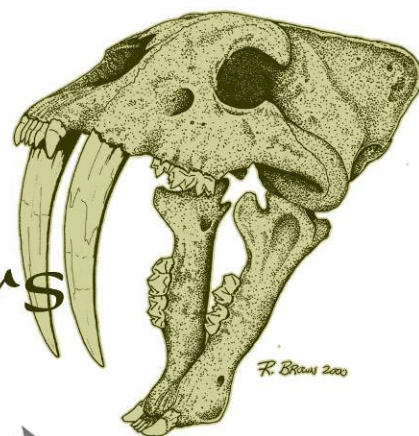


NEWS

Florida Fossil Hunters

Florida Prehistorical Museum, Inc.
dba/ Florida Fossil Hunters
Volume 30, Number 4

SEPT/OCT 2020



From Ye Olde President.....

Hi to all FFH members.

September 19th FFH is having a meeting at the OCS. Topics of discussion will be about FFH Fossil show in October. The show is scheduled and FFH is taking all safety precautions for the Covid19 virus. FFH has purchased a temperature gun, hand sanitizer, plastic gloves, hand sanitizer soap and masks.

FFH will practice all social distancing requirements and mandatory mask wearing at all FFH meeting and events.

Fossil topic for the meeting will be about the Permian Fossils and Tracks. Bring your permian fossils for show and tell.

Salvatore Sansone
FFH President

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

FFH meeting at OSC
Saturday, September 19th
2 pm - Kids' program
3 pm - Meeting

2020 FFH Fossil Fair
Sat., Oct. 10, 9 am - 5 pm
Sun., Oct. 11, 10am - 4 pm
Sanford Civic Center

More events listed on back page
For more info...
www.floridafossilhunters.com

Check floridafossilhunters.com
close to scheduled events to verify
event plans due to COVID-19, event
status may change dependent on
facility closings.

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2020 Fossil Fair Flyer
and Vendor Registration form
are now available at
[floridafossilhunters.com/
fossil-fair/](http://floridafossilhunters.com/fossil-fair/)

2020 FOSSIL FAIR



Online Membership Registration & Renewal NOW Available!

[floridafossilhunters.com/
membership/](http://floridafossilhunters.com/membership/)

*Please maintain your
membership to continue
receiving newsletters.*

& Invite your friends to join.

*Donations form also
available online*

MEETINGS

Next Meeting scheduled for:

Sat. September 19th 2 pm – 5 pm

Orlando Science Center

777 E. Princeton St., Orlando, FL 32803

Topic: Permian Fossils and Tracks

Please bring any Permian fossils you have found over the last few months to share with the club members.

Please check floridafossilhunters.com closer to scheduled events to verify plans due to COVID-19, event status may change dependent on facility closings.

Meetings are held at the Orlando Science Center. Admission and parking is FREE for those attending the meeting. Just let them know at the garage that you are there for the meeting, and they will let you in; same at the gate.

Kids' Fossil Blast

on Saturday, Nov 14th 2-3pm

Now Pay Online!

We can now accept membership payments online!
If you have not renewed this is your last newsletter.

RENEW YOUR MEMBERSHIP NOW!

<https://floridafossilhunters.com/membership>

And more... dealers can register for the Fossil Fair and we can take donations. We hope to also be able to take orders for Fossil Fair shirts online closer to the event.

- Donations: <https://floridafossilhunters.com/donations/>
- Fossil Fair Dealer registration: <https://floridafossilhunters.com/fossil-fair-dealer-registration/>

FFH STILL NEEDS HELP

NEWSLETTER: The club still needs someone to help gather content for the newsletter. It involves gathering information on club activities, looking for info on fossil and mineral shows, and finding articles and resources of interest to the members and then emailing that information to the person who puts the newsletter together. It does require a computer and you should attend the board meetings, if possible.

