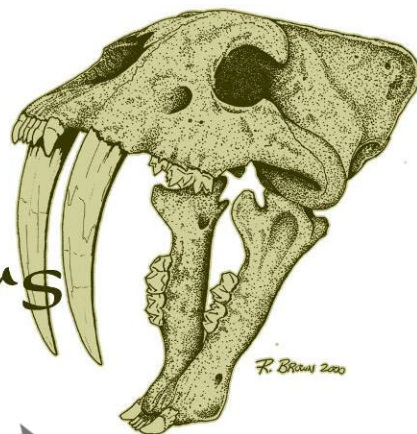


# NEWS

## Florida Fossil Hunters

Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters  
Volume 28, Number 9

December 2018



### From the desk of the President.....

**Welcome to all and Happy Diggings.** Now that Thanksdigging has come & gone, Merry Digging will be here before you know it. Then Happy New Digging arrives. Wow, a year goes fast. Guess you can tell what's on my mind.

**Peace River** is still dropping as is the warmer temps we were enjoying. If you get the chance to go, embrace the opportunity. It would be a good break from the busy holidays.

The **December 15th meeting** will be our Holiday Party and Fossil Bucks Auction. Bring your hard earned fossil bucks and some yummys to share (cookies, cupcakes, etc.) Dave Dunaway & Ed Metrin will be bringing in a sack full of goodies to bid on. There will also be some small give-a-ways.... everyone will leave happy.

At our board meeting, next year's schedule will be hammered out, so watch your newsletter, emails, etc.

### Thank you

At the close of another year as your President, I'd like to thank you all ... officers, friends, family, dealers, members new & old, and all the folks at the Florida Museum of Natural History ... for your support. I could not do anything without **you**. (especially Bonnie for putting up with the President)

Happy Holidays & New Year.  
Russell Brown

**It's Time to  
Renew for 2019**



*It's time to renew your membership for 2019.  
Florida Fossil Hunters is still a bargain at \$17 per household.  
If you just joined the club this Fall, your membership is good through 2019.*

## Coming Events

### UPCOMING MEETINGS at the Orlando Science Center

**Saturday, Dec. 15th**

2 PM - Kids' Program

3 PM - Meeting & Fossil Bucks  
Auction

**Saturday, Feb. 16th**

3 PM Meeting

*More events listed on back page  
For more info...*

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

## Table of Contents

Fragments .....	2
Peace River .....	2
Kids Fossil Blast !!! .....	2
Cambrian Fossil Bed .....	4
Whales lost their teeth before evolving hair-like baleen in their mouths .....	5
Vulcan Mine Field Trips .....	6
Contacts & Membership Info ..	7
Calendar .....	8
Florida Fossil Hunters Fossil Bucks Auction List .....	9
Peace River Access Map .....	10
Annual Bone Valley Gem, Mineral and Fossil Show Lakeland, flyer .....	11

# Florida Fossil Hunters News

# Fragments

## December 15th Meeting - 3 pm Holiday Party & Fossil Bucks Auction

Gather up all those fossil bucks you got for attending meetings, field trips, & volunteering. It's time to turn them into treasures at the auction!

For the Holiday part, we can partake of the yummy treats that all of us members bring: cookies, brownies, candy, etc. The club will supply water.

### What are Fossil Bucks?

The Florida Fossil Hunters have their own version of "money" called Fossil Bucks that are given to members for participating in club activities or making fossil donations. We hold an annual auction in which members can use their Bucks to bid on items. There will also be opportunities to use your Bucks at each meeting on various items.

If you really want to earn lots of Bucks, take over the newsletter. You'll earn 1,000 Bucks per issue.

