

## Physical Anthropology Section – 2008

## H116 Left Hanging in Mandeville: Multiple Approaches in Search of a Positive Identification

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The goal of this presentation is to illustrate how multiple lines of inves- tigation can be used to develop an identification in cases where decomposed remains of unknown decedents are found. Particularly in cases of indigent or transient individuals, few leads may be available. In such cases, if no potential matches can be made with missing persons reports, alternative strategies such as facial reproduction, press conferences, and DNA analysis may be necessary.

This presentation will impact the forensic community by illustrating the importance of multidisciplinary collaboration in the identification of unknown skeletal remains.

This presentation highlights a case from Louisiana which presented few leads and little hope for a successful identification. In 2006, a boy riding an ATV through a wooded area found what appeared to be a human skull and other bones underneath a large tree. Still hanging from a branch above was a largely skeletonized trunk and limbs, wearing jeans and a shirt. The boy returned home and notified the St. Tammany Parish Sheriff's Office, which sent officers to the scene, along with death investigators from the St. Tammany Parish Coroner's Office. The remains in the tree were found to be hanging from a nylon rope with a simple slip knot encircling the neck area, suggesting that the death may have been a suicide. The scene was photographed and described, and the human remains and clothing were collected.

Staff from the coroner's office brought the human remains and clothing to Tulane University's Forensic Anthropology Laboratory on April 12, 2006, requesting assistance with developing a biological profile of the individual and an estimate of time since death. Analysis by Verano and Titelbaum indicated that the remains were those of an edentulate white male approxi- mately 45-55 years of age, of relatively short stature (est. 5'5"). Time since death was estimated as between eight months to a year, based on multiple criteria, including the position of the body (suspended) during decompo- sition, as well as evidence that the tree had been damaged by Hurricane Katrina (August 29, 2005), resulting in two distinct clusters of skeletal remains on the ground. Although the skeleton was mostly complete, it was noted that some bones were missing, and offered to assist with another search of the scene. The second search produced another sixteen skeletal elements, including four vertebrae, eleven hand and foot bones, and a fragment of costal cartilage. Some of the bones found on the ground showed carnivore gnawing, and some elements that were not found in either search, including the hyoid bone, may have been scattered or destroyed by carnivores.

A search of missing persons records by the St. Tammany Parish Sheriff's Office produced some preliminary leads, but all were excluded based on a lack of correspondence in age, stature, or antemortem injuries. Given the lack of progress in identification, a bone sample was sent to the FBI DNA Laboratory for possible matching with data in the National Missing Person DNA Database, and the Coroner requested that we do a facial reproduction. A three-dimensional facial reproduction was done by Pierson, and was presented in a local press conference in October, 2006. Following the press conference the sheriff's office received numerous phone calls, including one strong lead towards identifying the individual. A landlord reported that he had rented a trailer to a man matching the description of the decedent, and that he subsequently had left without notice and had not been seen again. With this information, investigators located a possible relative in another state who agreed to provide a DNA sample for comparison.

A bone sample from the decedent and a buccal swab from the possible relative were submitted to the FBI DNA Laboratory in Quantico, Virginia, for analysis and comparison. Mitochondrial DNA comparison revealed a match between the two samples, although unfortunately, the sequence identified was not a particularly rare one (observed in 8.65% of Caucasians in the FBI database). Nuclear DNA analysis is now being done in an attempt to provide a more secure identification, although based on their investigation, the St. Tammany Parish Sheriff's Office is convinced they now have a secure presumptive identification.

Human Identification, Facial Reproduction, DNA Analysis