



Physical Anthropology Section – 2008

H49 Forensic Osteology Research Station (FOREST): A New Facility for Studies of Human Decomposition

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Those attending this presentation will come away with an overview of Western Carolina University's new outdoor laboratory for decomposition studies and an understanding of the nature of the research that will be carried out in the outdoor laboratory. Attendees will learn why it is important for there to be more than one outdoor decomposition laboratory in the United States.

This work impacts the forensic community by its contribution to our collective knowledge and understanding of how humans decompose, how the timing of decomposition changes depending on the environment and how the environment is altered by decomposition. The forensic community will be further affected by this presentation because it includes a call for collaboration among researchers at other institutions with outdoor decomposition laboratories and those planning future decomposition laboratories.

One of the questions forensic anthropologists are often asked is: how long does it take a body to decompose? The answer depends on numerous variables many of which have to do with the environmental conditions in which the decomposition occurs. Observations of decomposing human remains can help us formulate an answer in a given location. In order to formulate answers applicable to broader areas we must focus on collecting decomposition data and associated environmental data in more than one or two locations so that patterns specific to physiographic regions may be identified. There is a need for at least one outdoor decomposition laboratory in each physiographic region of the United States. There is a need to identify classes of data that will be collected similarly in each region.

A new outdoor decomposition laboratory has been established in the mountains of Western North Carolina. It is touted in the popular press to be the second such facility in the nation although plans for several others are underway. The Western Carolina University outdoor laboratory has been dubbed the "FOREST" (Forensic Osteology Research Station). Its internal dimensions are roughly 17 meters by 17 meters and it is delimited by a wooden privacy fence and a chain link protective fence topped with razor wire. The FOREST is located in a rural area adjacent to Western Carolina University in Cullowhee, North Carolina on a 500+ acre undeveloped property recently acquired by the university. The surrounding terrain is mountainous and the facility is on a steep slope and is surrounded by and encloses moderately dense forest vegetation.

It is known that the environment affects decomposition and that decomposition changes the environment in the vicinity of a body. Prior to placing the first corpse at the FOREST an environmental survey of the interior of the facility and the area immediately surrounding it was conducted in order to provide baseline data of the plant and animal life present as well as soil composition and chemistry. Future plans include repeating this survey seasonally as long as the facility is in use.

Decomposition, Environment, Physiography