

The Rockhound

Official Publication of the Gem & Mineral Society of the Palm Beaches, Inc.

www.gemandmineralsociety.org June 2018 Volume 51 Issue 9

President's Message

Greetings Rockhounds!

We always know when it's summertime not only because the temperature outside is scorching hot, but, there are lots of faces missing during club activities. Some members have gone north or gone west and others are on road trips, vacationing, or even on rockhounding excursions.

That's just the way it is in paradise in the summer! Having said that, there are a lot of us still here and there are things to do and places to go right here in South Florida.

Earlier this month, we attended the gathering at TY Park of members from the clubs in Ft. Lauderdale, Miami, and Palm Beach. There was food, a Raffle, Bingo, and members displaying and selling rough rocks, slabs, geodes, jewelry, glass, and an afternoon of meet and greet among old and new friends. At the May General meeting, Jennifer Martin, our 2nd Vice-President and program coordinator, arranged for a presentation by Alan Meltzer who wowed us with some of his collection of petrified wood from around the world. The pieces he brought for show and the video of even more, including pictures of dinosaur bone were an astounding display of gem grade fossils that few of us had ever seen. Also, just a couple days ago, we were all invited to view some of his collection of agate, petrified wood and dinosaur bone on display. Those of us who attended were treated to a collection of museum quality examples of lapidary treasure that will not be forgotten. Thanks Alan! And a big "Thank You" to Jennifer for the great work she has done in arranging for the presentations and field trips that have kept us coming back for more for the last few years!

Please take the time to check in this newsletter for upcoming activities. There are sometimes temporary changes in the summertime and this is the best way to be informed. See you at the next general meeting on June 21st.

- Lee Miller, President

Membership Meeting

Thursday, June 21 at 7:30 pm

4801 Dreher Trail North West Palm Beach FL 33405 at the Multi-Purpose Center

<u>June Program:</u> <u>K.C. Foster on</u> <u>Micromounting</u>

This will be a fun, hands-on presentation on micromounting minerals. This will

be fun and informative for the whole family!

<u>Junior Rockhounds</u>

This month our Junior Rockhounds will join the adults in a fun presentation on micromounting.



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Birthstone: Pearl

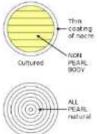
There are three different classifications of pearls: Natural, cultured and artificial. Natural pearls have been



known since antiquity. Cultured pearls are expensive but natural pearls are very expensive. Artificial pearls are trinkets. Natural pearls form usually when a parasite gets into a

bi-valve mollusk. The parasite or foreign material also has to carry a bit of the mantle lobe (membrane between the shell and soft tissue that creates the shell). The irritation causes the bit of mantle tissue to surround the foreign bit and to secrete calcium carbonate and conchiolin . This process is repeated many times to form the pearl.

Conchiolin is a protein and the CaCO 3 is in the crystal form of aragonite. The alternating layers are called nacre and give the pearl it's iridescence. Pearls display iridescence because of the light reflecting from the layers in the nacre. Natural pearls are about 86% CaCO 3, 10% conchiolin and the remainder water. Natural pearls can only be

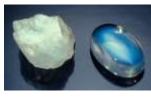


distinguished from cultured pearls by an x-ray scan or breaking the pearl open.

Cultured pearls are formed by taking a bit of a bi-valve shell and grinding it into a sphere and putting it along with a bit of mantle lobe into the soft tissue. The mollusk treats the sphere as an irritant and the bit of mantle lobe begins making the pearl nacre around the foreign bead.

Birthstone: Moonstone

Moonstone has been prized since antiquity. Moonstone

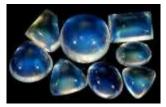


is the state gemstone of Florida because of the moon landings but does not occur naturally in Florida.

Moonstone is a member of the

feldspar family that exhibits adularescence. Adularescence is the metallic iridescence originating from below the surface of a stone, that occurs when

light is reflected between layers of Minerals. Moonstone is a mixture of orthoclase (potassium aluminum silicate KAISi 3 O 8) and albite (sodium aluminum silicate NaAISi 3 O 8). When the moonstone



forms the two minerals separate on a microscopic level which gives the layers. The iridescence or adularescence is caused in moonstone by much the same mechanism as in pearl.

