



Save Our History: Written in Bone



INTRODUCTION

Many students today are familiar with the wide variety of sources historians use to retrace the past, from newspaper articles to government documents to first person testimonies. But ***Save Our History: Written in Bone*** reveals a source few of us may have considered: the human skeleton. In this captivating one-hour documentary, viewers are introduced to Doug Owsley and his cutting-edge team of forensic anthropologists at the Smithsonian's National Museum of Natural History. Owsley is renowned for his detailed analyses of skeletons and DNA evidence as he parses these remains searching for answers to some of the most perplexing mysteries of the past. Dispatched to archeological sites and crime scenes throughout the world, Owsley and his team treat each new skeleton as a time capsule that, if analyzed properly, can speak volumes for the peoples and communities that can no longer speak for themselves.

From the discovery of six new graves at the site of the early 17th century Jamestown colony, to the iron coffin holding an unknown 19th century boy found in contemporary Washington, D.C., to the wreckage at the Branch Davidian complex in Texas, ***Written in Bone*** shows how Owsley and his team dissect each individual case, looking for the clues etched in the skeletal remains. From these bones, they can determine the age of those who died, the cause of death, and even the foods they may have eaten. This documentary gives students an insightful introduction to the unique field of forensic anthropology, providing fascinating insight into the methods employed by expert researchers as they attempt to retrace the past. Examining the contemporary applications of forensic anthropology in criminal investigations, this program also introduces students to the many exciting and critical applications of forensic anthropology and related fields.

Curriculum Links:

Save Our History: Written in Bone would be an excellent addition to American History, American Culture, Science and Technology, Social Studies and courses with units on Anthropology or Environmental Studies. It is appropriate for middle school and high school students and fulfills the following standards as outlined by the National Council for History Education: (1) Civilization, cultural diffusion, and innovation, (2) Conflict and cooperation, (3) Human interaction with the environment

Vocabulary:

Using the dictionary at www.merriamwebster.com, an internet resource such as www.history.com, or an encyclopedia, students should define or explain the significance of the following terms:

Anaerobic	Anomaly
Anthropology	DNA
Forensic	Fracture
Mitochondrial	Replica
Resonance	Striations

Discussion Questions:

1. How would you describe the field of forensic anthropology? What is the main job of Doug Owsley and his team?
2. The narrator in this documentary states that the evidence uncovered through analyzing skeletons are “time capsules” that reveal new information about the past. What are some of the things Owsley and his team learn about the past from analyzing skeletons?
3. In 2005, an iron coffin was discovered underground in Washington, D.C. How did Doug and his team determine the age of the individual inside at the time of his death? What were some of the challenges they faced in determining his identity? What were some of the other sources researchers used in order to learn more about the boy?
4. What is mitochondrial DNA? Why is this form of DNA more helpful in learning about the past than nuclear DNA?
5. What is magnetic resonance? Why do forensic anthropologists use this method at crime scenes?
6. Doug and his team were unable to find the evidence they were looking for to uncover the truth about the murder of Shaquita Bell. Yet they were still able to rule out some of the possible locations of her body? What methods did they use in making this determination? What do these methods reveal about the necessity of using multiple research methods in the field?
7. What are “tool mark comparisons”? How did Doug and his team use this method, and what did evidence did it help them reveal?

8. What did Doug's team learn from studying the skeleton of the "Fort James" boy? What is carbon 13 isotope analysis, and why is it considered such an important method?
9. How did Doug determine the reason for the deterioration of the teeth of the "St. Mary's" woman? What does this story reveal about how people acted in the 17th century? Was this woman's behavior similar to anything you hear about today? Discuss.
10. How did the forensic anthropology team finally learn the identity of William White?
11. Overall, how does forensic anthropology help us learn more about the past? What do you think would be lost if these methods were no longer used?

Extended Activities:

1. This documentary reveals many new terms and concepts which might be new to students. Some of the most important terms discussed in this documentary are: tool mark comparison, carbon 13 isotope analysis, magnetic resonance, forensic anthropology, and many others. Ask students to create an illustrated glossary of terms they learned from watching this program. These glossaries can be in Powerpoint format, in notebooks, or on posterboard. Students can illustrate these projects with images or drawings related to the field of forensic anthropology.
2. Ask students to imagine that they are a forensic anthropologists working on one of the projects explored in this documentary. Ask them to write a 1-2 page letter or journal article from the perspective of a forensic anthropologist as they attempt to reconstruct the past. These letters might include details about the equipment they will need, the methods they will use, or other sources they will need to consult to learn more about a particular skeleton.
3. This documentary explores some of the most important early colonies in North America, including Jamestown and St. Mary's City. In small groups, ask students to locate a primary source related to one of these colonies online or at the library. Then, ask students to write a short report about their source, including when it was created and what it reveals about the history of the early colony. Each group should chose one student to share their findings with the larger class or group in an oral report of 5 minutes or less.
4. One hundred years from now, the techniques of forensic anthropology may be used in nearly every history project and criminal case. Today, these methods are considered innovative and cutting edge. Ask students to write a letter to a student or newspaper to be read 100 years from now describing how why and how forensic anthropology has transformed our knowledge of the past.

Additional Reading:

Benedict, Jeff. *No Bone Unturned: Inside the World of a Top Forensic Scientists and His Work On America's Most Notorious Crimes and Disasters*, (HarperCollins, 2004).

Carr, Lois Green, Philip D. Morgan, and Jean B. Russo(editors). *Colonial Chesapeake Society*, (University of North Carolina,1991).

Southern, Ed. *The Jamestown Adventure: Accounts of the Virginia Colony, 1605-1614* (John F. Blair Publisher, 2004).

Websites:

The Smithsonian Museum of Natural History:

<http://www.mnh.si.edu/>

History's special website on the Jamestown colony:

http://jamestown.invioni.com/real_index.html

Jamestown Rediscovery:

<http://www.apva.org/jr.html>

Historic St. Mary's City:

<http://www.stmaryscity.org/>