

LOST RIVER CAVERNS

A PRE-VISIT PACKET FOR TEACHERS

INTRODUCTION (A note to the Teacher)

Thank you very much for expressing your interest in Lost River Caverns. People have been touring Lost River Caverns since 1930. Through the years, thousands of people have seen our Crystal Chapel, the place where over 80 couples have exchanged their wedding vows. Thousands more have gazed upon the crystal clear Lost River. Your visit to the Caverns is bound to be both inspirational and educational.

A tour of the caverns takes approximately 1/2 hour with 15 to 25 people per tour. **RESERVATIONS FOR GROUPS (SCHOOLS, SCOUTS, CAMPS, ETC.) MUST BE MADE IN ADVANCE.**

This visitor packet has been designed especially for you - the teacher. It attempts to inform you of some of the details of your visit. Hopefully, this packet will be able to answer some of your questions concerning the tour before, during and after. If you need more information, please feel free to call or write. Thank you for your interest in Lost River Caverns, and we look forward to your visit.

WHAT YOU SHOULD KNOW...BEFORE THE TOUR

Where to Park:

Upon entering the parking lot at Lost River Caverns, have the students exit the bus near the main entrance of the building. Once the students are off the bus, park the bus across the street in the picnic grove. Students will most likely reconvene in the picnic grove after the tour. **NOTE:** Depending on the age of the students, adult supervision may be wise as the students cross the street.

Where to Enter:

- A. Groups of 30 or less: You will want to have the leader of your group come inside **FIRST** to check in with the staff of Lost River Caverns. After checking in, your group may enter through the top door and proceed down the ramp. At this time, you will be met by your tour guide. Please do not enter the caverns without a guide.
- B. Groups of 30 or more: Because of the size of the cave, we suggest taking tours through the cave in 10 minute intervals. Therefore, the following schedule is recommended for groups of 30 or more. You will want to have the leader of your group come inside to check in with the staff of Lost River Caverns. After checking in, the first group (up to 30 people) may enter through the top door and proceed down the ramp. The second group (up to 30 people) may wait on the ramp next to the tropical garden. They will enter the cave 10 minutes after group 1. Group 3 (up to 30 people) will wait in the lobby area and will enter the cave 10 minutes after Group 2. Group 4 (up to 30 people) may enter the gift shop until Group 3 has entered the cave.

Group Size:

Usually cave tours consist of 20 students and chaperones OR one class of up to 30 people.

Cave Conditions:

Lost River Caverns is always 52 degrees Fahrenheit, so a sweater or jacket is recommended along with comfortable walking shoes. The cave floor is wet, so you will want to watch your step at all times.

Cave Rules:

1. No eating, drinking or smoking permitted in the cave.
2. Do not touch any of the rocks in the cave.
3. Stay with your guide on the walkways.
4. Nothing is to be removed or defaced in any way.

Role of Chaperones:

We, the staff of Lost River Caverns, view the chaperone as an extension of the classroom teacher. He/she should assist in enforcing the cave rules as well as in the supervision of the students in the gift shop.

WHAT YOU SHOULD KNOW...DURING THE TOUR

History of Lost River Caverns:

Lost River Caverns is a natural limestone cavern. It was discovered in 1883 by a limestone quarry operation which was digging where the parking lot now stands. At that time, the operation accidentally created the entrance to the cave. Since that is the only entrance to the caverns, we don't have any bats, rats or snakes or any Native Americans, dinosaurs or cavemen in the cave. In 1930, the caverns were opened to the public and at that time walkways, handrails and lighting were added. Other than that, Lost River Caverns is a completely natural cave.

According to geologists, Lost River Caverns started forming within the past 250,000 years. It was formed by the work of the water table dissolving away the limestone to form the chambers and passageways. The water table has since dropped, allowing seepage from rainfall and melting snow to remove minerals from the rock above the caverns and deposit them on the rock surface. Over many hundreds of years, the minerals build up into different formations.

What You Will See Inside Lost River Caverns:

Once inside Lost River Caverns you will see an abundance of crystal formations within our five picturesque chambers, such as stalactites, stalagmites, helictites, flowstone, columns, soda straws, rimstone and anthodites.

One of the five chambers, the Crystal Chapel, has been the site of over 80 wedding ceremonies. This room was also used as a ballroom in the late 1880's.

Also on display in the cave is a unique array of fluorescent minerals. An ultraviolet light illuminates the rocks' natural colors.

Another special highlight of the cave tour is the beautiful Lost River. Crystal clear and chemically safe to drink, this slow-moving waterway contains no life, however it does contain unbelievable mystery.

Speaking of mystery, the Queens Room was discovered during a drought in 1963 when the Lost River stopped flowing. This magnificent room has never been opened to the public because the river has almost always been present, making it difficult for exploration. Photographs are on display in the lobby to give visitors a sense of what the Queen's Room looks like.