Birthstone: Alexandrite

Alexandrite is a rare color-change gemstone that changes color from green to red. It has been called emerald by day and ruby by night. It was first discovered in the Ural Mountains of Russia in the early 1800's and named after the Russian Czar Alexander II. Alexandrite is a gemstone of the mineral chrysoberyl which is beryllium aluminate (BeAl 2 O 4).

The color change is caused by the impurity chromium (present emeralds and ruby). Alexandrite absorbs purple and yellow light and

transmits the rest. In sunlight it appears green because sunlight has a lot of blue and green light in it.



In incandescent light there is mostly yellow and red light so the stone appears red.

References used for this article:

https://www.romadesignerjewelry.com/blogs/education/ the-history-of-gemstones-what-is-moonstone

https://en.wikipedia.org/wiki/Pearl

https://nature.berkeley.edu/classes/eps2/wisc/Lect17.html

https://www.gia.edu/moonstone

https://www.gemselect.com/gem-info/moonstone/ moonstone-info.php

http://www.geologyin.com/2017/01/what-isadularescence.html#C0clYFoyWvKKgfqv.99

https://www.gia.edu/alexandrite

https://en.wikipedia.org/wiki/Chrysoberyl

http://www.alexandrite.net/chapters/faq/why-doesalexandrite-appear-to-change-color-in-sunlightand-artificial-light.html

-Article compiled by Richard Tracey

May Business Meeting Minutes

This meeting was held on May 17, 2018.

Treasurer Jenny Wright reported an April ending balance of \$28,115.22.

Newsletter Editor Laura Phillips asked members to contact her if they do not receive their newsletter. Most people get electronic copies, but 22 members get printed copies. There was some discussion of alternative, less expensive ways to send hard copies.

Webmaster Richard Tracy reported he has added information to the website for Junior Rockhounds; this information was taken from Eastern Federation resources.

Membership Chairman Jennifer McIntyre reported on membership.

Members were encouraged to see newsletter about classes, and to contact instructors if they are interested in a particular class.

Shop Steward Susan Cairl was not present to give a shop report. Shop hours are listed in the newsletter.

KC Foster announced a monthly Micromounters gathering at her house for mineral identification.

The next TY Park Picnic will be held on June 3rd, 10 AM at Pavilion 9.

Show Chairman Walter Triche announced that the next Show Committee meeting will be June 4th at 7:30 PM at the shop.

Lo Rain Dudley, the Sunshine News Chair, was out of town and not available to give a sunshine report.

Program Coordinator Jennifer Martin reported on a field trip to Alan Meltzer home to view his rock collection. The trip will be on Saturday June 9th at 10 AM. Members interested in participating were asked to contact Jennifer.

2018 Steak Dinner

By Social Events Director Debi Kachman

Thanks go primarily to Walt Triche, Mike Perkins, and Lee Miller, who worked wonders getting charcoal, supplies and potatoes. The steaks were amazing. I'm sorry I can't name everyone who helped, although many members helped tremendously. I thank all of you!

The largest THANKS goes to Lorna Hayes for getting all the Auction things set up and sold. It was a group effort, but a special thanks goes to



Grant Simmons for agreeing to announce the auction again. Lo Rain Dudley wasn't there but she went over everything, getting it ready, marked and set starting bids.

Our 2016 Auction was able to make \$1,239.84. This year, 2018, we made \$1,276.00. We'd like to thank all the people who have donated parts of their collections so we can further our interest in Earth Science and promote community interest in it.

Please remember the GMSPB in your will or tell your family to give us any rocks, shells, and artifacts they don't want.

June 9 Field Trip Alan Metzger's Collection





Cheron Camacho Marcela Castillo Siu D on Chenowith L aurie F orman D andy Garcia B enjamin J ohnson D ede K uchinski K athleen Pickens Stephanie Rosicci B ruce Sirkus Randee Solomon D onna Sypniewski

When I was young, the Dead Sea was still alive. — George Burns

Club Purpose

To associate persons of the Palm Beach area of Florida who are interested in earth sciences, to work together as an organization in the gathering, cutting, displaying, and studying of rocks, shells, artifacts, and any kind of scientific objects of interest to the individual and the organization, to promote community interest in these objects.

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Our deepest sympathy to the Carlson family for the loss of family members.

Susan Cairl is up and running slowly and it is nice to she her at the shop.

Thank you Mike Perkins for installing the air conditioner in the front room of the shop.

Great time at TY Park: good food and friends from all three clubs.

