

# Rock Talk

## In This Issue

- June Club Meeting Program
- Triple Hobby Fun
- Bismuth
- Withlacoochee Rockhounds in News
- Bench Tips
- Taking Close-ups With an iPad
- What is it?
- Secretary's Report
- The May Club Meeting

June 2016



# Rock Talk



## June Club Meeting Program

The program for our June 9th meeting will be a continuation of the basic silvermithing workshop we had in May, plus a video about searching for jade in California. Any of the members who were part of the sil-

versmithing class at the May meeting will be included in the June class, as we will be finishing our project and trying something new as well. If you wish to join this class, see Melodye before the meeting to discuss

## Triple Hobby Fun

by Mike Stone

After several days of severe thunderstorms here in northern central Kentucky, the humidity dropped and the clouds cleared, so we took the opportunity to look for geocaches across the Ohio River in southern Indiana. I loaded our GPS receivers with the coordinates for twenty geocaches, we packed our lunches, and headed north on the motorcycle. Once we crossed the big bridge from Brandenburg, Kentucky into Mauckport, Indiana, the topography became much different. The Indiana terrain is quite rolling along the river and through the farmlands and wooded areas, but unlike Kentucky where sinkholes are very common, we didn't see a single one in Indiana. Just across the river in northern Kentucky sinkholes are very common.

One of our stops was on a steep, winding road leading from the Ohio River bottomland to a plateau several hundred feet higher in elevation. Our GPS units took us to where a geocache was hidden, at a sharp, ninety-degree turn on the steepest section of the road. I carefully pulled the bike to the left side of the narrow road and parked it almost touching the guardrail. Which, by the way, had been damaged numerous times by vehicles that obviously were unable to negotiate the tight turn. Unfortunately for us, the geocache was most likely hidden on the guardrail

and probably went tumbling down the steep bank into the deep brush during one of the collisions.

The air was cool and dry, the sunshine bright, and looking through the bright green spring leaves we could see barges loaded with coal and limestone making their way up river to the coal fired power plants near Louisville. What a perfect day and what a perfect place for lunch. Peg found her spot; a damaged section of guardrail where its top edge had been bent enough to provide a comfortable seat. I had been sitting on the motorcycle seat long enough, so I ate my sandwich across the road looking over a



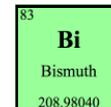
Checking out the sedimentary rock ledge.

Continued on next page.

The *Rock Talk* cover for this month is a close up of a man made bismuth crystal from Dorwin Skinner's

## Bismuth (cover photo)

by Mike Stone



Surly most rock hounds have seen odd, interesting, and colorful bismuth crystals at rock shows and rock shops. Here's a bit of information about bismuth and bismuth crystals.

Bismuth is a chemical element with symbol  $\text{Bi}$  and the atomic number 83. Bismuth is a metal and it chemically resembles arsenic and antimony. Elemental bismuth sometimes occurs naturally, although it is more commonly form as commercial ores. The free element is 86 percent as dense as lead. It is a brittle metal with a silvery white color when freshly produced, but it rapidly oxidizes in the air to a colorful pink tinge. Bismuth is the most naturally diamagnetic element (opposes magnetic fields), and does not conduct heat as well as most metals.

The metal bismuth has been known since ancient times, although until the 18th



Continued on next page

Next Meeting, Wednesday, June 9th at 7:00PM at the Weeki Wachee Senior Citizens Center

Triple Hobby Fun from previous page.

steep sedimentary cliff. Much of the rock was badly decomposed, gray colored limestone that had eroded and become soft and smooth over the years. However, there were a few narrow bands of a harder, brownish colored rock, and under close inspection I could see thousands of tiny ring shaped objects imbedded in the dark layer. These rings were crinoid fossils, so common on the Kentucky side of the river. The dark layers were harder than the rock above and below, because of the concentration of silica fossils making up these narrow, dark bands.



