

BOCK



Rock Talk



April 11th Meeting Program

The April meeting presentation will be by professor William Pasek from the geoscience department at the University of Southern Florida. Professor Pasek will talk to the group about fulgurites. ("...natural tubes, clumps, or masses of sintered, vitrified, and/or fused soil, sand, rock, organic debris and other sediments that can form when lightning discharges into ground..." *Wikipedia*).

We will also have a Chinese auction. (see description below).

Refreshments will be available and we will have the 50/50 drawing, and several door prizes.

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Larger Font

Most of the text in this edition of *Rock Talk* has been enlarged, hopefully to provide for easier reading. In the past, before the newsletter was distributed electronically, the font size was set to 10-points, which reduced the total number of pages in the publication. Now that we are distributing the *Rock Talk* via a link to our website, we can use a larger font because the number of pages per issue is no longer of any consequence.

Let us know what you think of the change. Is the larger font size and improvement? Do the additional pages cause a problem? *editor*

Silent Auction

Members are asked to bring items to the meeting that are related to our club (rocks, minerals, fossils, gems, handmade jewelry, tools, etc.). These items are spread out on tables. Members write their name and bid for desired items on provided sheets of paper next to each item. At the end of the designated bidding period, those with the highest bids win. All proceeds go into our club treasury.



Welcome New Members

Welcome new Withlacoochee Rockhounds club members. **Tony Acquaviva**, Spring Hill; **Carol** and **Timothy Caine**, Hudson; and **Joyce Koenig**, Spring Hill

The Cover

The cover is a photo of a desert rose, which is a from of gypsum.

March Meeting Photos

Photos by Barb Clark and Ralph Barber





Phosphate and Fossils

Hello everyone, recently I was asked by the Hernando County Historical Preservation Society to volunteer on the Rock Ridge Trail Board of Inverness Florida. I contacted Ms. Liz Fernley, the marketing director of the City of Inverness. We will be meeting in the near future regarding further development of the trail and help to advise where I am needed. Because the Rock Ridge Trail fea-

tures phosphate mining, it seems reasonable that I should dedicate this article to Florida's rich phosphate industry.

Phosphate mining in north central Florida started with the discovery of phosphate bone and pebble (hard rock phosphate) in a spring in Marion County, by Albertus Vogt in 1889. In 1881 Captain John J Frances discovered phosphate (soft pebble) along the banks of the Peace River. In 1886 John C. Jones and Captain W.R. McKee discovered high grade phosphate also on the Peace River and formed the first mining company known as the Peace River Phosphate Company. Over time phosphate dredging became one of Florida's leading industries.

The natural occurring Phosphate in Florida is considered an organophosphate, an ester of phosphoric acid, and was derived from the breakdown of calcium phosphate in animal bone. The decomposed remains of millions

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of vertebrate animal skeletons have accumulated here over the last 50 million years. Phosphate PO43- is an inorganic chemical that becomes stable when it naturally combines with other elements. Hard rock phosphate is usually a large pebble mass found in lime rock for-

> mation in our northern counties. Soft rock phosphate is usually of small granular size mixed in sand. Phosphate is a key chemical used in the agriculture and chemical industry. Florida has one of the largest agro-chemicals fertilizer industries in the world. Unusual by-products, such as uranium from this process sometimes occur. Uranium was once processed here for atomic weapon production. Today there is a

concern that these radioactive decaying elements such as radon

gas may cause health risks found in mine tailings.

The mining activities today are now centered in Polk, Hillsborough, Sarasota, and Hardee Counties. The mining company has to remove about 40 feet of over-burden fossil beach sand to reach the rich phosphate sands.



A dragline excavating phosphate.