CAVE TERMS

1. *Anthodite* - a flower-like formation, usually aragonite or calcite, forming a spray of needles from a center stalk.
2. *Calcite* - most common mineral found in caves. It is composed of calcium carbonate and often takes a crystalline form. It is the usual mineral of stalactites and stalagmites.
3. *Cave* - naturally formed cavity or series of cavities in the ground, large enough to permit entrance for humans. Synonymous with "cavern".
4. *Cave Bacon* - a form of drapery. On a slanted ceiling, water deposits calcite in thin, translucent sheets that hang in delicate folds. At times, the water may have minerals in addition to the calcite causing dark brown or orange bands to appear, forming the "bacon". The mineral is usually iron oxide.
5. *Column* - formation caused when a stalactite and stalagmite grow together, or when a stalactite grows all the way to the floor.
6. *Flowstone* - formation that looks like a "rock waterfall". Forms when water flows down walls, over floors and over older formations, building up sheets of calcite, like icing on a cake.
7. *Helictite* - odd-shaped formation that grows in all directions. Seems to defy gravity.
8. *Limestone* - a sedimentary rock composed mainly of calcite. It is the most common matrix in which caves are formed.
9. *Rimstone* - deposits of calcite formed from slow-moving streams.
10. *Soda Straws* - thin, hollow stalactites about $\frac{1}{4}$ of an inch in diameter, resembling drinking straws, grow from the ceiling as water runs down inside them, depositing rings of calcite at their tips.
11. *Speleothem* - cave formations such as stalactites and stalagmites formed by mineral deposition.
12. *Spelunker* - a person who explores caves.
13. *Stalactite* - formation that hangs from a cave ceiling.
14. *Stalagmite* - formation that builds up from a cave floor.

WHAT YOU SHOULD KNOW...AFTER THE TOUR

Gift Shop:

After touring Lost River Caverns, students generally enjoy visiting the vast and exciting gift shop. Here you will find a Rock and Mineral shop with fine mineral specimens and crystals, along with lapidary equipment, jewelry, and both rough and finished gems. Prices range from 27 cents to hundreds of dollars. Lost River Caverns reserves the right to limit the number of students in the shop at any one time

Gilman Museum:

If the students did not get to see the museum before the tour, they won't want to miss it afterwards. Collected through the years and passed down through the generations, the Gilman Museum contains rare fossils and unique minerals and gems. Examples of antique weaponry as well as animal specimens are also on display.

Jungle Garden:

The tropical garden, adjacent to the Gilman Museum, contains many tropical plants which may be found in endangered rain forests. Also, hidden within the Jungle Garden are a beautiful waterfall and fish pond.

Picnic Grove:

Across the street from the main parking lot at Lost River Caverns is our peaceful Picnic Grove. An attractive covered bridge overlooks Silver Creek, an elegant waterway nestled among the shaded grove. On the grounds is a pavilion, where many school groups enjoy eating their lunch. **THERE ARE NO FOOD SERVICES ON THE PREMISES, HOWEVER, SODAS CAN BE PURCHASED BY RESERVATION.**

Miscellaneous Information:

Bathrooms: Men's and women's bathrooms are located in the main lobby.

Handicapped accessibility: Lost River Caverns is not wheelchair accessible.

Photographs: Picture taking is encouraged at Lost River Caverns.

SELECT SOUVENIR ITEMS

Worry Stones.....	\$0.94
Magic Ink.....	\$0.94
Souvenir Pens.....	\$0.50 to \$2.75
Rock pencil.....	\$1.88
Children's T-shirt.....	\$11.95 & up
Books on Caves & Geology.....	\$6.95 to \$11.95

Lost River Caverns Mugs.....	\$7.25 & up
Sticker Books.....	\$1.50 & up
Lost River Caverns Pennants.....	\$2.99
Lost River Caverns Long John Pencils.....	out of stock
Caves of PA Writing Tablet.....	\$2.50
Pet Rocks.....	\$0.94
Assorted Rings.....	\$1.88 & up
Tumbled Stones & Rough Mineral Specimens.....	\$0.25 each & up
Jewelry.....	\$1.88 & up
Assorted Mineral or Fossil or Rock Kits.....	\$3.00 each & up

NOTE: Pennsylvania has a 6% sales tax charge on all souvenirs. Prices subject to change without notice.

Thank you again for your interest in Lost River Caverns. We hope this packet was helpful in answering your questions about our cave. If you have any further questions about your visit, please feel free to contact us at (610) 838-8767. We, the staff of Lost River Caverns, look forward to your visit.

FURTHER READING

Bramwell, Martyn. Rocks and Fossils. EDC Publishing: Tulsa, OK.: 1983.

Kramer, Stephen. Caves. Carolrhoda Books, Inc. Minneapolis: 1995

Mayes, Susan. What's Under the Ground? EDC Publishing: Tulsa, OK.: 1989.

Morris, Neil. The Wonders of Our World: Caves. Crabtree Publishing: 1996.

Resource Guide to Earth Science. The Academy of Natural Science, Philadelphia, 1991

Secret World of Caves. CD-ROM. Cambrix Publishing: 1995.

Watts, Lisa and Tyler, Jeremy. The Earth. EDC Publishing: Tulsa, OK.: 1986.

Teacher Packets - Elementary or secondary school packets can be order from:

U. S. Geological Survey
 Geologic Inquiries Group
 907 National Center
 Reston, VA 22092