### Mineral & Fossil Show

The Tomoka Gem and Mineral Society presents our 48th Annual Jewelry, Gem and Mineral, Fossils Show and Sale on

Sat., Jan 19th, 2019 -  
10am - 6pm and  
Sun., Jan. 20th, 2019 -  
10am - 5pm

Volusia County Fairgrounds  
3150 E. New York Avenue  
Deland, Florida  
(½ MILE EAST OF I-4, EXIT 118)  
Come join in the fun!  
Entrance fee is \$4.00

## Kids' Fossil Blast

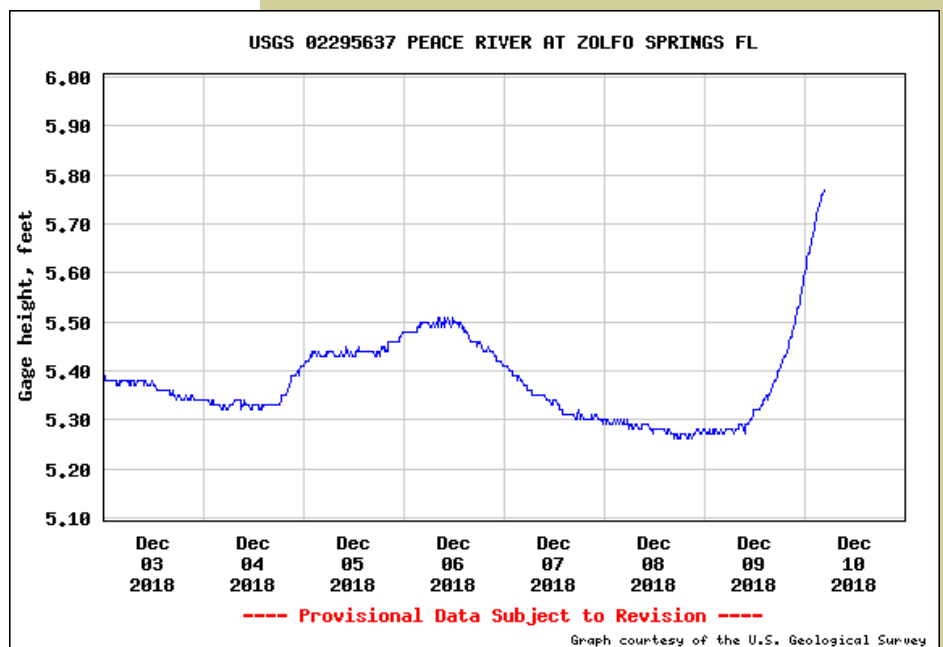
The Florida Fossil Hunters have their own  
Our next program will be on  
**Saturday, Dec. 15th** at 2:15 pm.  
Jordan will lead you on a journey to the Cambrian Explosion and the wonders that existed there.

Kids' Fossil Blast is an informal, hands-on experience with real fossils, casts, etc. aimed at kids ages 5 to 14. Check the newsletter and website for future programs as we get the information.

## Piece on the Peace

It's what we've been waiting for..... no, not the holidays. The Peace River is finally down to a level where we can dig & sift and find fossil treasures.

If you want to go with someone call Steve Sharpe. He goes there a lot.  
352-552-2296



# Florida Fossil Hunters News

## Permian Monsters: Life Before the Dinosaurs

Sept. 29, 2018-May 5, 2019

\$8 adults, (\$7 Fla. residents & seniors), \$5.50 ages 3-17, free to UF students & Museum members.

Step back in time 290 million years when distinctive creatures dominated life on land and sea, and learn about the greatest extinction the world has ever seen. This unique exhibition brings the past to life with fossilized skeletons and full-sized replicas of the animals that ruled the world before the age of dinosaurs, in a time known as the Permian. Gain a glimpse into the period with paintings from award-winning paleo-artist Julius Csotonyi. See models of giant insects, bizarre-looking sharks and strange reptiles with mammal-like characteristics. Meet the top predator of the time, the giant saber-toothed Gorgonopsid, and sift through interactive dig pits.

## MORE IN THIS ISSUE

Check out the extra attachments in the back of this issue,

- Fossil Bucks Auction List for December 15th Meeting
- Peace River access map
- Annual Bone Valley Gem, Mineral and Fossil Show Lakeland, flyer  
Saturday, February 24th



## VULCAN MINE FIELD TRIPS

Vulcan Mine is wonderful for adults and especially kids!