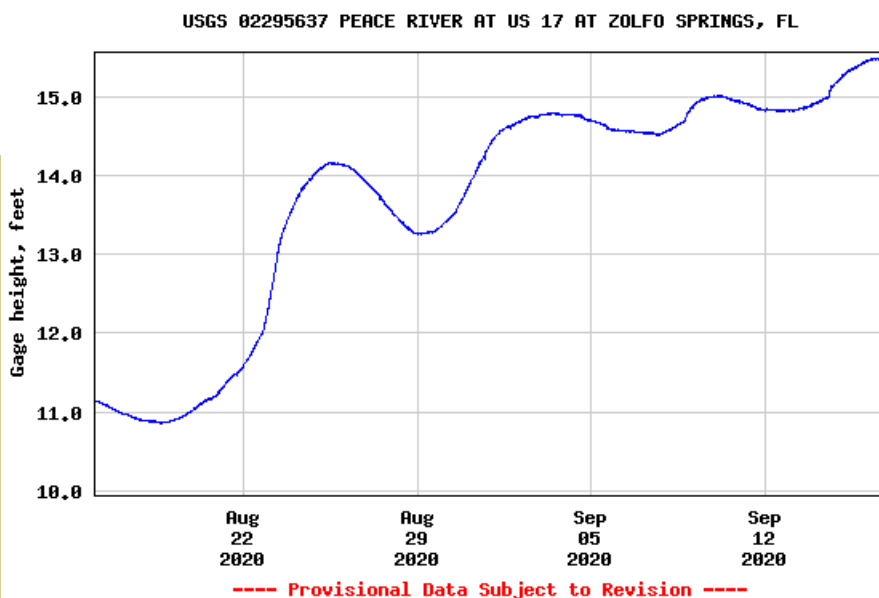
VULCAN MINE: We also need a someone to arrange for Vulcan Mine trips and to recruit trip leaders. I can send you all the contact info and forms.

Would you like more information?

Email us at info@floridafossilhunters.com

Piece on the Peace

Water level from
August 16th to September 16th



Florida Fossil Hunters News

2020 Florida Fossil Hunters Fossil Fair VOLUNTEER

It's that time of year to get together and see wonderful fossils and beautiful minerals and to talk to people who share your enthusiasm for the science of the earth and the life on it. We hope you can join us for all the fun by volunteering some of your time, your extra fossils for the Kids' Pit or the Silent Auction, and bringing some food to share with the volunteers and vendors.

Volunteers are needed at the doors taking temperatures, silent auction, setup, tear down, and more. The Fair is coming up fast! Masks, are required for everyone's protection.

This event raises the funds we need to pay for insurance to cover our members on private land such as Vulcan, the donation we make to the Florida Paleontological Society's Morgan Award for grad students' research and for the other expenses for our organization. You can email Bonnie at bonnierussell62@gmail.com or just show up at the Fossil Fair to volunteer.

Sign up at the Meeting or Contact Valerie First to volunteer!

407-699-9274 Landline | 407-721-0481 cell | vjfirst@aol.com | Facebook Messenger



The Permian Period: The End of An Era

The **Permian Period** was a time of great change on earth. The climate, continents, and living things were all changing dramatically. This is also the time of the ancestors of mammals. It ended with the Great Dying, the greatest extinction ever!

The Permian is the final period of the **Paleozoic Era**. It began about 299 million years ago and lasted until 252 million years ago. The greatest mass extinction that has ever occurred on earth took place at the end of this 47-million-year period. Its name comes from a region of west-central Russia called **Perm Oblast**. This is where rocks from this time were first found.

Pangea Is Now Complete

For most of the Permian, life on Earth was much like it had been in the Carboniferous. Temperatures were cooler because the continent of **Pangea** was moving northward.

Mountains were forming as the supercontinent Pangea moved. When the continent of Siberia collided into the northern part of Euramerica, Pangea was complete. The Ural Mountains were pushed up by this collision.

Conditions Become Dry On Pangea

Pangea was shaped like a large "C." It surrounded the **Tethys Sea**. The rest of the Earth was covered by a huge ocean named **Panthalassa**. Even though the ocean covered much of the earth, Pangea was so large that the interior did not benefit from the ocean waters. Deserts were places in the center of Pangea where the temperatures changed from very cold to very hot. In some places there was rarely or never any rain. Over all the earth was dry during the Permian Period.



Continued on page 6

Florida Fossil Hunters News



First ever preserved grown up **CAVE BEAR** unearthed on the Arctic island

By Anna Liesowska
12 September 2020

Separately at least one preserved carcass of a cave bear cub found on the mainland of Yakutia, with scientists hopeful of obtaining its DNA.

Unique discovery of the perfectly preserved extinct cave bear showing its teeth after up to 39,000 years. Picture: NEFU

More details of the finds are to be announced soon.

Until now only the bones of cave bears have been discovered.

The new finds are of 'world importance', according to one of Russia's leading experts on extinct Ice Age species.

Scientist Lena Grigorieva said of the island discovery of the adult beast: 'Today this is the first and only find of its kind - a whole bear carcass with soft tissues.

