# UPCOMING SHOWS

## 2017

**March** **5** **10:00 am -6:00pm** **NYMC - Holiday Inn 440 W 57th St**
**6** **11:00am – 5:00pm**

**March 11-12th** **IRH Annual Gem, Mineral, Fossil & Jewelry**
**Old Bethpage Restoration Village**

**May 20-21st** **Celinka Show- Our Lady of Mt. Carmel, Patchogue**

***May 22-28th Wildacres Spring Session***

**July 29-30th** **LIMAGS Annual Gem, Mineral, Fossil & Jewelry**

***For other Gem and Mineral shows:*** http://www.amfed.org/EFMLS/calendar.htm

www.suffolkgem.com
P. O. Box 302
Bohemia, L.I., NY
11716

*To promote cultural, educational, and scientific interest in mineralogy, and develop member's skills in lapidary arts and jewelry crafts*

*February 2017*

# THE CONGLOMERATE

***The Monthly Bulletin of the Suffolk Gem & Mineral Club, Inc.***

**Monthly Club meetings held at the Bay Shore-Brightwaters Library, Montauk Highway, Brightwaters starting at 7:00pm.**

**Refreshments served at 7:00 pm.**

## OFFICERS

*The Conglomerate Editor – Cheryl Neary*
*Club Webmaster – Kerry Dicker*

| | | | | |
|---|---|---|---|---|
| **President –** | **Cheryl Neary** | **516.449.5341 cell** | **Director - Elaine Casani** | **631-567-3342** |
| **Vice President –** | **Kerry Dicker** | **631-277-0994** | **Director – Lucy Jackson** | **631- 289-2328** |
| **Treasurer -** | **Roberta Besso** | **631-666-8023** | **Director - John King** | **631-775-7035** |
| **Asst. treasure** | **Joe LaBarca** | **631-242-5290** | **Director –Debbie Winston** | **516-238-8370** |
| **Secretary –** | **Rebecca LaBarca** | **516-768-4438** | **Director –Pat Seostrom** | **631.654.0746** |
| **Liaison –** | **Cheryl Neary** | **516.449.5341 cell** | **Director – Michael Jung** | **631.698.3018** |
| | | | **Historian –Kerry Ann Hilliard** | **631-277-0994** |

***Cell phones are to be turned off during all Club meetings.***

***More importantly, there should be no disturbances during any guest presentations.***

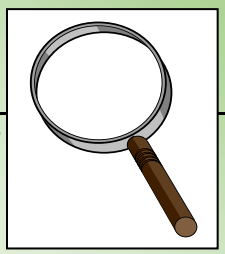
Happy Birthday Wishes!
May Your Year Be Filled
with Hugs & Kisses!

**February Birthdays**:

Michael Correale
Kelly Dohery
Joe LaBarca
Marilyn Inkles
Fran Katsar
Mike Katsar
Pat Seostrom

## UPCOMING MEETINGS & EVENTS:

### 2017



*February 27th – Hands-On Ladder design bracelets (see pics On page 8)*
*March 20th - Lecture*
*April 17th – Hands- On Paint on Rocks with Debbie Winston*
*May 15th*
*June 19th – Annual Bragging Rites*

## Wildacres Spring Session

Plan Ahead! Bob Jones will be the guest presenter for the Spring Session of Wildacres-

Bob Jones is an incredible young 90+ gentlemen that has so many entertaining stories – you just don't want to leave!

I will be going to the Spring session, so if interested let me know- the session should fill quickly-

More info on the following pages!

**Plan Ahead-**
**Annual Picnic either the weekend of:**
**July 15th or July 22nd**
**Pending the Herkimer Annual Show**

## Message from the Prez:

I will be in Tucson the week of February 06, 2017. I leave on Saturday, February 4th and return on Saturday, February 11th.

Needless to say, I am looking forward to an exciting week at the various Gem & Mineral Shows, but even more excited to be visiting with friends that have moved off the Island to either Florida or Las Vegas!

At this months' meeting we will have the formal swearing in of our new Slate of Officers.

Kerry will be teaching us how to make ladder design bracelets- (More information on page 8).

Hope to see you all on February 27th – a week later due to President's Day Holiday and the library being closed!