Saturday, Jan. 12th & Saturday, Feb. 9th

Check out Page 6 for more information on Vulcan Mine field trips.

# Florida Fossil Hunters News

# CAMBRIAN FOSSIL BED

The Burgess Shale, part of the Rocky Mountains in Canada, is one of the largest homes to fossils as old as 540 million years—the Cambrian period. Ever since its discovery by Charles Walcott in 1909, Burgess Shale has been a mesmerising spot for archaeologists, palaeontologists and research enthusiasts. Since 1909, with every excavation, Burgess Shale has been continuing with giving out information about unfamiliar species of the Cambrian period.

In their recent excavation this year, a team led by Paleontologist Cedric Aria of the Nanjing Institute of Geology and Paleontology, China and Jean Bernard Caron, curator of invertebrate paleontology, Royal Ontario Museum, Canada has also reported to have found fossils of archaic period. They have found the fossils of new species of butterflies, fish hyoliths (the ice cream cone shaped fossil) etc.

## Why Fossils of the Cambrian Period are Important

The Cambrian period marked the most profound change in life on earth. Almost all the metazoan species made the first appearance on this earth during the Cambrian period only. Metazoans are the species that undergo development starting from an embryo having three layers of tissue, namely ectoderm, mesoderm and endoderm. Before this period of time, the majority of all living organisms, in whole, were simple, unicellular, and smaller. Actually, it is the Cambrian period when complex multicellular organisms started becoming common.

The Cambrian period, the first geological period of the Paleozoic era, lasted for some 55.6 million years. It started 541 million years ago at the end of the preceding Ediacaran period and flourished the life forms till its end towards the beginning of the Ordovician period about 485 million years ago.

How Cambrian species are related to the members of the today's animal kingdom is an important aspect of how animals have evolved in time. Scientists and researchers are engaged for many decades in deciphering the factors that triggered the Cambrian evolutionary explosion. There have been reports that many species of that period were advanced in terms of anatomy and physiology, nevertheless many of them seem to be unrelated to the advanced animals of later period. Conversely, there had also been species in the Cambrian period that are found to be related to the animals of later times.

## The Burgess Shale

The Burgess Shale is referred to the rocky part found in the Canadian rocky mountain the Burgess Pass. Shale is the sedimentary rock consisting of silt and mud. Located in the Yoho National Park in British Columbia, Canada, the Burgess Shale is home to an enormous variety of metazoan fossils existing in the Cambrian Period. First discovered by Walcott in 1909, the creepy crawlies of Cambrian time buried in the Burgess Shale have stunned people with unearthing of ever new archaic species with each excavation done here.

But in recent years, many excavations have shown that the Rocky Mountains range of fossil extends much beyond what Walcott found. Among the excavators, Caron's team is one of the leading one. Caron has shown that the area in the Burgess Shale extends many kilometres beyond Walcott's site. His latest visit to the Cambrian tapestry was the one made this summer. Each new step had to reveal the secret of striking views of unfamiliar animals—all archaic. The little fish relative *Metaspriggina*, the *Tokummia* etc. are the few to name.

## How Cambrian Species are Related to Modern Animals

Since the time of Walcott, it has been a much-debated issue how to establish the link between the Cambrians and today's animals. Walcott classified his unknown fossils within known groups taking into account the fact that some of the Burgess Shale

fossils, for example brachiopods, persisted to live after the Cambrian with some making their presence even today. This led him to conclude that almost all creatures that resembled today's arthropods were crustaceans.

Later on, paleontologists developed other ways of classifying and establishing the link between the ancient animals with that of the modern ones. For example, Stephen Jay Gould of Harvard University in his book "Wonderful Life: The Burgess Shale and the Nature of History" found many Cambrian animals, such as the aptly named Hallucigenia which was a worm with legs and hard spines, seemed unrelated to later animals. Gould says that species of these kinds are the forgotten experiments of evolution.