Close-up of a piece of the ledge showing tiny 1/16 inch di-

I broke off a couple of small chunks of the fossil-bearing rock and put them in the motorcycle saddlebag for scrutinization under our microscope, and for possible inclusion in our growing collection.

After lunch we continued up the steep, winding incline and rode along miles and miles of beautiful country road, stopping every five miles or so to look for

I DIG ROCKS!



Bismuth from previous page



Bismuth ore

century it was often confused with lead and tin, both which share some physical properties with bismuth.

Bismuth compounds account for about half the production of bismuth. They are used in cosmetics, pigments, and a few pharmaceuticals (for instance Pepto Bismol), notably bismuth subsalicylate, used to treat diarrhea. Bismuth's unusual propensity to expand upon freezing is responsible for some of its uses, such as in casting of printing type. Bismuth has unusually low toxicity for a heavy metal. As the toxicity of lead has become more apparent in recent years, there is an increasing use of bismuth alloys (presently about a third of bismuth production) as a replacement for lead (bullet projectiles and fishing sinkers).

Information from [www.Wikipedia.com](http://www.Wikipedia.com)

#### Make your own bismuth crystals.

\*NOTE: As interesting and pretty as these crystals might be, please be aware that bismuth is a metal. Melting metals will cause them to give off fumes. Avoid breathing the fumes by heating the metal outdoors in a well-ventilated area. For complete details on bismuth and its properties please read the Material Safety Data Sheet (MSDS) found here: <http://www.sciencelab.com/msds.php?msdsId=9927101>

#### Materials Needed

- Metal Bismuth: eBay sells five pounds of Bismuth for \$56.50 with free shipping.
- Two to three stainless steel cups (stainless steel is preferred, but aluminum cups can be used. A muffin



Melting bismuth in a cupcake pan. The pan has been cut apart and a pour spout has been bent into one side.



Melted bismuth showing the yellowish slag floating in the top of the liquid. The slag can be removed with a stainless steel kitchen fork.

tin was cut up and used for this example.

- Stovetop or Hotplate (propane torch optional)
- Oven mitts or leather gloves
- Eye protection
- Tongs
- Hammer

#### Producing the crystals

- Wear hand and eye protection.
- Using the hammer, break the bismuth into desired sized chunks.
- Place the stainless steel or aluminum cups on the stove top or hotplate and set the heat to medium-high. A camping stove or a propane burner on a barbecue grill can also be used. Watch for the bismuth to begin melting. Increase the heat if necessary.
- Optional: if the stove top/hotplate does not get hot

Continued on next page

# Withlacoochee Rockhounds—Rock Talk

## Withlacoochee Rockhounds in the News 32 years ago

Bismuth from pervious page

enough to melt the bismuth, a propane torch can be used.

- Wearing oven mitt(s) or leather gloves, shake the container and watch for ripples in the liquid bismuth to check and see that it has all melted.
- Once the bismuth has completely melted, use a stainless steel fork to remove the floating slag from the top of the liquid.
- Allow the bismuth to cool and begin to solidify.
- Depending on the rate of cooling, the amount of bismuth in the container, and the size of crystals desired, you will need to experiment to determine how long the cooling should take place before the remaining liquid bismuth is poured out of the container.
- Once cooled to room temperature, the bismuth

### Tuesday Workshop

at the

#### Weeki Wachee Senior Citizens' Center

Elaine Alford is giving workshops on wire wrapping (stones), chain making (jump rings) and possibly other related skill at the Weeki Wachee Senior Citizens' Center in Spring Hill. The workshops are on Tuesdays from 9:00 AM until 12:00 noon. The cost per workshop is \$2.00. To participate in the workshops, one must be a member of the *Withlacoochee Rockhounds*, which covers dues to the *Weeki Wachee Citizens Club*.