Large dragline equipment excavates the matrix that is piled into hills called a "well" and water is injected into them while pumps remove this liquid slurry to be taken to the processing plants. Over the last century thousands of fossil collectors have recovered many thousands of fossil bones in these sediments that they fondly call the "Bone Valley". Animal species range from the giant elephant like gomphothere and the giant ground sloth to smaller sized saber tooth cats, camels, horses and tapirs. Even fossil whale and



Gomphotherium Jaw



Giant ground sloth bones at FMNH

Withlacoochee Rockhounds

Phosphate Mining from previous page

dolphin fossils are found alongside the teeth of the giant megalodon sharks and numerous dugong ribs, likely their last meal. Occasionally fossil bone may contain variously colored apatite crystals, loved by mineral collectors. Silica replaced fossilized wood is also found ranging from small fist size chunks to tree trunks!

In the 1940s through the 1960s a friend



Apatite crystals

of mine by the name of Joe Learned was one of the greatest fossil collectors from Florida. He amassed one of the largest fossil collections ever, from the Bone Valley sediments. In the 1980s the city of Mulberry Florida acquired his massive collection and it is now on display in the "Mulberry Phosphate Museum" in Mulberry Florida. I encourage everyone to visit it. Have a great April and keep collecting,

Related websites The Rock Ridge Trail at <u>www.visitrockridgetrail.com</u> The Mulberry Phosphate Museum at www.mulberryphosphatemuseum.org

M.



Your Favorite Specimen

We are always looking for something of interest for our club members. We're sure many club members have specimens in their collections that would be of interest to others in the club. If you would send us a digital photograph of your specimen we can publish it in the *Rock Talk*. A bit of information such as what it is, when, and where you found it would be great. If you don't have a digital camera, bring your specimen to a club meeting for others to see, and perhaps someone at the meeting could photograph it for the next issue of *Rock Talk*.

Rock Talk editors: Mike Stone and Peggy Burns n1ve@amsat.org



Judith Birx 1

We had another great club meeting. With the 50/50 coming in at \$80.00! If you weren't there, you missed Tom Mitchell, from the Southeast Federation of Mineralogical Societies (SFMS). He spoke about the benefits of being part of the federation. Everything from insurance to field trips to scholarships. Yes we are all members of the SFMS, based on your membership with us.

If you weren't at the last jewelry class then let me fill you in. We made a nice pair of dangling earrings and a copper wire ring. If you want to come to the next Jewelry class it will be on April 3^{rd} at 9:00 am until noon. The cost will be \$5.00.

Everything is beginning to come together. Lets keep the ball rolling and keep our group moving toward the goals we laid out at the beginning of the year. Soon we will lose some of our members (snowbirds), until the fall. So the members stuck here in the summer heat will have to hold the club together. That's right we will have to buy double the 50/50 tickets! Just kidding!

The silversmithing class was awesome. Rovie, Ralph, and Tony did an excellent job. We made a cabochon ring and a pendant. Now we are working on setting up for the cabochon class.

During the April meeting will have Matthew Pasek, professor of Geo Sciences at USF!

Don't miss the next meeting. We are having a Blast!

Next Meeting, Wednesday April 11th at the Weeki Wachee Senior Citizens Center

Tuesday Morning Workshop Photos

2018

Photos by Peggy Burns, Barb Clark, and Mike Stone

Tuesday Workshop at the

Weeki Wachee Senior Citizens' Center

Withlacoochee Rockhounds is giving workshops on wire wrapping (stones), chain making (jump rings) and possibly other related skills at the Weeki Wachee Senior Citizens' Center in Spring Hill. The workshops are normally on the **first Tuesday of the month from 9:00 AM until 12:00 noon** The cost per workshop is \$1.00. 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

For more information call Judith at: 352-587-1702

Next Workshop April 3rd at 9:00 AM

The April jewelry class project will be making pendants from Envirotex jewelry clay and pieces of junk jewelry. The jewelry clay is a blend of epoxy and clay powders and is easy to mix, shape, mold, and it is easy to texture. (see photo below)

The cost for the material for the pendants is five dollars per person. Pendants will be made from jewelry clay and pieces of junk jewelry, mica powder, and alcohol ink. Judith will supply all of the materials. The class will make two pendants.