Thank you Alan Meltzer & Deborah for showing your wonderful collection and your knowledge.

Think Pink! This is the color theme for our November show.



Daniel and Janet Carlson from Dania, Florida

Jeanine Lamanette from West Palm Beach

Think Cold for This Mineral

by Alberta Hare; from Tumbler 7-8/96 (8th Place in 1997 AFMS Advanced Article Contest)

Take water and freeze it – and there is the mineral: ICE! Defined in Webster's Dictionary a glassy, brittle crystalline form of frozen water, ice is listed in Dana's Manual of Mineralogy (16th edition) as an anhydrous oxide. In there are given its properties, as are those other minerals. Hardness is only 1-1/2 and being brittle it crushes

easily. Because when water freezes, it expands to $1/11^{th}$ of its volume, the specific gravity of ice is only 0.9166, so it floats in water. Ice may be clear and colorless, but when air is trapped in it, appears white. Ice crystals are in the hexagonal system. Ice is more abundant in its massive or granular form and is sometimes classified as a rock.

When the temperature drops to 32 degrees Fahrenheit, ice forms on surfaces of ponds, lakes and rivers. Even waterfalls may turn to icefalls. Seawater, which contains salt, will freeze when the surface temperature drops below 28 degrees Fahrenheit.



Frost appears when cold night vapor freezes from a gaseous state into minute crystals of ice that grow into patterns resembling ferns, feathers, or lace on cold surfaces. In hoar frost water vapor freezes instantly on a very cold surface.

Snow is the crystalline form of ice in which small crystals are made directly from water vapor in the air. Most rain, except in the tropics, starts off as snow. High in the atmosphere the temperature is below freezing, and the upper layers of cumulus clouds contain billions of tiny water droplets and ice crystals. The extremely small ice crystals join together in falling, growing into snowflakes of tremendous variety. Most snowflakes are 90 percent air, making snow an excellent insulator and muffler of sound. The seven basic forms of falling snow crystals: star, plate, needle, columnar, columnar capped at both ends, irregular and spatial dendritic, are expanded into finer distinctions of 101 types of snow crystals. The six sides are basically inherent in the atomic structure of snow crystals, with its one atom of oxygen having two hydrogen ones at 120 degrees from it. Form of the crystal depends on temperature and the availability of water vapor when it falls.

Snow crystals high in the clouds that melt before reaching the ground become raindrops. If while falling they hit very cold air and refreeze, they become solid pellets or sleet. Hailstones are frozen raindrops in the clouds which are tossed up and down by strong gusts of air and get coated with more ice layers before falling to the ground. These spherical lumps with layers of clear and opaque ice become quite large. One hailstone that fell in Coffeyville, Kentucky in 1970 weighed 1.7 pounds. Icicles form when cold nights freeze dripping water.



When snowfall exceeds the melting, snow crystals are compressed into round granules of ice. Weight, pressure and freezing of these granules make bodies of ice known as glaciers. When the ice gets to be 200 feet deep, the glacier begins to move, becoming a "river of ice" as it flows downhill or across valleys. It moves faster in the upper center region and flows more slowly at the sides and friction slows the bottom ice.

Glaciers are impressive. In the last Ice Age, 14,000 years ago, one third of the land's surface was covered by ice caps and glaciers., All this extra weight caused compression of the earth's

crust which is uplifting again slowly as glaciers recede. Ten percent of the earth is covered with glaciers at this time, with 99 percent of the glacial ice being in Greenland and Antarctica. Alaska has 28,000 square miles of glaciers today, with eighteen glaciers going into Glacier Bay.

Icebergs are the large chunks of ice that break off from glaciers. The largest one known was in the Antarctic and was 60 by 208 miles in diameter. Up to 20,000 icebergs a year come off Greenland's ice, with larger ones being up to 500 feet across and rising 300 feet out of the water.

Too much snow and ice does cause problems, as those trying to keep city streets clear or farmers trying to care for their livestock well know. When others think of ice and snow they think of the useful and fun things about it.

The main use of ice is storage of water. Three fourths of the earth's fresh water is found in glaciers. Blocks of ice may be used for building shelters in some regions, and



many of us are familiar with icepacks for injuries or to keep food stuff cold, and ice cubes in our drinks.