## Let the Adventures Begin!

### Field Trips for 2017:

Spring: IRH Bus trip- Rosendale Cement Mine & D&H Canal

May- St Lawrence County – (travel on own)

June 23-25 – LIMAGS - Gilsum, New Hampshire /TOVECO

July- TBD– Michigan

LIMAGS Bus Trip -August 12, 2017- Springfied, Ma OR

The 52nd annual Gilsum Rock Swap & Mineral Show will be held June 25-26, 2016 RAIN OR SHINE! More than 65 dealers and swappers with gems, jewelry and minerals available for sale or trade in scenic southwestern NH. Pan for minerals, enjoy a hearty pancake breakfast , sit down for a Chicken Barbeque lunch or join us for dinner Saturday eveinging for the old fashioned New England ham and bean dinner with home made pies!

**Saturday**
8 AM Exhibits open
8 AM - Noon: Pancake Breakfast
10 AM - 4 PM: Library books sale at the Library
1 PM SPECIAL PRESENTATION in the auditorium: During "Let's find some fossils," paleontologist Dr. Alan Russell will tell visitors where where to find fossils, how to expose them, and how to identify them. He'll also demonstrate how to break open the rock to expose a fossil, and will ask kids to come up and give it a try.
2 PM: SPECIAL PRESENTATION: Steve Garza demonstrates the correct way to break a rock - and let visitors give it their best shot. Steve will provide the hammer and protective gear at dealer space #40. Kids welcome!
4:45 PM: Annual Ham & Bean Dinner with homemade beans and pies! Three seatings beginning at 4:45, 5:45 and 6:45 PM. Tickets on sale at the Rock Swap Central information booth all day and at the church at meal time.
6 PM: Dealer exhibits close

**Sunday**
8 AM: Exhibits open
8 AM - Noon: Pancake Breakfast
Noon - 2 PM: Chicken Barbecue
10 AM - 2 PM: Library book sale 10:00 - 2:00 at the Library
4:00 PM: Show closes - See you next year!

## Outside The Box

Synopsis of Last Month's Meeting:

January's meeting was held at Parlor House Grill in Sayyville.

The Slate of Officers was voted on and approved.

Our live auction was held and we even had outside participation!

**What is a**
**Member in Good Standing?**
One that:

- Attends (4) Meetings
- Contributes Time to Club Show or the Celinka Show-at the Club Table

(If you are unable to attend the show, there is other show activities you can volunteer for- please see Elaine or Cheryl!)

Participates in Club Fundraisers

Remember-this is your club!
This club needs you to participate, in order for the club to grow-
If you have any suggestions for a program, please speak to one of the Board members listed above. If you have an idea for a field trip, please speak to a Board member as well!

Ask what else you can do!

# Bob Jones Returns!

by Steve Weinberger, Wildacres Committee Chair

Mark your calendar now!

**May 22 – 28, 2017**

Bob Jones will return "to the mountain" as our Speaker-in-Residence for the spring session!

Registration opened on January 1.

Tuition for 2017 will be $400 per person and will include your room and board, and gratuity for the resident Wildacres staff.

Your only additional "out of pocket" expenses will be for the materials used in the class or classes you take and monies you spend at the annual auction, in the canteen or at the tail gate. So....

**Mark your calendar now!**

**Can't make May – How about the Fall Session?**
**September 4th – 10th**

Photos courtesy of web

If you know any child interested in joining our club, we are starting a pebbles pup division.
The first meeting will be in the Spring.

Please have them contact either
Robin Wiley at rcwiley@optonline.net Or Cheryl Neary at ciervo.neary@gmail.com