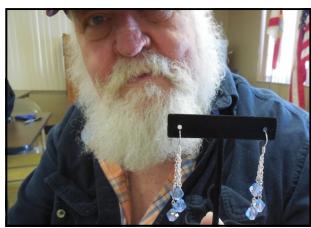














Tuesday Morning Workshop Photos



Photos by Peggy Burns, Barb Clark, and Mike Stone























Silversmithing Class Photos

2018 Photos by Barb Clark



















Secretary's Report

by



Withlacoochee Rockhounds **Monthly Meeting Minutes** March 3, 2018

- The meeting was called to order by club • president Judith Birx at 6:55 pm.
- We all stood for the Pledge of Allegiance ٠ followed by a moment of silent prayer.
- There were two new members to recog-• nize; Tim and Carol Cain.
- There were four guests in attendance; ٠ Lori Wilcox, Zaharah Watkins, Ryan and Virginia Blumhardt.
- Dave Letasi made a motion to accept the minutes of our February meeting as printed in the newsletter, the motion was seconded by Michele Evans, and it was assed by all members.
- Club treasurer Janet Wheeler gave the ٠ Treasurer's Report.
- Dave Letasi reported that Dorwin Skinner • had been in the hospital, but was home now and doing well.

Old Business

President Birx reminded members that club dues need to be paid. She also said that next month she will present a chart of the distribution of dues for all to see.

New Business

- President Birx announced the following: ٠
- There are upcoming field trips to Jackson Crossroads Mine and a Graves Mountain dig in Georgia. Lauren Ball has the paperwork. See her for details.

- The Board of Directors meeting will be held at the Senior Center on March 20 at 6:30. All members are invited to come and observe.
- The second Silversmithing class will take • place tomorrow night.
- Tonight's speaker is Tom Mitchell from • the SFMS.
- President Birx introduced Carol Hathaway • with the Weeki Wachee Senior Center. Ms. Hathaway addressed the membership regarding the replacement of the roof on the Senior Center. It was replaced in July of 2017 at a cost of \$10,000 for which Ms. Hathaway took out a personal loan from the bank. She asked for a donation of \$40 from each member to help pay off the loan. She said this donation could be spread out over time, and urged everyone to help.
- Secretary Steverson stood and announced • that her husband had set up an account on Amazon Merchant to provide club T-shirts for the members. This will cost the club nothing and the shirts will be provided wholesale for all members through Amazon Merchant.
- Next month's refreshments will be provid-• ed by Suzi Letasi, Angela Bennett, Jan Gathi, and Louise Vincent.
- Dave Letasi made a motion to adjourn the meeting, Mark Moore seconded, passed by all.
- Meeting adjourned at 6:26 pm. • Minutes respectfully submitted by Secretary Melodye Steverson.

Our Website www.withlacoocheerockhounds.com

Withlacoochee Rockhounds **Board of Directors Meeting Minutes** 3-20-2018

Attending Board members; Judith Birx, Melodye Steverson, Janet Wheeler, Ralph Barber, Dorwin Skinner, Mike Stone, and Rovie Alford. Also in attendance; Field Trip Committee Chairman Dave Letasi, and member Roger Wheeler.

The Board meeting started at 6:32pm and was held at the Weeki Wachee Senior Center.

Club president Judith Birx handed out the meeting agenda, then addressed the Board regarding the rejection of our 501(c)3 application. This was due to conflicting information from government sources, which caused the forms to be submitted incorrectly. President Birx and club treasurer Wheeler will re-group and resubmit the application as soon as possible.

President Birx then stated, that we need to remove the old names from the club's bank account "allowed check signer" list. It was decided to remove the now defunct names from the list and have only three current signers, as club checks needs at least two signers to be legal. The club by-laws state that the checks must be signed by the club treasurer and the club president or vice president. However, the Board can elect an alternate as the second signer in cases where the president or vice president cannot be reached.