On the fun side, there are many games and sports involving ice and snow; throwing snowballs and making

"angels in the snow" or a snowman; tobogganing, snow sledding and snowshoeing; ice skating, ice climbing or making ice sculptures. Let us be thankful for this unique and wonderful mineral: ICE!

Other References: Bentley, W.A., *Snow Crystals*, 1931 Cosgrove, Brian, *Weather* Eye Witness Book, 1991 Halcey, D.S. Jr., *Ice or Fire*, 1978 Kirk, Ruth, *Snow*, 1979 Reader's Digest Association, *ABC's of Nature*, 1984 Simon, Seymour, *Weather*, 1993

MICROMOUNTERS

This group usually meets the first Thursday of the month from 7:30 PM - 9:30 PM.

Bring a microscope, minerals, questions, and (maybe a yummy treat?). We always have lots of giveaways. We

will teach you to identify minerals and how to mount micro-minerals.



Please RSVP KC Foster at 561/523-4600.

Geology Humor

Q: Did you hear the one about the geologist?

A: He took his wife for granite so she left him.

Q: What did the boy volcano say to the girl volcano?

A: I Lava You!

Q: Why did the geologist take his girlfriend to the quarry?

A: He wanted to get a little boulder.

Q: How did the geology student drown? A: His grades were below C-level.

Watson: Holmes! What kind of rock is this? Holmes: Sedimentary, my dear Watson.

Q: If H2O is the formula for water, what is the formula for ice? A: H2O cubed.

Q: Did you hear about the geologist who was reading a book about Helium? A: He just couldn't put it down.

Q: What element is derived from a Norse god?

A: Thorium.

Q: What do you do with a dead geologists? A: Barium.

Q: What weapon can you make from the elements potassium, nickel and iron? A: A KNiFe.

Q: Anyone know any jokes about sodium deposits?

A: Na

source: http://www.jokes4us.com/miscellaneousjokes/ schooljokes/geologyjokes.html

SHOP TALK

Open Shop Schedule

Open shop is available for members use only, but visitors are welcome to stop by during open shop hours. Open shop fees are \$5.00 for the first 3 hours and \$7.00 for time over three hours.

Important! Members must complete a 6 class Certification Class before using the cabbing equipment. This class runs for six consecutive weeks for 3 hours each week to provide safety instructions and cabbing techniques. If you received training elsewhere, you will still need to demonstrate your proficiency before using shop equipment. For information on cabbing certification please call Susan Cairl @ 561-293-1298

Open Shop Hours:

Mondays 10:30am - 5:00pm, Samantha Lazzaro, Shop Steward - 631-764-6556 Tuesdays Evenings by Appointment - Laura Simmons, Shop Steward - 407-234-0444 Thursdays 12:30pm - 3:30pm, Dennis Rietwyk, Shop Steward - 561-255-0292 Fridays 6:00pm - 9:00pm, Susan Cairl, Shop Steward - 561-293-1298

"Stuff Happens" so please call first to verify the shop will be open as scheduled. If the assigned shop steward cannot be reached, call Susan Cairl, Head Steward, to confirm.

Shop Report

Open shop is available for lapidary, metal work, enameling, fused glass, classes and to use the library. You must be certified to use the kiln! For kiln certification and classes, please call Samantha Lazzaro.

At the present time, kiln use is limited to Monday Open Shop Hours. For beginning silversmith classes, please call Laura Simmons.

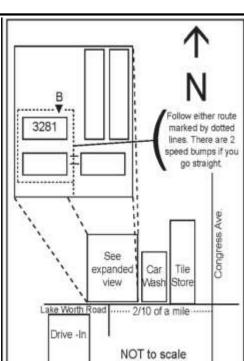
Additional classes will be announced as they become available. When visiting the shop please know:

