

Forensic Science School Year 2020-2021 jwardisiani@pths209.org

Bell – Ringer

- Describe the differences between the male and female skeleton.
- Describe the difference between adult and infant or child skeletal structure.

Introduction

- Archeologists are trained to study the remains of human cultures from the past.
- Sometimes this training is helpful in reconstructing events from the recent past.
- **For Example:**



An Archaeologist played an important role in determine what, if any, war crimes were committed in the Ukraine in 1942.

Introduction Continued

- Rumors of mass murders had circulated among the survivors for 50 years.
- In 1992, charges were brought to the Australian War crimes



Prosecutors against the Germans, stating that thousands of men, women and children had been shot and buried in an area of the Ukraine called Serniki.

The Defense

The attorney general's department wanted to prosecute the Germans for this alleged crime. They knew there were two types of defense the Germans might use:



- The wrong person or persons had been charged with the crime.
- **That the alleged events were imagined.**
- An Archaeologists was recruited to make sure that the second type of defense was not possible.

Finding an Unmarked, 50-Year-Old Grave

- First the archaeologist and his team explored the Serniki area on foot, looking for evidence of a large, 50 year-oldgrave.
- They were fortunate in finding an area where there was a definite change in the color and texture of the soil.
- They were able to determine the boundaries of the mass graves by the fill dirt that had been placed in it. The graves were 40 meters long by 5 meters wide.



At the Grave Site

- Soldiers helped the archaeologists by removing the top two meters of soil with bull dozers.
- Then, the scientists and solders worked together to take the dirt out of the grave, one shovel at a time.





□ When the bodies were exposed, they finished removing the dirt from around them using a paintbrush.

□ The task of uncovering the bodies required five weeks of backbreaking work.

Assembling the Puzzle

- By the time they had explored the entire grave, 550 skulls had been found and the archaeologist had a good idea about what had happened in this field 50 years earlier.
- He had found that most of the skeletons were those of women and children. There were a few old men there also.



He believed that all of the adults had been herded into the grave and told to lie down, with their hands clasped behind their heads.

The Puzzle Continued

- Most of the victims had been shot, and their skulls showed entry and exit bullet wounds.
- □ A few had been clubbed to death.
- Dirt had been thrown over the bodies of these adults, then the children were marched into the mass grave and killed in a similar manner.



- Jewelry and clothing had been stripped from all of the prisoners by the German soldiers as they entered the graves.
- Articles of clothing that the soldiers did not want were thrown on top of the dead children.

Testimony

- At the trial, this archaeologist testified that the rumors of mass murder were true and accurate.
- He explained that the fir trees had been planted onto of the grave fillings.
- The fir trees grew in neat parallel row and were clearly part of a plantation.
- By removing some of the trees and counting their growth rings, the archaeologists could show that the killing occurred during a period of time that agreed with the rumors.
- Because of his expert work, the court found that a war crime had been committed.



THANKS FOR YOUR ATTENTION

Questions or Comments?

