

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 22-28th Wildacres Spring Session

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

December 2016

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		
Asst. treasure Joe LaBarca	631-242-5290	Director – John King	631-775-7035
Secretary – Rebecca LaBarca	516-768-4438	Director –Debbie Winston	516-238-8370
Liaison – Cheryl Neary	516.449.5341 cell	Director & 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!

December Birthdays: **Marty Besso**

Jake Lazarus

Rob Rizzo

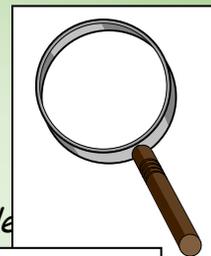
Gary Vorwald

UPCOMING MEETINGS & EVENTS:

2016-2017

*Dec. 19th - Auction & Holidays
Celebration*

*Jan. 8th - Holiday Dinner @
Parlor House Grill in West Sayville
See details below*



Message from the Prez:

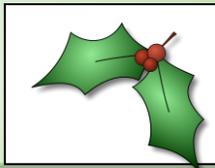
The show is now over and a great big Thank You to all who donated time and effort. We will discuss more at the January 8th Meeting at the Parlor House Grill.

This month is the Chinese Auction. Also please bring either an appetizer or dessert as follows:

Last name A-L- appetizer
M-Z-dessert

Holiday Dinner

When: January 8, 2017 Time: 4:00pm
Where: Parlor House Grill Cost: \$20.00 per person*
298 West Main St. RSVP: Roberta Besso 631.666.8023
Sayville Bring Check to
631-438-0733 meeting on 12/19!
*Members in Good standing
Cost for Guest and other members \$42.00



Please Note:

**New Hours for Our Meeting-
7:00 pm – 8:55 pm**

Auction begins promptly at 7:00pm. If you have any last minute donations, please bring by 6:30 –Thanks!

Field Trips for 2017:

Spring: IRH Bus trip- Rosendale Cement Mine & D&H Canal
May- St Lawrence County – (travel on own)
LIMAGS Bus Trip -August 12, 2017- Springfield, Ma OR
August 11 -15– Michigan
August 18– 21 - Kentucky

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 next month!

Let the Adventures Begin!

So many trees in the forest- all so unique!



Nomination Committee Slate of Officers for 2017:

President	Cheryl Neary
Vice President	Kerry Dicker
Secretary	Rebecca LaBarca
Treasurer	Roberta Besso
Asst. treasure	Joe LaBarca

Directors:
Elaine Casani
Lucy Jackson
Michael Jung
John King
Debbie Winston

If anyone is interested in a position, please see Lucy Jackson.

Thanks to all that volunteered for another year of service to the club.

The vote to accept the Slate will be January 8th



Outside The Box

Synopsis of Last Month's Meeting:

Thanks to Kerry for the wonderful hands-on project of the Tree ornament or sucatcher.

As you can see our trees are all unique- just like in nature!

Also, thanks to Densie for making us laugh!

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!

Scholarship:

The SGMC offers a scholarship to candidates attending college or graduate classes. The candidate should be taking classes in Earth Science. If you know someone interested in applying, see Cheryl for more information. All requests for the scholarship needs to be put in writing and received prior to the February meeting. All applications will be reviewed and any winner(s) will be awarded the check(s) at the annual picnic in July.

- a. All potential candidates must be either a senior in High School or registered in an under-or post- graduate curriculum
- b. Candidate must be enrolled in a science-based program. However, the candidates will be ranked for eligibility based on the following course of study:
 - i. Earth Sciences:
 1. Fields of Geology
 2. Meteorology
 3. Earth Science Educator
 4. Environmental Science
 - ii. Other Sciences
- c. Each candidate will submit a letter requesting said scholarship to be a minimum of 100 words but no more than 250 words describing the purpose of the scholarship award

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 will open on January 1.

We’ll have class descriptions and other information in the January EFMLS News as well as information about Bob and our stellar fall session line-up as well.

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....



Photos courtesy of web

Mark your calendar now!



First Dinosaur Tail Found Preserved in Amber

To scientists' delight, the incredible appendage from 99 million years ago is covered in feathers.

By [Kristin Romey](#)

The tail of a 99-million-year-old dinosaur, including bones, soft tissue, and even feathers, has been found preserved in amber, according to a report published today in the journal *Current Biology*. While individual dinosaur-era feathers have been found in amber, and evidence for feathered dinosaurs is captured in fossil impressions, this is the first time that scientists are able to clearly associate well-preserved feathers with a dinosaur, and in turn gain a better understanding of the evolution and structure of dinosaur feathers. The research, led by paleontologist Lida Xing of the China University of Geosciences, was funded in part by the National Geographic Society's Expeditions Council.

