

## H57 Mass Disasters and Non-Human Remains

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The goal of this presentation is to stress identification of non-human remains.

This presentation will impact the forensic community and/or humanity by demonstrating how identification of non-human remains can dramatically alter an investigation and why proper identification can save investigation time and expenses.

When disaster struck on 9-11 anthropologists from across the United States responded to lend their expertise. As in any disaster, large or small, anthropologists are often called upon to perform the same or similar tasks that they face in their own forensic setting at home. Often the importance of human verses non-human determination is underplayed in the mass disaster arena. During the 9-11 response 30% of the remains the first author examined in a three-day period were non-human and did not need further identification processing. The frequency and type of animal remains recovered or found in a mass disaster certainly depends on the setting. Airplane crashes in the ocean usually result in a variety of sea mammal remains; those in an urban setting often include processed domesticated animals, such as pig, cow, bird, sheep, or pets such as cats and dogs. This poster focuses on a problem in identification which is not stressed in the literature. In a review of bone specimens submitted over a ten-year period to Southern California Coroner offices in Los Angeles, Orange, Riverside, and San Bernardino counties, the authors of found the "pig knee" to be the most problematic. Variability in "pig knees" is shown using photographs and line drawings and comparisons are made with the adult human skeleton. Graphs are also presented to show the frequency of animal types from 9-11 and from a year (2004) at the Riverside County Sheriff-Coroner. While the fully cleaned "pig knee" or ham bone does not necessarily offer a challenge to the trained anthropologist, partially fleshed ham bones pulled from garbage cans by the neighborhood dog have proven to be the most often misidentified element by specialists with some degree of knowledge. In the cases presented the "pig knee" was misidentified as being human by emergency room doctors, chiropractors, radiologists, and an orthopedic surgeon.

Mass Disaster, Human/Non-Human Identification, Faunal Analysis