

Riverbluff Cave: An Accidental Treasure

By Matthew Forir

ON September 11, 2001 a crew building a new road in southern Greene County blasted into a cave. Calls went out to everyone. Dr. Ken Thomson and I were finally called to come look at the cave.

When we got to the cave I expected the usual small mud-filled hole in the ground. What I got was a 40-foot long by 20-foot high crack in the rock giving me a sneak peek at what Riverbluff Cave had to offer. I could see the beautiful white cave formations shining



Above Right: Construction site that opened the cave. The opening is at the base of the rocks.



Left: The first day the cave was open, looking into the man-made entrance at the main room of Riverbluff Cave.

Bottom Left: A glimpse inside the opening of Riverbluff Cave.



in the sunlight. My mind wondered what else might be in the cave.

Being a paleontologist and seeing a newly discovered cave made me excited about the potential for all types of fossil bone and tracks of extinct animals. I could not wait to enter the cave.

The first time in the cave was an exploration trip. It was my job, along with my assistant, Lisa McCann, to explore the cave a few hundred feet to see how big it was and to look for important features in the cave. I was looking for bone and tracks. We entered the first large room slowly, always looking before we took a step. Moving past the large white columns and around

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the delicate flowstone, we made our way toward the back of the cave.

The first obstacle to cross was a small lake bed. We worked our way around it, making our way along a 14-foot high clay wall. I stopped to tie my boot and when I looked up near the top of the wall I saw a claw mark, 12 feet up on the wall. It was 8 inches wide and 2 feet long. After I had measured it, I knew it could have come from only one animal, the giant short-faced bear (*arctodus simius*). The short-faced bear is a wonderful animal. At full adult size, this bear could have been 6 feet tall on all four legs, 10 feet long and weighed nearly 1600 pounds. It was the largest carnivore during the Ice Age. The claw mark was just the beginning for the cave. Since that first day we have found many large bear beds in the cave. These are large, bowl shaped features that bears would use to sleep in. Within these beds, we have discovered other bear remains, such as dung (manure) and hair. The dung, beds and hair are the first recorded for each of these remains, giving us a new look at diet, color and overall lifestyle of these animals.

Another of the large animals using the cave during the Ice Age was the peccary. It resembles a large wild boar, and we sometimes call it the Ice Age pig. We have found bones, droppings and track-ways of this animal also. The dung and

track-ways are the only ones recorded in the world. Like with the bear, we can now piece together diet and lifestyles of this animal.

The cave sealed itself up sometime during the Ice Age. Because of this, the cave has preserved the vast amounts of tracks, droppings and other soft remains, making Riverbluff Cave one of the most significant discoveries in paleontology. The surface has only been scratched and many new discoveries are sure to be made.

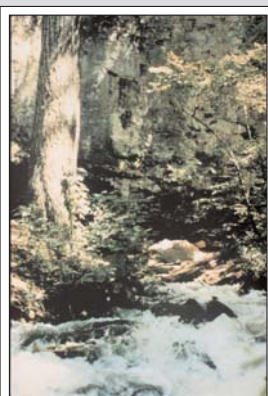
For a more detailed account of the cave and the work being done there, visit: <http://www.Riverbluffcave.50megs.com>



Our Guest Writer: Matthew Forir is President of Missouri Speleological Society, a long time caver in Missouri and Project Paleontologist at Riverbluff Cave. He has worked in Paleontology for 11 years with main research in the study of disease and cause of death of fossil organisms. Matt currently lives in Springfield, MO, and is Executive Director of the newly formed Natural History Museum of the Ozarks and President of Heart of the Ozarks Caving Grotto club.

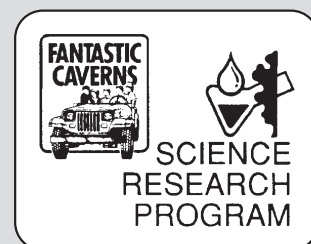
Pictured at left: What a giant short-faced bear might have looked like.

(Artwork by Carl Dennis Buell - "Arctodus On The Trail" ©1999 Mammoth Site of Hot Springs, SD, Inc.)



Students are important to Fantastic Caverns. This issue of *Ozark Adventure* is sent to over 70,000 students in the Ozarks of southwest Missouri, northwest Arkansas, northeast Oklahoma and southeast Kansas. While this is a huge undertaking for a small family business, understanding caves and springs is important. Taking care of these natural resources will keep the Ozarks a wonderful place to live and visit.

This magazine is sponsored by the Fantastic Caverns Science Research Program.



Modeling Treasure

Did you ever wonder how some museums display ancient artifacts? It isn't always possible to remove the wonderful natural treasures from Riverbluff Cave and put them on display. This is when creative thinking takes over. Paleontologist Matt Forir knew a local resin caster named Larry Krauck. Mr. Krauck had been making custom resin products for the hobby industry for years and Matt thought it would be possible to make resin cast replicas of the Riverbluff treasures to display for others to enjoy. Through the combined efforts of Matt and Larry we are now able to not only see photos of the actual artifacts in their unique environment, but we now have the opportunity to actually touch and examine exact replicas without disturbing the cave or the rare fossils found inside.



Above: Bear claw marks of the giant short-faced bear found in the bear pit in Riverbluff Cave.



Right: Picture of a peccary foot bone (on right) and the resin cast replica (on left) that Mr. Krauck has made.

Treasure Seekers

When we think of treasure, what we see is visions of diamonds, gold and rubies surrounded by pirates!

Missouri and the Ozarks are rich in geological and mineral resources. Students participating in the **2004 Summer Discovery** will ply their skills on an old-time mineral sluice in search of those riches. Groups attending this specialty tour will be panning for Missouri and regional mineral samples, then working to identify their discoveries and learn about the properties of the samples. Instead of diamonds and gold, they'll find minerals common to the Ozark region – All in a touchable, hands-on program that encourages student groups to learn by doing. **Summer Discovery** is available only during June, July and August.



2004 SPRING WORD DISCOVERY

Circle the vocabulary words you can find in the grid.
 Words can go horizontally, vertically and diagonally in all directions.

M R R F R D V Q R L G W R V Y L
 P D B H Q N T F L T B R M O L D
 V H C L F L O W S T O N E T C E
 Y R O W A L C R X J F T M O C T
 G R L L I S C M U D W R L F E C
 W R F I E E T V Z N K U F B R N
 T Q I W S N G E C I M R O C U I
 P W M V G S V A D N W B R A S T
 N A U F E A O C P P V S M R A X
 S T E L C R I F E L K N A N E E
 E E S V G T B C K C C N T I R M
 N R U Y S B C L A O L G I V T N
 O G M A E A Y R U G R E O O P T
 B G L A R X T F K F N Z N R T W
 X P R Y T B G Y Y Z F U S E M D
 T V K D E R E V O C S I D F R G

See If You Can Find These Vocabulary Words:

TREASURE
 FORMATIONS
 CARNIVORE
 FLOWSTONE
 DISCOVERED
 WATER

MUSEUM
 CAVE
 BONES
 PECCARY
 CLAW
 RIVERBLUFF

COLUMN
 MUD
 FOSSIL
 DUNG
 BEAR
 ICE

MOLD
 EXTINCT
 TRACKS
 BLASTED
 HOLE
 AGE