**Weeki Wachee Senior Citizens' Center.**  
3357 Susan Dr.  
Spring Hill FL 34606

### Club Website

[www.withlacoocheerockhounds.com](http://www.withlacoocheerockhounds.com)

2-Hernando

THE TAMPA TRIBUNE, Thursday, February 9, 1984

## Hernando People



Tribune photo by ROBBIE BEDE

### Polished collector

Dorothy Mortlock, president of the Withlacoochee Rockhound Club, grinds

a puddingstone during a rock-polishing demonstration at the library of the

Brooksville campus of Pasco-Hernando Community College.

**Next Meeting, Wednesday, June 9th 7:00 at the Weeki Wachee Senior Citizens Center**

## Bench Tips

by Brad Smith

### Quick Close-ups

Often when trying to get a close-up photo with your iPhone or Android, you end up with a fuzzy, out-of-focus image. Next time try using your loupe over the camera lens. It works quickly and easily.



### Little Things Can Bite

Most jewelers treat motorized equipment with caution. We've all heard stories about work pieces coming loose in the drill press or about getting long hair or clothing caught in the polishing machine. It stands to reason that a machine with a motor of a half horsepower or so is going to win out over its operator. We all know that, and I'm not going to harp on it. That's not the point of this story.

I want to talk about the smaller motor powered machines we often use, the ones with little three-inch diameter motors. For instance, these small motors are used in flex shafts and micro buffers. They're so small that many of us forget caution when using them. I'm guilty of it myself sometimes, and believe me it can get you in trouble. Here's what happened to two people I know.

One friend had a polishing bur bend in the hand piece and then whack the thumb that was holding the work piece so badly that it seemed the bone might be broken. The swelling was substantial, and it took several weeks to regain normal use. A small underpowered motor? I don't think so.

Another friend was using one of the small buffing machines, the kind you can stop when you apply too much pressure to the wheel. "Not to worry about such an underpowered beast", you say. Wrong, it literally jumped up and bit the hand that feeds it!

Buffer was set on a low table to do a quick polish, so was not mounted or clamped. A buffing pad was installed on the right spindle, no buffing pad on the left. My friend was wearing a tight-fitting, long-sleeved sweater. While buffing on the right wheel, the left tapered spindle caught a thread on the friend's left sleeve and started grabbing more and more threads and the sleeve.

Rather than pulling the arm into the machine, the light buffer quickly lifted off the table and started climbing up the underside of the friend's arm. There was no way to get a hand of the on/off switch because the unit was spinning wildly and battering my friend like a club wielded by a mad man. Only when my friend could grab the gyrating power cord and yank it from the wall did the mayhem stop.

So when you're in the shop, please think safety. Don't take even those little motors for granted.

## Taking Close-ups With an iPad

I was particularly interested in Brad Smith's June Bench Tip about taking close-up photos with a phone or android device, because I have an iPad and find it very quick and easy to take photos and then send them via iMessage or email. So I gave his suggestion a try and was quite impressed.

My loop is small, only about 5/8 of an inch in diameter, so holding it in position was a bit tricky at first. Also my iPad has a soft plastic case that prevents the loop from being placed close enough to the built-in camera lens. I removed the case to take photos with the loop.

Lighting can be a problem because the loop must be positioned a fraction of an inch from the subject, so I set up for photographing on a table next to a window. The depth of field is very narrow when taking close-ups using this method. The best subjects to photograph should be nearly flat, otherwise only a small area will be in focus.



## What is It?

Can you identify the specimen below?



Answer in next month's *Rock Talk*.

Last month's mineral was bauxite, ore of aluminum

# Withlacoochee Rockhounds—Rock Talk

## Welcome New Members

Welcome new club members: **Mark and Leslie Moore**, Inglis; **Jacquelyn Indelicato**, Spring Hill; **Jan Gathje**, Masaryktown; **John and Patti Motzer**, Spring Hill; **Susan and Lynn**

## Nearby Gem Shows

**October 15 & 16, 2016**

Tampa Bay Mineral & Science Club  
Plant City Strawberry Festival Expo

**November 12 & 13, 2016**

Canaveral Mineral & Gem Society

## For Sale Items

Club members can post appropriate club-related type **for sale** items in the *Rock Talk* free of charge. Contact your editors by the 25th of the month to have your items posted in the next issue.