'It is completely preserved, with all internal organs in place including even its nose.

"Previously, only skulls and bones were found. This find is of great importance for the whole world.'

Florida Fossil Hunters News



First ever preserved grown up cave bear - even its nose is intact - unearthed on Bolshoy Lyakhovsky island, with at least one preserved carcass of a cave bear cub found on the mainland of Yakutia.

The remains were found by reindeer herders on the island and the remains will be analysed by scientists at the North-Eastern Federal University (**NEFU**) in Yakutsk, which is at the forefront of research into extinct woolly mammoths and rhinos.

Russian and foreign colleagues will be invited to join the study.

The cave bear (***Ursus spelaeus***) is a prehistoric species or subspecies that lived in Eurasia in the Middle and Late Pleistocene period and became extinct about 15,000 years ago.

According to the rough preliminary suggestions the bear could live in Karginsky interglacial (this was the period between 22,000 and 39,500 years).

'It is necessary to carry out radiocarbon analysis to determine the precise age of the bear,' said senior researcher Maxim Cheprasov from the Mammoth Museum laboratory in Yakutsk.

The finder transferred the right to research to the scientists of NEFU, he said.



Bolshoy Lyakhovsky Island, or Great Lyakhovsky, is the largest of the Lyakhovsky Islands belonging to the New Siberian Islands archipelago between the Laptev Sea and the East Siberian Sea in northern Russia. Picture: Alexander Oboimov

'A scientific programme for its comprehensive study will be prepared. We will have to study the carcass of a bear using all modern scientific research methods - molecular genetic, cellular, microbiological and others.

'The research is planned on as large a scale as in the study of the famous Malolyakhovsky mammoth,' said Dr Grigorieva, leading researcher of the International Centre for Collective Use of Molecular Paleontology at the **NEFU's** Institute of Applied Ecology of the North.

Recent years have seen major discoveries of mammoths, woolly rhinos, Ice Age foal, several puppies and Cave Lion cubs as the permafrost melts in Siberia.

[For more pictures, visit" https://siberiantimes.com/other/others/news/first-ever-preserved-grown-up-cave-bear-even-its-nose-is-intact-unearthed-on-the-arctic-island/](https://siberiantimes.com/other/others/news/first-ever-preserved-grown-up-cave-bear-even-its-nose-is-intact-unearthed-on-the-arctic-island/)

Florida Fossil Hunters News

Continued from Page 3

Plants Adapt To Dry Climate

The swamp land dried up and many of the plants that needed the water died out. New plants developed that were adapted to the dryer conditions. They were called gymnosperms. These plants had seeds. One of the earliest of these plants still exists today. It is called the **Ginkgo**. Most of the trees living during this time period were **conifers**. Conifers are trees with seeds in cones.

Another gymnosperm from this time was glossopteris. Glossopteris forests eventually covered much of southern Gondwana. They are famous as the fossils that helped to prove plate tectonics. They are found on South America, Australia, Africa, and Antarctica, continents that made up southern Gondwana.

Check out some of the **Educational Materials** for sale on our sister site fossilicious.com.

The Dry Climate Favors The Reptiles

The changing climate affected how animals were evolving also. Amphibians that had depended on the swamps for a moist habitat began to die out. They were replaced by the reptiles whose bodies could live in the very dry air and



the wide changes in temperature. **Pelycosaurs** evolved from their beginnings in the Carboniferous. These animals look like a reptile, but have skull characteristics that make them more like a mammal. The most famous of the pelycosaurs is the **Dimetrodon**. Like many other pelycosaurs, Dimetrodon had a large sail on its back. The sail could have been used to help keep the body temperature stable.

Therapsids developed during the Permian Period also. These animals are the ancestors of mammals and share some bone structure characteristics. Some of the therapsids from the Permian period may have had fur to help them adapt to the temperature changes.

Coral Reef Building

The corals began to produce again in the Permian Period. After near-extinction at the end of the Devonian period, corals were now making huge reefs. Many corals did not survive the mass extinction that came with the end of the Permian. The horn corals and tabulate corals that had built many reefs in the Devonian period were all gone after the Permian.

The End of The Permian Period

The corals were not the only species to become extinct. The **Permian Extinction** was largest mass extinction that

had ever occurred. No extinction since has killed so much of the life on the planet. In the seas, 90 to 95 percent of the species went extinct or were severely harmed. On land the damage was less severe, but some species, like the pelycosaurs, died out completely.