Contemporary paleontologists found another way to settle the issue. For example, consider the arthropods. In a family tree, the recent branches that signify the living arthropods like that of spiders, insects, crustaceans etc. constitute the "crown" group. But some of the fossils in the Burgess Shale probably appeared much before the crown group animals and they belong to "stem" which branched off from the family tree before the crown arthropods appeared. The stems don't have any more descendants. Newer fossils found in the recent excavations of Caron also help support this way of classifying. Caron, in 2015, argued that his specimens of Hallucigenia have the features suggestive of the fact that the animal belongs to one such stem group of the velvet worms. The velvet worms still crawl around the tropical forests.

With the finding of ever new species with new excavations in the Cambrian tapestry, finding the link with modern animals and also finding the way the animal kingdom bloomed and finding the evolutionary aspects involved, are key challenges for archaeologists and paleontologists.

## Whales lost their teeth before evolving hair-like baleen in their mouths

Newly described fossil whale in museum collections reveals a surprising intermediate step in their evolution

Date: November 29, 2018

Source: Smithsonian

*Summary: Rivaling the evolution of feathers in dinosaurs, one of the most extraordinary transformations in the history of life was the evolution of baleen -- rows of flexible hair-like plates that blue whales, humpbacks and other marine mammals use to filter relatively tiny prey from gulps of ocean water. Now, scientists have discovered an important intermediary link in the evolution of this innovative feeding strategy: an ancient whale that had neither teeth nor baleen.*

Rivaling the evolution of feathers in dinosaurs, one of the most extraordinary transformations in the history of life was the evolution of baleen -- rows of flexible hair-like plates that blue whales, humpbacks and other marine mammals use to filter relatively tiny prey from gulps of ocean water. The unusual structure enables the world's largest creatures to consume several tons of food each day, without ever chewing or biting. Now, Smithsonian scientists have discovered an important intermediary link in the evolution of this innovative feeding strategy: an ancient whale that had neither teeth nor baleen.

For the whole article,  
visit [sciencedaily.com](http://sciencedaily.com)

[www.sciencedaily.com/  
releases/2018/11/181129142423.htm](http://www.sciencedaily.com/releases/2018/11/181129142423.htm)

# Florida Fossil Hunters News

# VULCAN MINE Field Trip

*Vulcan Mine near Brooksville*

## FIELD TRIP LEADERS

**Saturday, Jan 12th & Feb 9th**

### TRIP LEADERS: NEEDED

Steve Chambers will be leader for both months.  
ph: 321-806-0763 email: [stchamb1@outlook.com](mailto:stchamb1@outlook.com)

### **MUST HAVE PAID YOUR 2019 DUES**

*(you can bring a \$17 check with you)*

This is one of the few places where kids are allowed in to fossil hunt. Be sure to stay with them since there are steep cliffs, sharp rocks, and small sinkholes.

Meet on the driveway loop near the entrance to the Mine by 8:30 am to sign releases before we are escorted into the mine around 9 am. We get to drive our vehicles in so you can have your coolers, snacks, and equipment handy while you hunt. They usually allow us to dig until noon and sometimes people can stay till 2 pm.

## ALL PARTICIPANTS MUST

**MUST BE ESCORTED  
INTO AND OUT OF THE  
MINE. NO EXCEPTIONS.  
IF YOU ARE LATE,  
YOU DO NOT GET IN.**

**THERE ARE  
NO RESTROOM  
FACILITIES AT  
VULCAN MINE,**  
other than the boulders  
and the hills.

**Directions:** The trip will take approximately 2 hours from Orlando to Vulcan Mine. Be sure to allow for extra time to stop at a restroom before you get there.

