has its own park. Maybe MAGS could have some long range project at Nonconoh.

**Christmas Party:** MAGS will supply ham, turkey and a chicken. Paul Sides can bring a tree. We can decorate and auction off the tree. Adults bring a gift around \$10.

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## 10 New Year's Resolutions for Geologists

Adapted from [geology.about.com/od/peoplecareers/tp/newyearsres.htm](http://geology.about.com/od/peoplecareers/tp/newyearsres.htm).

### 1. See more rocks!

Seeing more rocks makes you a better geologist, whether you're an enthusiast or a professional. Look more closely at rocks, the minerals and fossils and features they contain, and don't forget the landforms where they crop out.

### 2. Make a realistic life list.

Make a list of geologic sites and destinations that you have a fair chance of completing. Better to make a list that matters by (1) having a time limit on it and (2) forc-

ing you to go a little farther than before, not hopelessly farther.

### 3. Take a field trip.

Anyone can do this. If you're attending a MAGS meeting, see what field trips are offered in the days before and afterward. If you're at home, get a field-trip guide for your region; pick one and follow the road log and locality notes on your own.

### 4. Appreciate your local resources.

Whether it's metal ore, aggregate, topsoil or geographic attractions, your area has Earth resources that contribute to your local economy and culture. Get closer to them in some way. Perhaps you can be included in a special tour. Do geology-related businesses support campaigns in your city? Seek them out and give them recognition. Are geologic resources unappreciated? Highlight them. Are they threatened? Defend them.

### 5. Beef up your field equipment.

From a specialized pry bar to a better GPS unit, there's something new that will make your activities more productive. Also, consider donating old field clothing and equipment to your car trunk. And you can never have too many magnifiers.

### 6. Get a local geologic map.

Researchers are always revising and improving the old maps, not just with new observations but with new explanations based on contemporary theories. Government agencies have extensive programs for publishing maps of bedrock, surficial deposits, soils and hazard susceptibility. And one way

*Continued, P. 10*

*Continued from P. 9* or another, let a child stare at a geologic map and help it make sense to him or her.

**7. Speak up on a geologic issue.**

Even if you don't know much about geology, you know more than most voters—and most government officials. This resolution is easy to satisfy with a letter-to-the-editor, or even a thoughtful post on a popular blog. But if you have the credentials, consider speaking to an organized group or testifying at a government hearing.

**8. Try a new journal.**

There is something for you whatever your level, starting with general-interest publications like *Scientific American*. or, for geology, *Earth* (formerly known as *Geotimes*). At the professional level, a possibility is to use the prepaid plans from GSA and AGU that let you pick a certain number of individual articles from a whole range of journals. I also think professionals should read a few popular geology books, just to know what the public is learning.

**9. Put together a hazard kit.**

Every place has some sort of hazard that involves Earth science. List all of yours, then learn what you need to get through at least three days without housing or power in good shape. Put together a survival kit. After securing yourself, work on your neighborhood, workplace and city.

**10. Share your knowledge.**

Talk about geology to nongeologists, talk about science to nonscientists, talk about your version of the landscape to people who do other outdoor activities. I have a

special request for geologists (including amateurs) that I've been making for many years: Add something of your own to the Web. For geology to assume the role it deserves, more people must learn what geologists know, what moves them and how their discipline is practiced.

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**Jewelry Bench Tips** by  
*Brad Smith*

SHARP KNIVES FOR  
CUTTING MOLDS

Cutting molds is easier and more precise with a sharp blade. A new Xacto blade is sufficient for cutting RTV molds but is usually not sharp enough for vulcanized rubber. For that it's best to use scalpel blades available from most jewelry supply companies. The #11 blade is triangle shaped, and the #12 is hawksbill shaped. I find the hawksbill is particularly nice for cutting the registration keys of the mold.

USE YOUR THUMB

When using multiple bits in your Foredom, you often have to deal with several different shaft sizes—the usual 3/32 inch burs, the larger 1/8 inch shafts sizes and of course many different drill sizes. For some reason I really dislike having to turn the key multiple times to open or close the jaws of the handpiece chuck.