Mass Extinction Theories

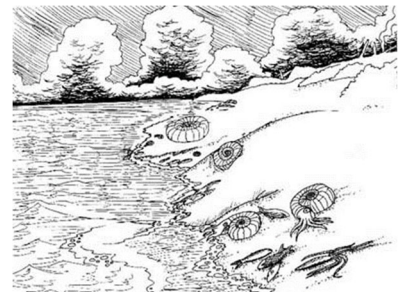
Volcanic Activity

There are many theories about the cause of this great extinction. It could have been caused by huge amounts of volcanic activity, more than any that has been experienced since written history. We know from recent volcano eruptions that large eruptions can cause the temperature to drop all around the globe. In Siberia there is a place called the Siberian Traps. They were created by huge amounts of volcanic activity over millions of years. One estimate on the amount of lava from this time is equivalent to covering the entire United States 1 mile deep!

Recent studies of the area show that the eruptions caused underlying coal beds to ignite and burn. The resulting release of CO2 adding to the outpouring of gasses from the volcanos caused a major global warming event.

Comets and Meteors

Another theory is that a comet or meteor could have hit the planet, setting off a series of events that would have caused changes to temperature and sea levels, including the formation of glaciers. Others think that the formation of a land mass as huge as Pangea upset the balance of climate that happens when the ocean waters can affect more of the land surface.



No matter what the cause, the extinction event that took place at the end of the Permian Period was so important that it brought the end to the Paleozoic Era. Life on Earth would never again look as it had during the Paleozoic Era.

Learn more at

www.fossils-facts-and-finds.com/permian-period.html

Florida Fossil Hunters News

Florida Fossil Hunters

is a fun and educational group whose goal is to further our understanding of the prehistory of Florida. We encourage family participation and welcome explorers of all ages.

Membership is \$17 per year. Other household members may be included at no charge.

Meetings are usually held on the third Saturday of the month but may vary with club activities. Check the website for the date and location of the next meeting or call one of the officers.

Officers:

President	Salvatore Sansone	(321) 278-9294
Vice President 1	Steve Sharpe	(352) 552-2296
Vice President 2	Paul Hardin	
Secretary		
Treasurer	David Dunaway	(407) 786-8844

Chairs:

Field Trips	OPEN	
Fossil Fair	Valerie First	(407) 699-9274
Fossil Auctions	Dave Dunaway	(407) 786-8844
Fossil Bucks	Dave Dunaway	(407) 786-8844
Fossil Lotto	Ed Metrin	(407) 321-7462
Membership	Ken Sellers	
Newsletter		
	Elise Cronin-Hurley	info@elisech.com
Photography	John Heinsen	(407) 291-7672
Facebook	Salvatore Sansone	
	Ken Sellers &	Paul Hardin
Webmaster	Elise Cronin-Hurley	info@elisech.com

Board of Directors:

Marge Fantozi	
Valerie First	
Paul Hardin	
Cindy Lockner	
Ed Metrin	(407) 321-7462
Ken Sellers	

Membership Application

**Mail in this form or online at
www.floridafossilhunters.com/membership**

Names: _____

Associate Members: _____

Address: _____

City: _____

State: _____ Zip: _____ Phone: _____

e-mail: _____

____ New ____ Renewal

Please list any interests, experience, talents or just plain enthusiasm, which you would like to offer to the club:

Membership is \$17 per year. Our membership year runs from January to December.

Please make your checks payable to:

Florida Fossil Hunters
Post Office Box 540404
Orlando, Florida 32854-0404

Associate members are people in the same household, included at no extra charge, 2 adult votes per household.

Newsletter Policy

Articles must be submitted by the first of the month to be included in that month's newsletter. These can be mailed to the above Post Office Box or e-mailed to: info@floridafossilhunters.com. Articles can be sent as text in the e-mail or in Microsoft Word files (.doc or .docx).

Please note in subject of email 'FFH'. _____

**Florida Prehistorical Museum, Inc.
dba/ Florida Fossil Hunters**

Florida Fossil Hunters News

Florida Fossil Hunters Mark Your Calendar

FFH Scheduled Meeting Dates at the Orlando Science Center

September 19th: 3:00-5:00pm

November 14th 3:00-5:00pm
Kids (2:00pm)

December No Meeting,
Christmas Party Plans tba

FFH Fossil Fair

Sat., Oct. 10, 9 am - 5 pm

Sun., Oct. 11, 10am - 4 pm

Sanford Civic Center

Vendor Registration now available online.