Mike Stone  
[n1ve@amsat.org](mailto:n1ve@amsat.org)



## Secretary Report

by  
**Melodye Steverson**



### Withlacoochee Rockhounds Monthly Meeting Minutes 5-11-2016

- The meeting was called to order by club president Ralph Barber at 7:18 pm.
- We all stood for the Pledge of Allegiance followed by a moment of silent prayer.
- There were nine new members to recognize: Mark and Leslie Moore, Jacquelyn Indelicato, Jan Gathje, John and Patti Motzer, Susan and Lynn Wysong.
- There were two guests in attendance; Linda Domiano and Linda Ryan.
- Dave Letasi made a motion to accept the minutes of our April meeting as printed in the newsletter, the motion was seconded by Roger Wheeler, and passed by all members.
- Club treasurer Janet Wheeler gave the Treasurer's Report.

### New Business

Our very own Paleontologist, Dave Letasi, announced that new members Ken and Fay Badgley had made a very rare find at the Vulcan Mine. They found a pig vertebrae fossil that is over a million years old. Ken and Fay said they will return to the mine to search for more fossilized bones.

Dave Letasi also stated that a reporter for the *Hernando Sun* wants to write an article about our club members searching for interesting items at the Vulcan Mine. He asked for volunteers to speak with her, and requested anyone with pictures of members at the mine to get in touch with him.

Dave also stated that the letter of club support for the funding of a new museum in Brooksville is completed and will be mailed soon.

### Old Business

- There was no old business to discuss.
- Next month's refreshments will be provided by Dave Letasi and Melodye Steverson.
- Dave Letasi made a motion to adjourn the meeting, Dave Davis seconded the motion, and it was passed by all.
- The meeting was adjourned at 7:28pm.

## The May Club Meeting

### by Melodye Steverson

Our May meeting was an exciting one. Members had been clamoring for a silversmithing class for years, and finally, the first class in basic silversmithing was held during the meeting. There were seven members who took part in the class, and they had a wonderful time. They learned about safety at the workbench and how to fill and handle the torch that they will be using. The students were also taught about other tools needed during the class, including the pickle pot. The students listened and asked questions. A few seemed a little nervous about using a torch, but when it came time to soldering their jump rings, all were anxious to get started. Everyone got through soldering for the first time, with only a few "meltdowns" (melting the silver into a ball). Once the jump rings were all soldered and cleaned, the students were to join them into a pattern to create earrings or a pendant. Some of the students didn't get quite to that point, so we will finish the class at our June meeting. However, I have to say, the class was a success and the students did a great job. The class was taught by Melodye Steverson and Dennis Brown, with assistance by Richard Drum.

The members who were not participating in the sil-

## Show Us Your Stuff

We're always looking for information for the *Rock Talk*. Club members would enjoy seeing other members rock cutting and polishing equipment, display cabinets, projects, and favorite specimens. Take a photo and send it to your editors along with a description and we will be glad to include it in our

**Next Meeting, Wednesday, June 9th 7:00 at the Weeki Wachee Senior Citizens Center**

# Withlacoochee Rockhounds

## Membership Dues Form, 2016

Please complete the form and bring it with you to the December or January Withlacoochee Rockhound meeting. Attach your membership dues to the form.

**Annual Dues: \$15.00 for an individual member or \$25.00 for a family**

**Please Print**

### Primary Member

Last name \_\_\_\_\_

First Name \_\_\_\_\_

Renewing members check here if no change in information below.

