



Physical Anthropology Section - 2012

H6 Taphonomy of Infant and Child Sized Remains in Western North Carolina

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After attending this presentation, attendees will have a better understanding of the arrival sequence of scavengers, their impact on the decomposition, scattering, and recoverability of remains deposited both on the surface and buried in western North Carolina.

This presentation will impact the forensic science community by highlighting the impact avian and mammalian species have on the scavenging and scattering of infant and child sized remains placed within a wooded area of western North Carolina.

There have been limited studies of the scavenging and scattering of infant and child sized remains. This research focuses on the relationship that scavengers play in the decomposition process and the associated pseudotrauma that they can cause to remains, and examines the recoverability of scavenged remains. These data are of importance to personnel tasked with the search and recovery of such remains, as well as the pathologist and the physical anthropologist.

The first phase of this research was conducted from February to July, 2011. Six sets of pig remains weighing less than 10 pounds were placed in a wooded environment both on the surface and buried. Three areas were chosen to place remains. Each area contained a shallow burial and a surface deposit. In Area 1, the burial and surface deposits were both covered with small piles of brush. In Area 2, both sets of remains were wrapped in common shopping bags from the local market. In Area 3, the remains were deposited with no additional alteration. Motion activated game cameras were utilized to track scavenger activity and field visits were conducted to track changes in the remains.

The second phase was conducted from March to June, 2011 and involved the deposition of one 30 pound pig on the surface in a wooded environment. Multiple motion activated game cameras were utilized to track scavenger activity and field visits were conducted to track changes in the remains.

The two phases of this research project resulted in varying observations of animal behavior in response to the remains. In the first phase no buried set of remains was disturbed, whereas two sets of surface remains were completely removed from the area. The set of remains placed on the surface in a bag was finally fully scavenged but only after an extended period of time. In the second phase arrival and contribution of the scavengers was not as expected from previous studies. In particular, the role of canines seemed to be highly diminished in comparison to avian involvement with scavenging and scattering.

This research shows the relationship that scavengers in western North Carolina have to the destruction of infant and child sized remains. It is recommended that additional studies be conducted throughout the United States. By becoming more familiar with the results professionals involved with the search and recovery of infant and child sized remains will be better prepared to develop effective search strategies in cases where scavenging and scattering of remains have occurred.

Taphonomy, Scavenging, Forensic Archaeology