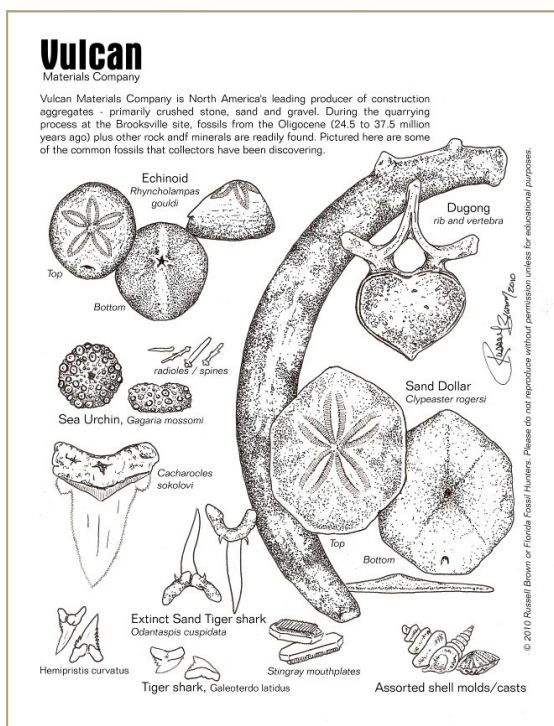
From Orlando take Hwy. 50 west (or the 408 west to the FL Turnpike, take exit 272 and then continue west on Hwy. 50) to Brooksville. Follow 50A/98 North through Brooksville and turn right on Ponce De Leon Blvd. (Hwy 98 North). Go approximately 10 miles. Vulcan/Cemex will be on your left. The address is 16313 Ponce De Leon Blvd, Brooksville, for those of you who want to download a map.

If you follow the truck route for Hwy. 50, you have to turn right onto 41, and then take the fork to the left to hook up with Ponce De Leon Blvd/98. There are several fast food places on 41 where you can take advantage of the bathroom facilities. Be sure NOT to keep following 41 north. You want to take 98 north from Brooksville.

This is mostly surface collecting with occasionally a little digging to pry out a specimen. Bring a small trowel or screwdriver or rock hammer, and a bucket to put your fossils and rocks into. You may want to bring small containers and tissue for fragile fossils.

Wear a hat, sturdy shoes, long pants (some of the rocks are sharp), and sunscreen. Bring lots of water and/or drinks and some snacks or lunch to eat.

We find mostly echinoids and sometimes sea urchins, pieces of bone, or other fossils are found. We also find chert rocks. This is the material that the Indians used to make their arrowheads and tools.



**TRIPS  
JAN 12 & FEB 9**

*ID Sheet above is available on  
the field trip and website.  
[floridafossilhunters.com/Field\\_Trips.htm](http://floridafossilhunters.com/Field_Trips.htm)*

***You MUST be a member of the  
club for insurance purposes  
to participate in this field trip.***

***MUST have paid your 2019 dues  
(you can bring a \$17 check with you)***

# 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	Russell Brown	(352) 429-1058
Vice President 1	Steve Sharpe	(352) 552-2296
Vice President 2	Salvatore Sansone	
Secretary	Bonnie Cronin	(352) 429-1058
Treasurer	Sara Morey	(619) 302-4863

## Chairs:

Education	Bonnie Cronin	(352) 429-1058
Field Trips	<b>OPEN</b>	
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	Bonnie Cronin	(352) 429-1058
Newsletter	Bonnie Cronin	(352) 429-1058
	Elise Cronin-Hurley	(407) 929-6297
Photography	John Heinsen	(407) 291-7672
Facebook	Paul Hardin	
Webmaster	Elise Cronin-Hurley	(407) 929-6297
	elise@liseydreams.com	

## Board of Directors:

Ed Metrin	(407) 321-7462
Dave Cass	(407) 409-9095
Marge Fantozi	
Marcia Wright	
Cindy Lockner	
Dave Dunaway	
Salvatore Sansone	

# Membership Application

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. All renewals are done in December and January.

## 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: bonnierussell62@gmail.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.**

# Florida Fossil Hunters News

# Florida Fossil Hunters Mark Your Calendar

See inside for more information on events.