A motion was made by Rovie Alford to remove the defunct names, (Ralph Barber, Jerry Johnson, and Danielle Thornton), retaining club treasurer Janet Wheeler, and to add club president Judith Birx and club secretary Melodye Steverson as alternate signer on the club checking account. The motion was seconded by Ralph Barber and passed by all attending

BOD Meeting

Board members.

Club president Birx discussed the display board she proposes to create to show how membership dues are distributed yearly. She will work with Dorwin Skinner to design the board, which will be on display at the next monthly meeting. Mike Stone stated that if we mention our gem show at every meeting, we can use money from the show fund account to pay for the meeting. Dorwin Skinner informed us that there is a set of rules for 501(c) 3 organizations regarding how they are allowed to spend money. This can be found on the internet. He suggested the Board members read up on it.

Mike Stone asked about removing members that have not paid their dues from the roster. He has sent applications to each of them. Only 3 couples have responded. They will be reminded one more time.

Club president Birx moved to the discussion of a "Gem Show Collection of Information". She said we should have all show information in one folder, and several officers should have a copy of the file. That way, the information will be available for club use at any time. The file is being formulated at this time.

Can we have an extra night just for machine use? Discussion ensued. The Board decided it would not be financially feasible to pay for the Weeki Wachee Senior Citizens Center to be open another night for just a couple of people to use the machines. Also, some members are using the equipment with disregard for the rules of machine use. There must be a senior member familiar with proper machine use overseeing member usage at all times. Rules are to be posted by the machines, and members are to sign up for usage at each meeting.

Field Trip Committee Chairman Dave Letasi stated that Sal Mendoza with the Vulcan Mine needs a roster of our membership so he can let our members into the Vulcan Mine on the 2nd Saturday of each month. Sal suggested we appoint a "Point person" for each month's group, to be responsible for the members signing entry papers, and being the contact person for the group while on site. Dave also mentioned a possible field trip to the South Florida Museum in Bradenton. The Museum has offered our members a \$15 entry fee and a special program in their Planetarium. Dave will announce this at the next meeting.

Mike Stone asked for permission to renew Domain names for our website and was given the okay.

Mike also had seen some UV flashlights and suggested we give them away as door prizes, and possibly sell them, at our gem show.

Mike suggested we have a Welcome Packet for new members that includes a letter, brochure and info about the website. This was met with approval and will be put into use. Secretary Steverson volunteered to write the letter.

Mike also asked about plastic nametags. Ralph Barber will check with the company the club used to get them from, to see about getting more. He will report back to the Board.

Rovie Alford made a motion to adjourn the meeting, Ralph Barber seconded, and were in favor.

The meeting ended at 8:15pm. Respectfully submitted by Secretary Melodye Steverson



Withlacoochee Rockhound

Tee Shirts

Rock Talk

Kryptonite

Kryptonite, the protagonist of one of the most famous stories of superheroes of all time: "Superman", is a stone that, although it has been created for entertainment, shares the same characteristics of



the comic stone with a mineral which is chemically similar in composition. However, actual Jadarite and Kryptonite differ in some aspects.

This rare mineral was discovered by several geologists in the mines of the Jader region in Serbia in 2006, coincidentally very near where Lex Luthor found the Kryptonite mine in the first movie of this legendary film franchise. After extensive analysis and research at the Natural History Museum, it was concluded that this stone had almost the same chemical composition of the famous Kryptonite described in comics, that is, sodium lithium boron silicate hydroxide.

Nevertheless, jadarite cannot honor the name given by the comic book because it was discovered that the mineral has nothing to do with krypton, which is colorless noble gas. However, its name derives from its place of origin. Another difference between the real and the fictional mineral is the color. Jadarite is not green or sparkling; rather it is white and grainy. It does not emit radiation, and most definitely, it does not weaken any super human. It is believed that if largest deposits of the mineral are found, commercial uses could be attributed.