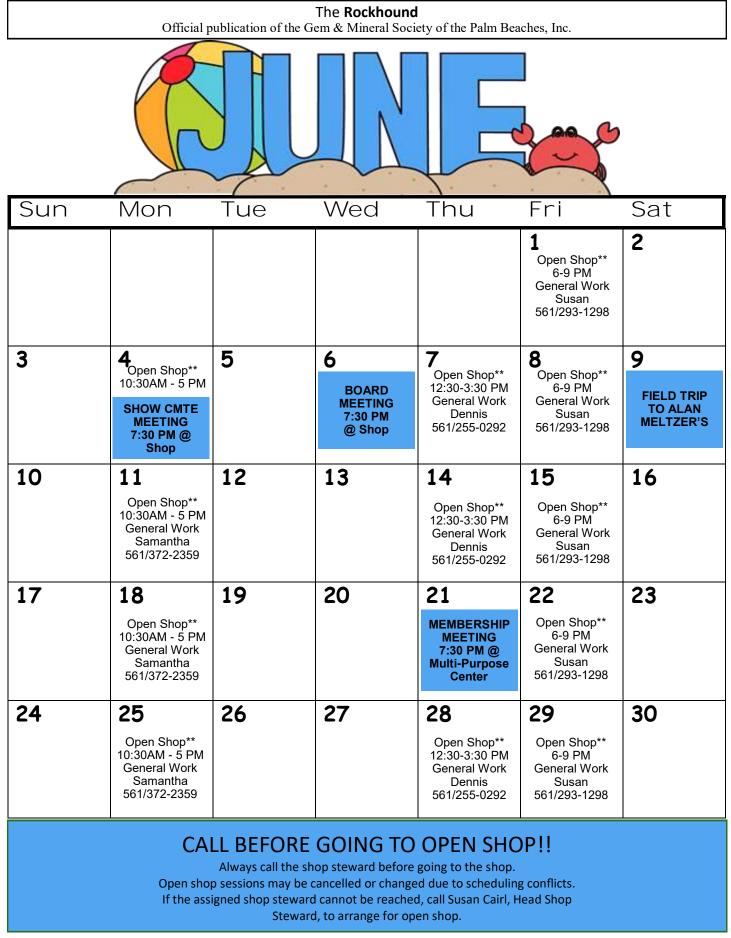
- You will be asked to sign a one-time liability waiver and be given a copy of the shop rules
- Always sign in and out of the log book and complete the information on the sign in sheet
- Drinks and food are permitted in the outer room only
- There is no fee to use the library or reference videos available in the shop

The street address of the shop is: 3281 Lake Worth Road, Suite B, Lake Worth, FL 33461









The Rockhound Official publication of the Gem & Mineral Society of the Palm Beaches, Inc.							
July							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1	2	3	4	5 Open Shop** 12:30-3:30 PM General Work Dennis 561/255-0292	6 Open Shop** 6-9 PM General Work Susan 561/293-1298	7	
8	9 Open Shop** 10:30AM - 5 PM General Work Lee 561/329-8872	10	11	12 Open Shop** 12:30-3:30 PM General Work Dennis 561/255-0292	13 Open Shop** 6-9 PM General Work Susan 561/293-1298	14	
15	16 Open Shop** 10:30AM - 5 PM General Work Lee 561/329-8872	17	18	12:30-3:30 PM MEMBERSHIP MEETING 7:30 PM @ Multi-Purpose Center	20 Open Shop** 6-9 PM General Work Susan 561/293-1298	21	
22	23 Open Shop** 10:30AM - 5 PM General Work Lee 561/329-8872	24	25	26 Open Shop** 12:30-3:30 PM General Work Dennis 561/255-0292	27 Open Shop** 6-9 PM General Work Susan 561/293-1298	28	
29	30 Open Shop** 10:30AM - 5 PM General Work Samantha 561/372-2359	31					
CALL BEFORE GOING TO OPEN SHOP!! Always call the shop steward before going to the shop. Open shop sessions may be cancelled or changed due to scheduling conflicts. If the assigned shop steward cannot be reached, call Susan Cairl, Head Shop Steward, to arrange for open shop.							