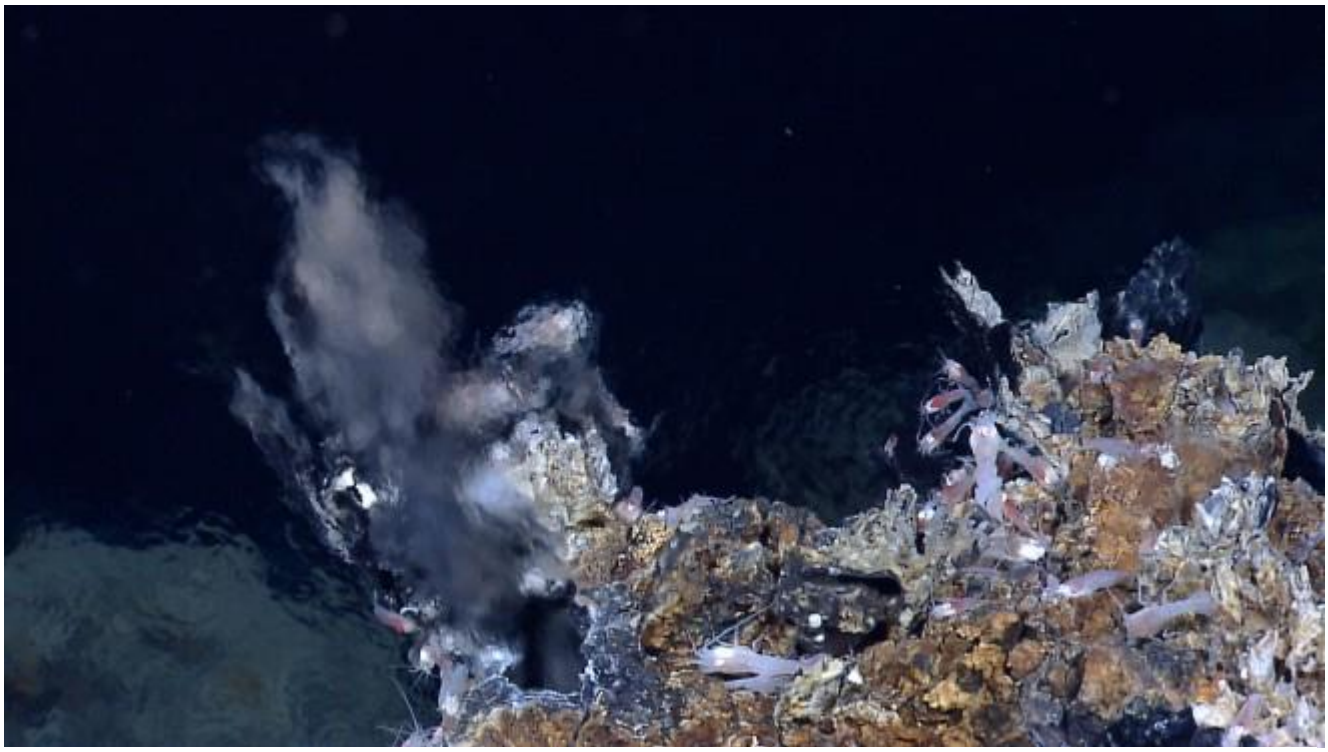
Discover
SCIENCE FOR THE CURIOUS

The Extremo Files

# New Type of Seafloor Vent Discovered, Dominated by Talc

By Jeffrey Marlow | February 8, 2016 1:38 pm

The study, entitled "Talc-dominated seafloor deposits reveal a new class of hydrothermal system," was published in the journal *Nature Communications* by authors Matthew Hodgkinson, Alexander Webber, Stephen Roberts, Rachel Mills, Douglas Connelly, and Bramley Murton.



An active hydrothermal vent at the Von Damm hydrothermal field. (Image: NOAA Okeanos Explorer Program, MCR Expedition 2011)

In 1977, with the discovery of heated water spewing metals from the seafloor along the Galapagos Rift, scientists were taken by surprise. The ocean floor had always been assumed to be a static, low-energy environment, a passive repository for detritus falling from more dynamic surface waters. But the powerful vents revealed a new dimension to the deep sea – it was an important interface between the molten mantle and the surface world, a site where enormous amounts of energy were streaming into the cold depths of the oceans.

In the intervening decades, hundreds of seafloor vents have been discovered, but they have typically fit within a narrow classification scheme. "Black smokers" are the most well-charted, found pervasively along mid-ocean ridges where new oceanic crust is formed. Slightly cooler systems epitomized by Lost City are the result of mineralogically-specific water-rock interactions. Methane seeps are found most frequently along convergent plate margins, where hydrocarbons break down at depth and are pushed upward into seafloor sediments.