A Telling Tail

The semitranslucent mid-Cretaceous amber sample, roughly the size and shape of a dried apricot, captures one of the earliest moments of differentiation between the feathers of birds of flight and the feathers of dinosaurs. (Learn more about the evolutionary relationship between dinosaurs and birds.)

Inside the lump of resin is a 1.4-inch appendage covered in delicate feathers, described as chestnut brown with a pale or white underside. CT scans and microscopic analysis of the sample revealed eight vertebrae from the middle or end of a long, thin tail that may have been originally made up of more than 25 vertebrae. Based on the structure of the tail, researchers believe it belongs to a juvenile coelurosaur, part of a group of theropod dinosaurs that includes everything from tyrannosaurs to modern birds.

Feathered, but Could It Fly?

The presence of articulated tail vertebrae in the sample enabled researchers to rule out the possibility that the feathers belonged to a prehistoric bird. Modern birds and their closest Cretaceous ancestors feature a set of fused tail vertebrae called a pygostyle that enables tail feathers to move as a single unit. "[A pygostyle] is the sort of thing you've seen if you've ever prepared a turkey," says study co-author Ryan McKellar, curator of invertebrate paleontology at Canada's Royal Saskatchewan Museum.

The dinosaur feathers feature a poorly defined central shaft (rachis) and appear to keel to either side of the tail. The open, flexible structure of the feathers is more similar to modern ornamental feathers than to flight feathers, which have well-defined central shafts, branches, sub-branches, and hooks that latch the structure together. In a report in June of this year by the same research team, Cretaceous-era bird wings preserved in amber revealed feathers remarkably similar to the flight feathers of modern birds.

The current study concludes that if the entire length of the dinosaur tail was covered in the type of feathers seen in the sample, the dinosaur "would likely have been incapable of flight." Rather, such feathers may have served a signaling function or played a role in temperature regulation, says McKellar.

(Could dinosaurs fly?)

The weakly developed tail feathers also suggest that the owner of the Cretaceous tail falls somewhere lower down on the evolutionary tree of theropod dinosaurs, "perhaps a basal [primitive] maniraptoran," Xing suggests, referring to the subgroup of coelurosaurs that includes oviraptorosaurs and therizinosaur. (See the oviraptorosaur that paleontologists have dubbed the "chicken from hell.")

Destined for Jewelry, but With a Silver Lining

The amber sample—formally called DIP-V-15103 and nicknamed "Eva" in honor of paleobotanist Eva Koppelhus, the wife of co-author Philip Currie—comes from a mine in the Hukawng Valley in Kachin state, northern Myanmar. Amber from this region most likely contains the world's largest variety of animal and plant life from the Cretaceous period.

It was one of more than a dozen amber samples with significant inclusions that were collected by Xing and his research team in 2015 at a well-known amber market in Myitkyina, the capital of Kachin state. Two of the other samples contained the dinosaur-era bird wings published earlier this summer.

The majority of Burmese amber is used in jewelry and carvings, and the "Eva" sample had already been subject to shaping by the time it was collected by the researchers.

The modification had a silver lining, however: It offered "a nice cross section" through the tail that enabled the scientists to study the chemistry of the exposed surface, notes McKellar.

That study revealed the presence of ferrous iron, a decomposition product from the blood hemoglobin that was once present in the dinosaur's soft tissue.

"The fact that [the iron] is still present gives us a lot of hope for future analysis, to obtain other chemical information on things like pigmentation or even to identify parts of the original keratin," says McKellar. "Maybe not for this particular specimen, but for other [samples] down the road."

Meanwhile, Xing believes that the "nearing end" of a decades-old conflict between the Myanmar government and the Kachin Independence Army, which controls the Hukawng Valley, will lead to increased scientific access to the amber mines and, in turn, to an increase in spectacular discoveries.

"Maybe we can find a complete dinosaur," he speculates, rather confidently.