### Additional family members:

Last name \_\_\_\_\_

First Name \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

ZIP \_\_\_\_\_

Phone Number(s): \_\_\_\_\_

Email Address: \_\_\_\_\_

**Please give this completed form along with your check for dues made out to "Withlacoochee Rockhounds" to club secretary Janet Wheeler at the club meeting. Or mail the form and your check to Janet Wheeler 338 Appaloosa Rd. Tarpon Springs, FL 34688**

# Rock Talk



## His Nibs

Diamonds and Jewelry  
Insurance Appraisals  
Gemstone Identification  
Professional Repairs

Jerry Johnson, G.G.  
Graduate Gemologist-GIA  
(352) 573-0830

12470 Spring Hill Drive  
Spring Hill, FL 34609

Hours: By Appointment Only

5-15

## Your Business Card Size Ad in Rock Talk

The cost to advertise your businesses in *Rock Talk* is \$25.00 for twelve issues—one year. Contact Mike Stone or Peggy Burns to set up an ad in both the club newsletter and our website. It will benefit both your business and our club.

RALPH BARBER

STONE JEWELRY  
bottle wind chimes

Hernando County Farmers Market  
US 19  
Spring Hill FL  
352.200.6852  
barbersbloomers@hotmail.com

4-15

## Withlacoochee Rockhounds

### Purpose

We are a non-profit organization whose purpose is to foster interest and promote knowledge of minerals, gems, fossils, lapidary arts, and earth sciences, through regular meetings, informative programs, workshops, and field trips. PLUS our annual gem and mineral and jewelry show. Membership is open to anyone sharing such interests.

### Dues

Dues are \$25.00 annually for a family and \$15.00 annually for a single member

### Club Meeting Location and Time

Weeki Wachee Senior Citizens Center, 3357 Susan Drive in Spring Hill. The meetings are held on the second Wednesday of the month at 7:00 PM.

## 2016 Club Officers

President.....	Ralph Barber.....	352-200-6852.....	<a href="mailto:barbersbloomers@hotmail.com">barbersbloomers@hotmail.com</a>
Vice President.....	Doug DuPont.....	352-515-1517.....	<a href="mailto:ddupont6@tampabay.rr.com">ddupont6@tampabay.rr.com</a>
Secretary.....	Melodye Steverson.....	352-683-9496.....	<a href="mailto:melodye@designsbymelodye.com">melodye@designsbymelodye.com</a>
Treasurer.....	Janet Wheeler.....	727-938-3644.....	<a href="mailto:ceecgirl@tampabay.rr.com">ceecgirl@tampabay.rr.com</a>
Rock Talk Editors.....	Mike Stone / Peggy Burns.....	603-524-0468.....	<a href="mailto:n1ve@amsat.org">n1ve@amsat.org</a>
Club Web Master.....	Mike Stone.....	603-524-0468.....	<a href="mailto:n1ve@amsat.org">n1ve@amsat.org</a>
Mailing Reporter.....	Janet Wheeler.....	727-938-3644.....	<a href="mailto:ceecgirl@tampabay.rr.com">ceecgirl@tampabay.rr.com</a>
Program Coordinator.....	Melodye Steverson.....	352-683-9496.....	<a href="mailto:melodye@designsbymelodye.com">melodye@designsbymelodye.com</a>
Education Chairman.....	Gloria DuPont.....	352-515-1517.....	<a href="mailto:ddupont6@tampabay.rr.com">ddupont6@tampabay.rr.com</a>
SFMS Stamp Program.....	Audrey Stead.....	352-688-7821.....	<a href="mailto:audreyste35@gmail.com">audreyste35@gmail.com</a>
Gem Mine Chairman.....	Jean Casanova.....	352-442-2667.....	
Sunshine Chairman.....	Audrey Stead.....	352-688-7821.....	<a href="mailto:audreyste35@gmail.com">audreyste35@gmail.com</a>

Board of Directors: Rovie Alford, Ralph Barber, Doug DuPont, Gloria DuPont, Dave Letasi, Melodye Steverson, Mike Stone, Janet Wheeler