There's nothing you can do to avoid multiple key turns when opening up the jaws, but there's a neat trick to close the jaws around a smaller shaft. Hold the new bit in the center of the open chuck jaws, put your thumb lightly onto

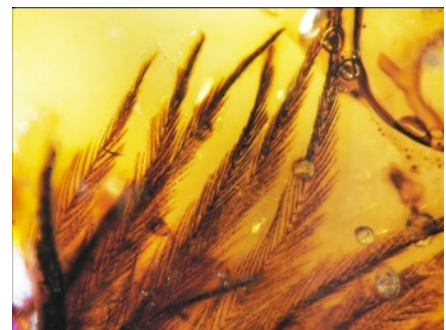
the outer toothed collar of the chuck, and gently start up the Foredom. As the chuck turns, it will naturally tighten the jaws around the shaft of the bit. Then all you have to do is a final tightening with the key.



More BenchTips by Brad Smith are at [groups.yahoo.com/group/BenchTips/](http://groups.yahoo.com/group/BenchTips/) or [facebook.com/BenchTips](http://facebook.com/BenchTips).

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**Dinosaur Feathers  
In Canadian Amber**



The feathers in this picture date to the end of the Cretaceous, about 85 to 70 million years ago. At that time, the forerunners of birds were well on their way to taking wing; dinosaurs like *Epidexipteryx* and *Limosaurus*, discovered in China in the last decade and dating to some 160 million years ago, possess relatively bird-like bone structures and hints of what might have been feathers.

Those hints *Continued, P. 12*

## MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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### Dixie Mineral Council Field Trips **The Southeast Federation of Mineralogical Societies, Inc**

DMC Program of the SFMS Field Trip  
Committee - Copyright © All rights reserved.



### **DMC Program of the SFMS Field Trip Committee**

An Official Field Trip of The Treasure Coast Rock & Gem Society (Vero Beach, FL) (HOST)

An Official Field Trip of the Memphis Archaeological and Geological Society

**9:00 AM, Saturday, January 7, 2012**

**Fort Drum Crystal Mine/Ruck's Pit**

**Fort Drum, Okeechobee County, FL**

**FEE AREA**

**FEE AREA: \$20 per adult**

**Children under 12—half price**

**Pets: allowed on leash**

**COLLECTING:** Honey colored calcite in fossil clam and whelk shells found in the Nashua and Tamiami formation limestone (1.8 to 3 million years old). Also, sharks teeth and bone fragments have been found.

**BRING:** Even in January, Florida can be hot so bring a hat, sunscreen, gloves, sturdy boots, food and plenty to drink. Also buckets, newspaper for wrapping specimens, hammer, pick, chisel, rake/garden hoe and safety glasses.

**DIRECTIONS AND WHERE TO MEET:** We will meet at the mine in the covered pavilion in front of the collecting area.

From Vero Beach the trip will take you about one hour.

Ft. Drum is on Hwy 441 approximately 15 miles south of the intersection of Hwy 60 and 441 (Yeehaw Junction). Go south of the Ft. Drum General Store about 0.5 mile and turn east on 304<sup>th</sup> St. Go about 2.75 miles to the quarry entrance (north side of the road just past the dairy). Eddie and Debbie Ruck will be on site. They have opened a gift shop at the mine.

**WHERE TO STAY:** Okeechobee is the nearest town! There are also many inexpensive motels in the Kissimmee area and on I-95 south of Melbourne down to Ft. Pierce.

**Field Trip Contacts:**

**Darryl Taylor,**

POB 644044

Vero Beach, FL 32964

[rockhound531@yahoo.com](mailto:rockhound531@yahoo.com) 772-633-4423

**OR**

**Eddie Ruck**

863-634-4579

# Happy New Year!

*Continued from P. 10* have been interpreted—and given life in eye-popping artist renditions—as feathers, an interpretation that was plausible but still inconclusive. But the latest fossils, found in Alberta and described Sept. 16 in *Science*, leave little doubt. The age of dinosaurs was a feathery one.

"These lovely specimens of significantly older, smaller dinosaurs from China have got some sort of covering about them. But you can't tell if it's hair or feathers because the fossils have undergone the ravages of time," said paleontologist Alex Wolfe of the Univer-

sity of Alberta, a co-author of the new study. "Those fossils don't preserve the kind of detail that we have in amber, which doesn't fossilize but entombs an object."



Many thanks to Kim Hill for the picture on this page, plus all the other pictures of the MAGS Holiday Party in this issue.

## Calendar

### January 5, 2012

Board Meeting, St. Clare Room, St. Francis Hospital, 6:30 P.M.

### January 9, 2012

ShowTeam meeting, Agricenter International, 6:30 P.M.

### January 13, 2012

Membership Meeting, Shady Grove Presbyterian Church, 7:30 P.M.

### January 14, 2012

Volunteer Day, C. H. Nash Museum at Chucalissa, 9:00 A. M.- 1:00 P. M.

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