**Sept. 29, 2018 - May 5, 2019**

Permian Monsters  
FL Museum of Natural History

**Saturday, Dec. 8th**

Vulcan Mine Field Trip

**Saturday, Dec. 15th**

2 PM - Kids' Program

3 PM - Meeting & Fossil Bucks Auction

**Saturday, Jan. 12th**

Vulcan Mine Field Trip  
Leader: Steve Chambers

**Jan. 19th & 20th, 2019**

Tomoka Mineral & Fossil Show  
Deland, FL

**Saturday, Feb. 9th**

Vulcan Mine Field Trip  
Leader: Steve Chambers

**Saturday, Feb. 16th**

3 PM Meeting

**Sat., Feb. 24th, 9 am - 4:30 pm**

Bone Valley Gem & Fossil Show  
Lakeland, FL

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

**facebook**

## Be Green

Email Bonnie at [bonnierussell62@gmail.com](mailto:bonnierussell62@gmail.com)  
to receive the newsletter via email.



Visit us online at [www.floridafossilhunters.com](http://www.floridafossilhunters.com)

Articles and comments should be sent to: [bonnierussell62@gmail.com](mailto:bonnierussell62@gmail.com)

## Florida Fossil Hunters

Post Office Box 540404

Orlando, Florida 32854-0404



## Florida Fossil Hunters News

# Fossil Bucks Auction List

December 2018

J- Junior (kids) | N- New member (less than 1 yr)

1. Beaver Skull
2. Pyrite Sun
3. Belemnite
4. Petrified Wood Slab
- N 5. 3 Fossil Cases - New Member
- J 6. Orthocerus - Jr. Member
7. Geode
8. Fly in Case
9. Alligator Skull
10. Petrified Wood
- N 11. Sifter - New Member
- J 12. Shark Tooth Necklace - Jr. Member
13. Crocodile Coprolite
14. Agatized Coral
15. Mammoth- Small Skeleton Model
16. Ammonite
17. Fossil Ivory
18. Shark Teeth (Suwannee River)
19. Fossil Leaves (Cretraceous, Texas)
- 20 Drusy Quartz Stalagmite

***Rule: Two successful bids per household.***

***Children get one successful bid each.***

Florida Fossil Hunters News

# Peace River

Highway 17 runs south out of Bartow along the Peace River to Arcadia. You can easily put in at these points with a canoe. Just remember...you park at these areas at your own risk. Lock up and don't leave valuables in your vehicle. There are shallow areas that can be accessed without a boat in Wauchula, Zolfo Springs, Gardner and Arcadia.

**Access point #1**, Ft. Meade Outdoor Recreation Area located on the southeast side of the US 98 bridge over the river, just east of Ft. Meade city limits.