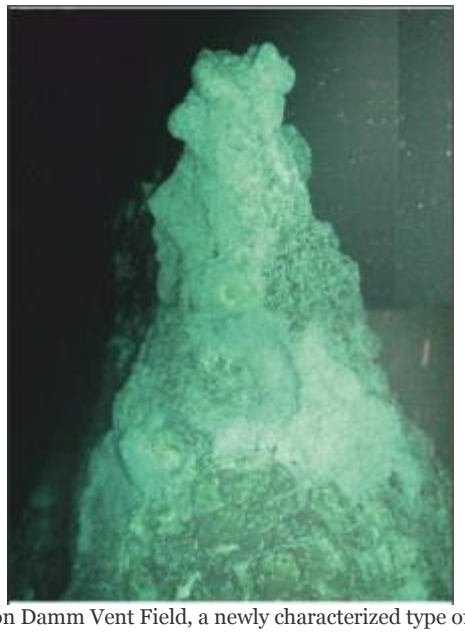
While these features all look very different, they're universally exciting for biologists: with the potential for energetic input separate from the sun, a whole new world of chemosynthetic possibility opened up. Indeed, the resulting analyses were a biological bonanza, revealing new types of metabolisms, innovative symbioses, and bizarre, otherworldly creatures.

But as exciting as these vent-based discoveries have been, the picture is incomplete. The fact that so few distinct types of vents have been cataloged is likely due more to our poor coverage of the ocean bottom rather than any first-order geophysical principles.

In December, however, a team of researchers from the National Oceanography Centre and the University of Southampton in Southampton, England, published a remarkable new finding: a new type of hydrothermal vent.*

At the Von Damm Vent Field (VDVF) in the Caribbean Sea, diverging plates move apart at a mere 15 milimeters per year – much slower than most mid-ocean ridges. This didn't seem to bode well for rigorous venting activity: "It was originally thought that ultra-slow spreading ridges would not be able to support hydorthermal activity," notes Matthew Hodgkinson, a PhD student at the University of Southampton who led the study. "As the spreading rates get slower, you generally have a lower magma supply and less heat to power hydrothermal vent fields."

Which is why the 1997 discovery of hydrothermal venting at the ultra-slow spreading Southwest Indian Ridge came as a surprise. VDVF follows in this tradition, and is even more surprising given its slightly off-axis position. Electron-rich 200-degree (C) water was supporting a rich ecosystem comprised of many endemic species. "We'd expect there to be no magma whatsoever," Hodgkinson explains, "so what's powering this kind of activity? And what are the chemical consequences?"



A talc-dominated spire found at the Von Damm Vent Field, a newly characterized type of hydrothermal vent. (Image: National Oceanography Centre)

During two different expeditions in 2010 and 2013 to the vents, the Southampton researchers tried to get answers, retrieving rock samples and developing high-resolution bathymetric maps of VDVF. When the remotely operated vehicle *Isis* returned to the ship after a day of sampling with a basket full of rocks, "the scientists would swarm around to get their samples," Hodgkinson recalls, "bring them inside, take a photo, and do a quick description." The more detailed analysis of mineralogy and rock precipitation history would be done back in the lab over the coming months and years.

Ultimately, the team found something remarkable: the dominant mineral was talc, a magnesium-rich silicate mineral perhaps best known for its softness and starring role in cosmetics products. It's an unusual mineral to see at the seafloor, likely attributable the high pH values at VDVF (6) compared to those found at canonical black smokers (2-4). With a higher pH, the concentration of dissolved metals remains low, allowing silica to serve as a more prominent mineralogical player.

The heat source itself remains a mystery; the researchers are focusing in on fluid circulation and remnant heat from the lower crust / upper mantle that has been drawn up from depth by tectonic activity.

These putative deep-seated heat sources could allow slow-spreading systems to actually contribute disproportionately to the flux of heat from the mantle to the crust. Faster-spreading mid-ocean ridges have magma chambers close to the surface, restricting the amount of fluid circulation that can happen, but slow-spreading tectonic systems "allow fluids to percolate, and you can mine heat from deeper in the crust," explains Hodgkinson.

Wherever the key ingredients of heat, fluid flow, and distinct chemical repositories are found, there are likely to be live-giving vents on the seafloor. And as we gain a broader perspective on seafloor processes, it seems that such systems are more diverse than ever imagined.

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This month join us for a hands-on project: Ladder bracelets
The club is supplying the materials for each member to make (1) bracelet.
The fee for non-members is $3.00
Members can also purchase additional kits at $3.00

Please bring a tape measure ( to measure your wrist)
Cloth – to keep your beads from traveling

Of course- if you want to use your own beads- please feel free to bring them.

Kerry has informed me that you should have this project done within an hour!