

#5 - Analysis and Impact of Discovery



Focus Question:

How do cave safety and common sense go hand in hand?

Objective:

The students will learn the responsible and safe methods of cave investigation.

Suggested Grade Level:

Grades 5-12

Overview:

Man's curiosity probably first carried him into the sunless world of caverns. The last great glacial period created the need for shelter. So, hunter/gather groups sought refuge in the equitable temperatures of the caves. Crude and unpolished outlines scratched into walls engraved man's first inner glimpse of the world and the deeper spiritual wonders. In Europe alone, there are 120 caves that contain evidence of early discovery by man. Fire introduced light and heat to the underworld discovered by post-glacial man. Throughout history caves continued to serve as temporary shelters, homes, temples, and burial chambers. Even during the more recent historical past man has chosen to utilize caves for protection and security. Today, due to population pressures or a shortage of timber, cave cities may still be formed. In China, the city of Yen, in the province of Shan-si, and in Spain, the city of Sierra de Gaudix, an underground city, are examples of temporary and then permanent use of caves by people in need of shelter and permanence.

Today, millions of visitors are drawn to the mystery of caverns. Hundreds of caverns and caves world-wide are commercially developed to offer people a unique chance to experience the magic of caverns. Tens of thousands of caverns are known in the United States alone. Thousands more are yet to be discovered. These are known as "wild caves" and they pose the greatest danger to the eager and naive adventurer. With this caution in mind, this activity offers to students and teachers alike a responsible plan of investigation and exploration of wild caves.

Procedure:

Every year the media reports accidents and fatalities of those venturing into caves. All too often these reports mention inexperienced and untrained individuals who go into caves unprepared and often do not return. Caving can be a wonderful physical and recreational activity, but it should never be attempted by those unprepared or uninformed about its hazards. If you should discover or hear of a discovery of a new cave or sinkhole, remember the following:

- 1) Do not attempt to explore yourself!
- 2) Write or call the following organization to inform them of your discovery: The National Speleological Society (NSS), Cave Avenue, Huntsville, Alabama 35810.
- 3) The NSS believes that caves have unique scientific, recreational and scenic values. These values can be endangered by both carelessness and intentional vandalism. Once the values are gone, they can never be recovered. The Society works to preserve caves with a realistic policy supported by effective programs for encouraging self-discipline among cavers and education and research on the causes and prevention of cave damage. The society is dedicated to the conservation of all the contents of a cave and scientific collection is professional, selective and minimal. The collecting of mineral or biological materials for display purposes including previously broken or dead specimens is never justified.
- 4) In most states, as in Virginia, it is illegal to write or mark on walls, break or remove mineral formations, sell or transport to other states for sale mineral or speleothems, disturb or collect cave organisms including bats, remove or disturb historic or prehistoric artifacts or bones, litter or dispose of trash or refuse, or dump spent calcium carbide. (*The Virginia Cave Protection Act of 1979*)
- 5) Training and equipment requirements will be a part of your education and is best left to the professionals from your local caving organization.

For general information, here is a basic list of "cave safety musts":

- 1) Never go caving alone.
- 2) Always leave notification of where you are going and when you expect to return, and stick to the schedule.
- 3) Carry at least three sources of light .
- 4) Wear appropriate clothing for the occasion and proper safety gear.
- 5) Do not consume alcohol or use drugs, and **DO NOT DRINK WATER FROM THE CAVE!**
- 6) Do not climb ropes, swim, or boat in a cave with improper or inadequate equipment and insufficient experience.
- 7) Do not take unnecessary risks and use common sense in questionable situations.

Conclusion:

Caving as a hobby or a science is a relatively recent activity, not more than a century old. There is a special lure to explore the depths of ancient caverns, however, one should never attempt to go beyond reading and study unless trained and practiced. It is a wondrous region with many secrets yet to be revealed, and it takes the informed, cautious and responsible to fully appreciate and navigate those uncharted worlds. Leave only footprints. Take only photographs. Kill nothing but time. (*National Speleological Society*)