## People & Caves

## **PowerPoint Script**

1. Title: People & Caves

- 2. Human beings have been attracted to caves for hundreds, thousands, and perhaps even millions of years for a variety of different reasons.
- 3. Due to the near constant conditions found in caves, caves are a valuable source for information about both the geological and historical past.
- 4. Fossils in caves provide scientists with clues to the biological portion of the earth's history.
- 5. Fossils of marine animals and plants that lived in the seas where the limestone was deposited are found imbedded in the bedrock.
- 6. In addition, fossils of more recent terrestrial creatures which used the caves as homes or became trapped inside are sometimes found in cave passages. These include mammoth, mastodon, saber tooth cat, and giant sloth remains.
- 7. The fossilized bones of many animals have been researched and carefully assembled, therefore allowing scientists to better understand what those organisms may have looked like and how they may have lived.
- 8. Throughout history, primitive people have made use of caves for shelter, burial, or as religious sites.
- 9. Caves were obvious natural shelters for early humans, offering effective protection from the elements.
- 10. The dry, nearly constant atmosphere of many caves has preserved primitive tools, clothing, food, artwork, pottery and skeletal remains of past human civilizations. These cave artifacts all provide clues to our past.
- 11. For example, the tools found in caves can tell us how an early culture hunted for food, and finding corn cobs in a cave indicates that people settled in an area long enough to cultivate crops.
- 12. Early humans used torches made of reeds to travel deep into caves to record objects on the stone walls. Cave wall paintings and engravings depict animals, geometric designs, and occasional human figures.

- 13. Caves have also been used for religious and ceremonial purposes. Some of the earliest Buddhist temples and shrines are in Chinese caves that are still in use today.
- 14. The Dead Sea Scrolls, discovered in caves near Qumran, Israel, along the western shore of the Dead Sea between 1947 and 1956, are considered by many to be the single most important archaeological find of the 20<sup>th</sup> century.
- 15. In recent centuries, modern humans have used caves for more practical purposes such as storing fruits and vegetables and for growing mushrooms.
- 16. Some caves have even provided ideal conditions for the aging process of some cheeses and alcoholic beverages.
- 17. Some caves were used as hospitals for people with respiratory illnesses in hope that the constant atmosphere might help.
- 18. Caves have provided hiding places for bandits, smugglers, counterfeiting operations, and moonshining (making illegal whiskey).
- 19. Cave waters have supplied drinking water and have been used in the production of many types of products. Even today, a variety of products advertise they are made with "pure spring waters."
- 20. During the 1800s many caves in Virginia, West Virginia, Kentucky, Indiana, and Tennessee were mined for a very valuable type of salt known as saltpeter (potassium nitrate). Saltpeter is the largest component of black powder. Mixed with sulfur and charcoal, the resulting black powder is a very unstable substance and will explode violently when exposed to a spark or to heat. Black powder drove shot from cannons and balls from rifles for centuries. Even today, with its limited power and clouds of smoke, black powder is used for blasting fuses and fireworks.
- 21. Caves have also been mined for guano (bat feces), which is used as fertilizer.
- 22. Until early in the 1900s, US caves were mined for their speleothems, such as stalactites and stalagmites, because they were popular for decorative use in homes. This was the most destructive use of caves, and the practice is still prevalent in some regions of the world.
- 23. After years of cave destruction and exploitation, we now understand the value that caves offer. Caves have captured imagination of many poets and authors, and have conjured the spirit of adventure and exploration.
- 24. Spelunkers, commonly called cavers, go underground for many reasons. Some cave scientists are interested in the adaptations of cave organisms to their unique conditions. New knowledge of how these creatures survive may provide sources for modern medicines

and other technologies. Other cave scientists are interested in how caves are formed. Some cavers explore the cave systems to help landowners and towns learn about their underground resources and how to protect them. Cavers promote an understanding of caves, their contents, and the areas in which they formed.

- 25. One way cavers share knowledge of a cave is by surveying the cave and creating a map. A completed cave map provides guidance and safety for future scientific explorations in the cave. Used in a combination with surface maps, it gives a more comprehensive relative geography of that area.
- 26. Surveying is usually done by a team of three of four people, each performing a specific role.

Human use of caves has come a long way throughout our history, from living space to hiding place and from commercial production to exploration. Despite the long existence of caves, we continue to learn from them and about them