Jadarite can bring great benefits to mankind in the near future due to the properties of the mineral. The boron could be used to encapsulate the radioactive material in the nuclear fission processes; and it also has an important role in the system of electricity produc-
tion. Besides boron, the other elements pre-
sented in the composition of this mineral could
be exploited for their extraordinary properties.abu
er
bec

In May 9, 2007, jadarite was exposed to the world at the Museum of Belgrade, capital of Serbia. To give honor to the history of the famous superhero, it is displayed in bright green light, as described in the famous stone that weakens the powers of "Superman", this in order to draw the attention of viewers.

https://www.joya.life/en/blog/the-powerof-kryptonite/



Much Sought After Mineral Discovered in a Diamond

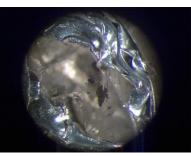
Originally published by Live Science, Nester Korolev, UBC

A diamond, discovered in Cullinan, South Africa contains the first evidence of a mineral scientists have sought after for years.

Scientists recently analyzed a mineral that was trapped inside a three-millimeter diamond, and discovered that the mineral is perovskite (CaSiO₃). Perovskite could be the fourth most

abundant mineral in the Earth's crust. However it cannot exist on the surface of the Earth because it

doesn't remain stable. Scientists say that perovskite forms deep inside the Earth's mantle, more than 435 miles below the Earth's surface.



The diamond with the perovskite inclusion was found in a South African mine, six tenths of a mile below the surface. Scientists say that it is a "deep diamond", which means that it was formed at least 435 miles below the surface of the Earth, where it was exposed to 240,000 atmospheres (3,528,000 pounds per square inch) of pressure.

Diamonds are really unique ways of seeing what's in the Earth. And the specific composition of the perovskite inclusion in this particular diamond very clearly indicates the recycling of oceanic crust into Earth's lower mantle. It provides fundamental proof of what happens to the fate of oceanic plates as they descend into the depths of the Earth.

When Googling "perovskite", I found that several forms of the mineral are not rare, but these are modified versions with a different chemical formulas, such as $CaTiO_{3}$, than the mineral described above. These variations are beautiful specimens with fantastically colored crystals. editor

Photos https://www.mindat.org/



More common forms of Perovskite



Bench Tips for Jewelry Making and Broom Casting for Creative Jewelry are available on Amazon

No-Mar Pliers

Pliers can often leave nicks and scratches on your work. If this is giving you a problem, first take a close look at the plier jaws. New tools can be a little rough. I typically relieve any sharp edges, sand away any tool marks, and give working areas a quick polish.

If that doesn't solve the problem, you probably need to cover the jaws. Plastic electrical tape provides a quick fix but can leave messy adhesive on the jaws, and the tape doesn't seem to last very long.

A quick and easy solution is to slip a length of 1/8 inch diameter vinyl tubing over each jaw. It works well and leaves no sticky residue. The tubing can be found in stores that sell aquarium supplies. Note that this will increase the size of the plier jaws a bit, but I haven't found that to be a problem.



Patina Recipes

Sometimes it's fun to explore some new patinas. If this appeals to you, here are a couple web sites that have ideas particularly for copper and bronze.

The Science Company at <u>http://</u> <u>www.sciencecompany.com/Do-It-Yourself-</u> <u>Patina-Formulas-W12C672.aspx</u> with plenty of formulas for a variety of colors.