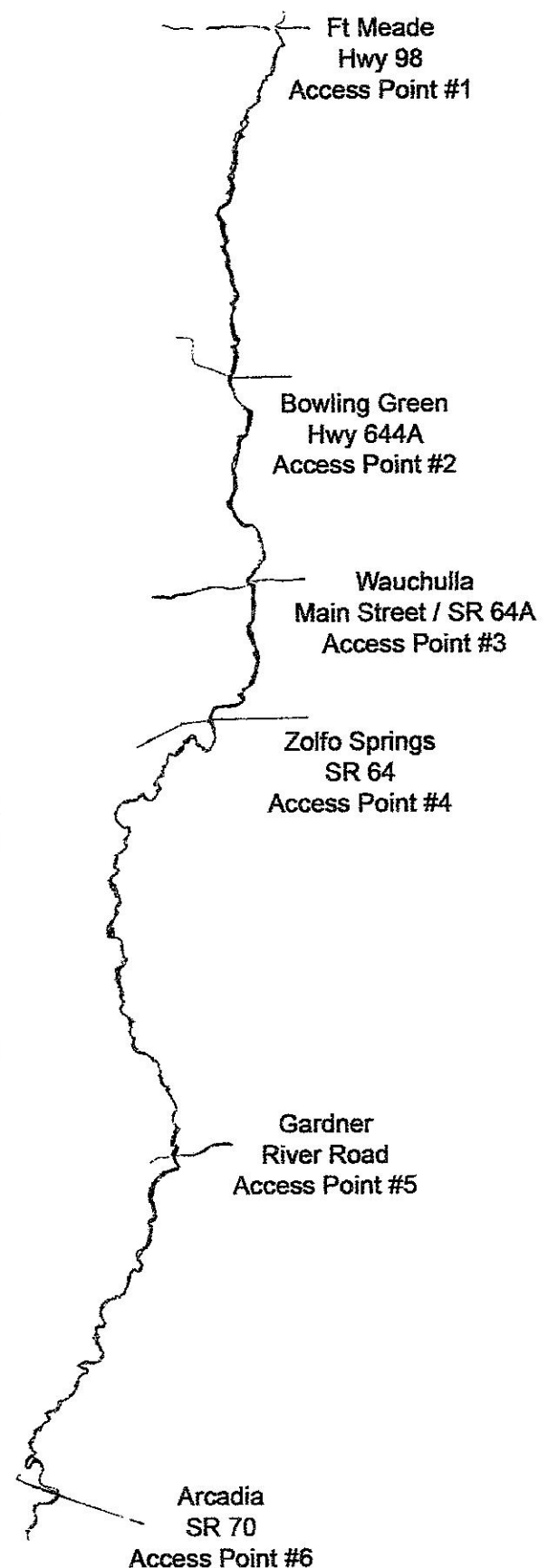
**Access point #2**, Bowling Green, 644A bridge. From 17 in Bowling Green, turn east onto Main St., following the brown park signs, then turn south onto Lake Branch Rd. (CR 644A) and go approx 1 mi. You can either park your vehicle at Paynes Creek State Park (100 yds. west of the bridge) or park your vehicle under the bridge. You cannot collect fossils until you are south of Paynes Creek Park..look for the sign on the west side of the river.

**Access point #3**, Wauchula Crews Park. From Hwy. 17 in Wauchula, turn east onto Main St. (SR 64A/CR 636) Go approx. 1 mi. and look for the park on the left before the bridge. You can walk under the bridge from the park and find shallow areas to dig without having a boat.

**Access point #4**, Pioneer Park, Zolfo Springs. From Hwy. 17 turn west onto SR 64. The park entrance will be on your right. OR You can go to Thousand Trails campground just north of the Zolfo Springs bridge, pay a \$5 fee to park your car, and walk into the shallow areas along the campgrounds.

**Access point #5**, Gardner Boat Ramp. Take Hwy 17 south from Zolfo approx. 13 mi. Turn right onto River Rd. (becomes a dirt road). Go approx. 1-1/2 mi. to the boat ramp. There is a small shallow area that can be walked into for hunting.

**Access point #6**, De Soto County Park, Arcadia. From Hwy 17 in Arcadia, head west on SR 70 for approx. 1.5 mi. to the bridge. Park entrance is located on the west side of the bridge.



# Annual Bone Valley Gem, Mineral and Fossil Show

-----Stones and Bones-----

**Saturday – February 24, 2018**

**9:00am - 4:30pm**

**First Presbyterian Church of  
Lakeland**

**175 Lake Hollingsworth Dr.  
Lakeland, Fl. 33801**

**Adult Admission \$3.00**

**Children under 18 and Teachers Free**

**Hourly Door Prizes**

**Spin & Win Mineral Wheel**

**Kids Treasure Dig**

**Demonstrations**

**Educational Displays**

**Silent and Chinese Auctions**

**\*No ATM on premises**

**Teachers: Come by the club table and enter to win a  
special prize for you and your school**

**For more information, go to [www.bonevalley.net](http://www.bonevalley.net) or  
check us out on Facebook at Bone Valley Gem, Mineral  
& Fossil Society, or call show Chair Kim Price at (863)  
412-9156.**

The Imperial Bone Valley Gem, Mineral and Fossil Society is a not-for-profit organization. All proceeds go to scholarship and promotion of education and interest in the various earth sciences, in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary, and related subjects.

**Fossils &  
Fossil  
Related  
Items**



**Mineral Specimens  
Tools  
& other  
Lapidary  
Supplies**



**Jewelry  
Cabochons  
Gemstones**



**Explore  
Learn  
Discover**