<http://www.nationalgeographic.com/contributors/r/kristin-romej/>

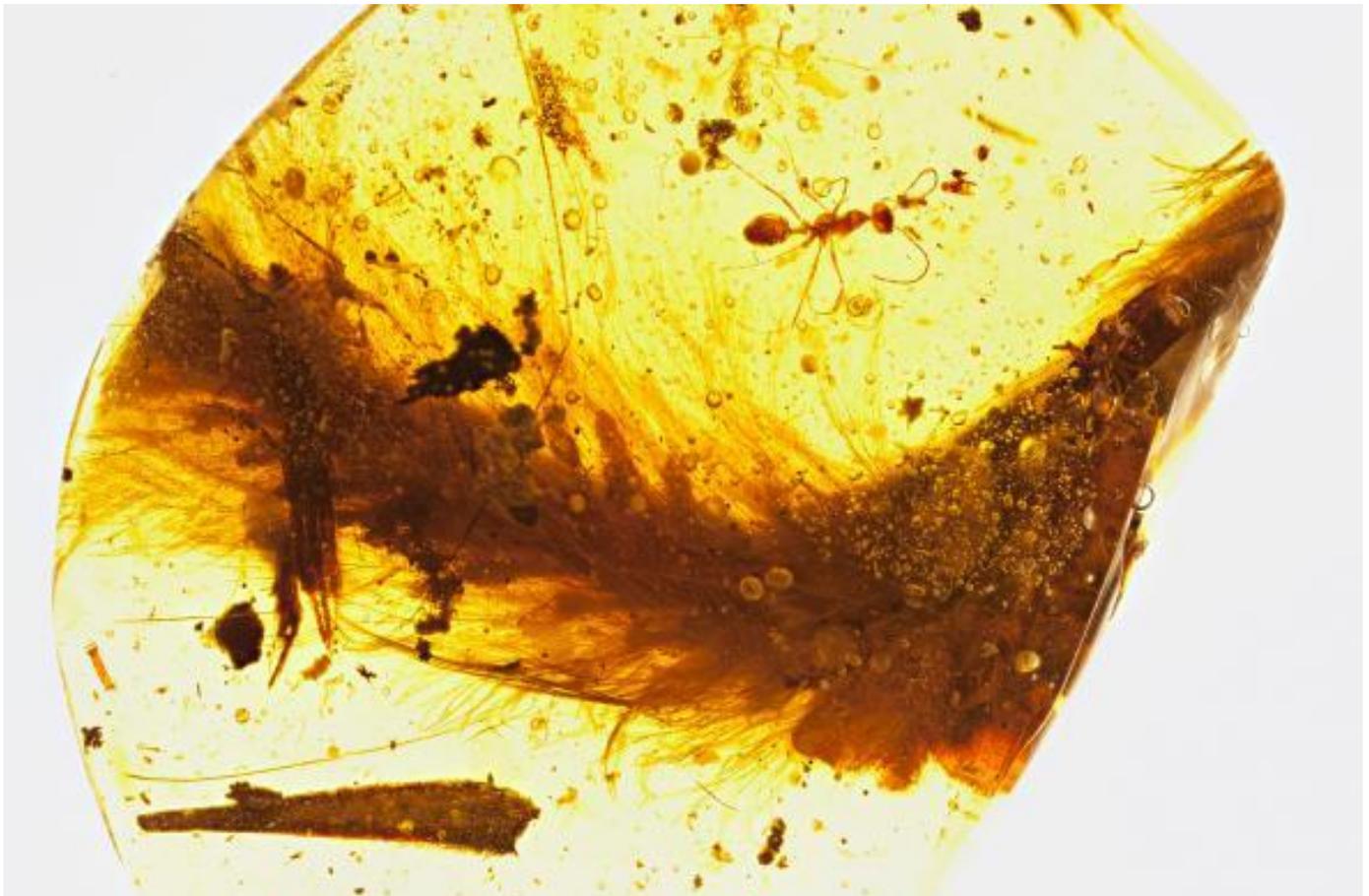
Kristin Romey covers archaeology and paleontology for *National Geographic* magazine and National Geographic News. She is the former executive editor of *Archaeology* magazine and a Fellow of the Explorers Club. Romey holds an A.B. in Greek from Vassar College and an M.A. from Texas A&M's nautical archaeology program. Before joining the National Geographic editorial staff, Romey served as the field operations director for the Society's multiyear archaeological expedition at Lake Issyk Kul in Kyrgyzstan.

Fossilized tree resin is known as **Amber**. Amber is used in jewelry and as an ingredient in perfumes, and a healing agent in folk. Amber, because of its stickiness, sometimes contains animals and plants as inclusions.

According to the myth, when the son of Helios (the Sun) -**Phaëton**, was killed, his mourning sisters became poplar trees and their tears became amber. Amber has been noted

Amber occurring in coal seams is also called **resinite**, and the term **ambrite** is applied to that found specifically within **New Zealand** coal seams.^[5]

Amber is discussed by **Theophrastus** in the 4th century BC, and again by **Pytheas** (c. 330 BC) whose work "On the Ocean" is lost, but was referenced by **Pliny the Elder**, according to whose *The Natural History* (in what is also the earliest known mention of the name **Germania**):^[12]



A segment from the feathered tail of a dinosaur that lived 99 million years ago is preserved in amber. A Cretaceous-era ant and plant debris were also trapped in the resin.

PHOTOGRAPH BY R.C. MCKELLAR, ROYAL SASKATCHEWAN MUSEUM



A micro-CT scan reveals the delicate feathers that cover the dinosaur tail.

PHOTOGRAPH BY LIDA XING