And there are more formulas at Tim McCreight's Brynmorgen Press web site at <u>http://</u><u>www.brynmorgen.com/resources.html</u>

Small quantities of chemicals for making your own patinas are available from The Science Company at <u>http://www.sciencecompany.com/</u> <u>Patina-Chemicals-Patina-Book-C672.aspx</u>

If you prefer to buy the patinas ready for use, one of the best sources I've come across is Sculpt Nouveau at <u>http://www.sculptnouveau.com/</u>

Don't miss all the instructional PDF's on the site and be sure to take a look at the videos showing how to use the products at <u>http://</u>www.youtube.com/sculptnouveau



Learn New Jewelry Skills With Brad's How-To-Do-It Books <u>Amazon.com/author/bradfordsmith</u>

Graves Mountain Lincolnton, Georgia

Digging and collecting will be taking place at Graves Mountain on the following dates.

April 27, 28, 29, 2018 from 8:00 AM to 6:00 PM October 5, 6, 7, 2018 from 8:00 AM to 6:00 PM

The following minerals can be collected in the area: rutile, kyanite, lazulite, iridescent hematite, pyrophyllite, pyrite, ilmenite, fuchsite, barite, sulfur, variscite, woodhouseite, crandallite, strengite, phosphosiderite, cacoxenite, blue quartz, quartz crystals, etc.

If you are interested in joining these activities, check out the website below. For more information speak with Lauren Bell at a club meeting or contact her at

madhousemindworks@gmail.com

Below is the website for Graves Mountain https://www.gamineral.org/ft/commercial/ ftgravesmain.html

Check our club website for a video of collecting at Graves Mountain.

withlacoocheerockhounds.com

Next Meeting, Wednesday April 11th, 7:00 PM at the Weeki Wachee Senior Citizens Center

Withlacoochee Rockhounds Membership Form 2018
Complete this form and bring it with you to the Withlacoochee Rockhound meeting. Attach your membership dues to this form.
Annual Dues: \$15.00 for an individual member or \$25.00 for a family
Primary Member
Last name First Name Renewing members check here if no change in information helow
Additional family members:
Last name First Name Check If
Last name First Name Check if
Last name First Name Check if Check if Inder 18
Last name
Street Address:
City: State: ZIP
Phone Number(s):
Email Address:
Give this completed form along with your check for dues made out to "Withlacoochee Rock- hounds" to club secretary Janet Wheeler at the club meeting. Or mail the form and your check to Withlacoochee Rockhounds, PO Box 5634, Spring Hill, FL 34611-5634

Rock Talk

Withlacoochee Rockhounds

www.withlacoocheerockhounds.com

Our monthly club meeting is held at the Weeki Wachee Senior Citizens Club, 3357 Susan Dr., Spring Hill, FL 34606, on the 2nd Wednesday of each month from 7:00 to 9:00 PM



Hernando County

Your Business Card Size Ad in Rock Talk

The cost to advertise your businesses in Rock Talk is \$10.00 per month. . Contact Mike Stone to set up an ad in both the club newsletter and our website. It will benefit both your business and our club.

> Withlacoochee Rockhounds PO Box 5634 Spring Hill, FL 34611-5634



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Howards Flea Market M 13.15.17.19 HOMOSASSA, FL. 34446

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.

2018 Club Officers

President	Judith Birx	352-587-1702	judithbirx@hotmail.com
Vice President	Kelly Johnson	352-688-9399	KellyMineralsFossils@aol.com
Secretary	Melodye Steverson	352-683-9496	melodye@designsbymelodye.com
Treasurer	Janet Wheeler	727-938-3644	ceecgirl@tampabay.rr.com
Rock Talk Editors	Mike Stone / Peggy Burns	603-524-0468	n1ve@amsat.org
Club Web Master	Mike Stone	603-524-0468	n1ve@amsat.org
Mailing Reporter	Janet Wheeler	727-938-3644	ceecgirl@tampabay.rr.com
Gem Bag Coordinator	Gloria DuPont	352-848-5199	ddupont@tampabay.rr.com

Board of Directors

Rovie Alford (2018) Ralph Barber (past president) Judith Birx (president) Linda Spaulding (2020)

Melodye Steverson (secretary) Dorwin Skinner (2020) Mike Stone (2019) Janet Wheeler (treasurer)