**Please check the website for
the most current meeting information.**

See inside for more information on events.

Join Our Facebook group, Search:
[Florida Fossil Hunters](#)

facebook

Be Green

Email Bonnie at bonnierussell62@gmail.com
to receive the newsletter via email.



Visit us online at www.floridafossilhunters.com

Articles and comments should be sent to: info@floridafossilhunters.com

Florida Fossil Hunters

Post Office Box 540404

Orlando, Florida 32854-0404



Florida Fossil Hunters News

2020 FOSSIL FAIR

Florida Fossil Hunters

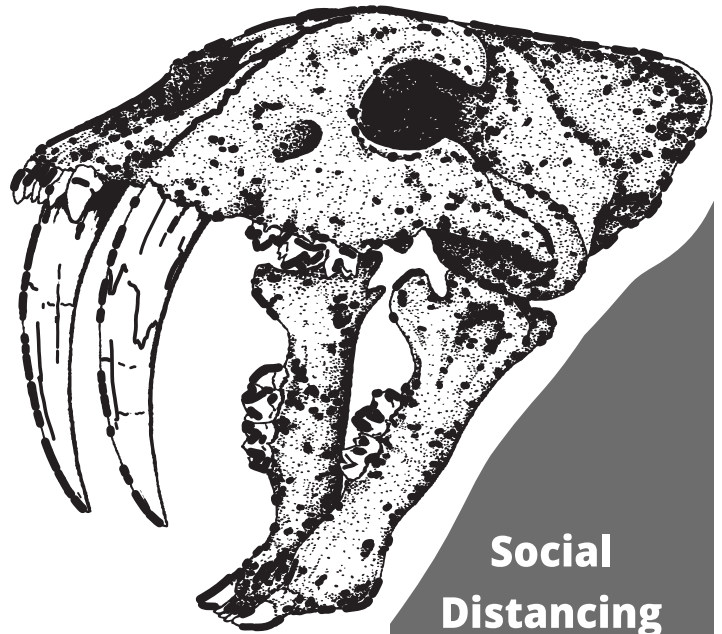
Twenty-ninth Annual Fossils, Rocks, Gems & Minerals

Saturday, October 10, 2020

9:00am - 5:00pm

Sunday, October 11, 2020

10:00am - 4:00pm



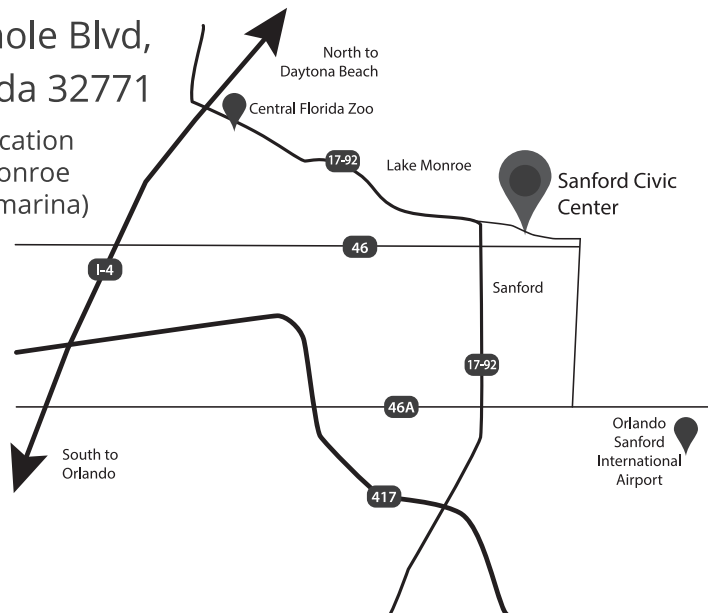
\$4.00 Adults | \$1.00 Children

**LEARN to dig in Florida and
see what can be discovered!**

New Location! Sanford Civic Center

401 E. Seminole Blvd,
Sanford Florida 32771

A picturesque location
right off Lake Monroe
(across from the marina)



For more information on the 2020 Fossil Fair contact us by email at info@floridafossilhunters.com, call 407-699-9274, or check the website at

www.floridafossilhunters.com

**Social
Distancing
& Face Masks
are required
to enter
the show.**

Raffles

Vendors

**Silent
Auctions**

**Educational
Displays**

**Airconditioned!
INDOORS!**

**There will not be a
Kids Dig Pit this year
due to COVID-19
concerns**