AVAILABLE CLASSES

CLASS	INSTRUCTOR	COST	DATE/TIME/NOTES
 ◊ Introduction to Chainmail ◊ How to Use the Jumpringer ◊ Introduction to Metalsmithing ◊ Viking Wire Weave 	Laura Simmons 407/234–0444	\$30 + \$10 materials fee \$10 + \$5 materials fee \$50 + \$30 materials (copper) or \$60 materials (silver) \$30 + \$15 fee	Contact instructor to arrange.
Cabochon sessions Six 3-hr sessions	Susan Cairl 561/293-1298	\$75 + \$20 materials fee	Contact instructor to arrange.
Cold Connections Class Series: Explosion Pendant Fold Forming Bracelet w/Beveled Stone Setting Scrapbook Bracelet (rivets) Metal Etching & Air Chasing Bracelet 3D Pendant w/Druzy Stone Slice NEW! 	Arlene Lazzaro 5 <i>1</i> 6/810-3495	\$40 + \$35 materials fee \$40 + \$35 materials fee \$40 + \$35 materials fee \$40 + \$40 materials fee \$40 + \$40 materials fee	Contact instructor to arrange.
Enameling	Samantha Lazzaro 561/372-2359	\$40 + \$50 materials fee	Contact instructor to arrange.
Flat Lap	Susan Cairl 561/293-1298	\$40 + \$10 supplies fee	Contact instructor to arrange.
Gem Tree	Dianna Ray 561/707-6753	TBD	Contact instructor to arrange.
Metalsmithing: ◊ Alien Prong Ring	Arlene Lazzaro 516/810-3495	\$40 + \$15 materials fee	Contact instructor to arrange.
Wire Fan Bracelet Class	Debi Kachman 561/568-8736	\$30 + \$20-50 materials fee (depending on metal) OR supply list can be provided	Contact instructor to arrange.
Wire Sculpture Class	Debi Kachman 561/568-8736	\$30 + \$20-50 materials fee (depending on metal) OR supply list can be provided	Contact instructor to arrange.

MEMBERSHIP DUES

Junior Membership—\$10.00 (Under age 18) Single Membership—\$20.00 (Over age 18) Family Membership—\$30.00 (Includes 2 adults and children under age 18 in a single household)

Membership expires on December 31st each year and is due by the end of February of the new year.

To renew your membership, make your check or money order to:

Gem & Mineral Society of the Palm Beaches, Inc. and mail to:

Membership Coordinator Gem & Mineral Society P.O. Box 18095 West Palm Beach, FL 33416-8095

NAME TAGS

Available from: Ace Marking Devices (\$12.00) 3308 S. Dixie Hwy. West Palm Beach, FL 33405 561/833-4073

SHOP FEES

Up to 3 hours shop time - \$5 Over 3 hours shop time - \$7

SEE CALENDAR FOR OPEN SHOPS

SHOP STEWARDS

Head Shop Steward: Susan Cairl 561/293-1298

Laura Simmons 407/234-0444 Dennis Rietwyk 561/255-0292 Samantha Lazzaro 561/372-2359

Shop Phone: 561/585-2080

- President* 1st Vice President* 2nd Vice President* Secretary* Treasurer*
- Head Shop Steward* Membership* Newsletter Editor* Member-at-Large* Show Chairman* Webmaster*

2018 OFFICERS

561/389-8584
561/379-4307
561/281-5466
561/389-8584
561/634-1427

2018 DIRECTORS

Susan Cairl	561/293-1298
Jennifer McIntyre	863/414-1240
Laura Phillips	561/523-3594
Lo Rain Dudley	561/827-5793
Walter Triche	561/628-1031
Richard Tracey	561/318-6891

COMMITTEE CHAIRPEOPLE

	Hostess	Samantha Lazzaro	561/372-2359
Jr. Rockhound Program		Mitchell Turk	561/506-4655
	Librarian	Shop Steward on Duty	
	Programs	Jennifer Martin	561/281-5466
	Raffle Coordinator	Lo Rain Dudley	561/827-5793
	Refreshments	Arlene Lazzaro	561/810-3495
	Sunshine Committee	Lo Rain Dudley	561/827-5793
	Social Events	Debi Kachman	561/793-6777
	Webmaster	Richard Tracey	561/318-6891

*Denotes a Voting Member of the Executive Committee.

WEBSITE www.gemandmineralsociety.org

Club Email Addresses

membership@gmspb.org newsletter@gmspb.org president@gmspb.org show@gmspb.org vendorinfo@gmspb.org webmaster@gmspb.org

Link to our **smile.amazon.com** account: <u>http://smile.amazon.com/ch/59-6196330</u>

The Gem & Mineral Society of the Palm Beaches, Inc. is a 501 (c) (3) corporation and a member of the Eastern and Southeastern Federations of Mineral and Lapidary Societies, and is affiliated with the American Federation of Mineralogical Societies. Monthly meetings are held on the third Thursday of the month except for December, which is held on the second Thursday. Meetings start at 7:30 PM at the former Garden Club building (across from the Science Center), 4800 Dreher Trail North, West Palm Beach, FL 33405.

Send comments or submissions to newsletter@gemandmineralsociety.org