



Physical Anthropology Section – 2009

H81 Analysis of Thirty-Three Years of Forensic Anthropology Casework at California State University, Chico (1975-2008)

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The goal of this presentation is to summarize and assess statistical patterns in the forensic anthropological cases examined at California State University, Chico (CSUC) from January 1975 to April 2008.

This presentation will impact the forensic community by providing demographic information on cases examined at the CSUC Human Identification Laboratory (CSUC-HIL) that will aid in evaluating trends in forensic anthropological casework in northern California. This study will provide comparative data for evaluating temporal and regional trends in forensic casework in North America, and also will shed light on the changing applications within forensic anthropology since the 1970s.

The research is modeled after a similar study conducted at the Smithsonian Institution (Grisbaum and Ubelaker 2001). Case reports spanning 1975 to 2008 were examined, and a total of 319 cases were entered into the project database. For each case, the date of arrival, anthropologist, trauma type, age, sex, ancestry, and MNI were recorded. Cases were categorized as representing human or non-human remains, or both.

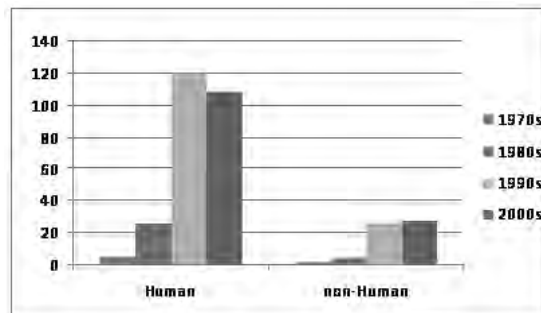
Of the 319 cases recorded, 18.8% (n=60) were non-human or included non-human remains. Of the 264 human remains, 18.2% (n=48) were positively identified through efforts of the CSUC-HIL. Biological profiles were determined on an individual basis, when possible, as several of the cases were determined to have an MNI greater than one. These cases typically involved buried remains (e.g., archaeological), in which commingling was a hindrance to creating individual biological profiles.

A MNI of 328 was determined for the 264 cases that were determined to be human remains. Of these 328 individuals, 43.3% (n=142) were male and 28.9% (n=95) were female. In the remaining 91 individuals, sex could not be determined due to the incomplete or fragmentary nature of the remains. Of the 328 individuals analyzed, 10.4% (n=34) represented subadults.

The frequency and regional distribution of casework were also analyzed. The majority of cases are from five northern California counties: Shasta (13.2%), Butte (9.1%), Tehama (8.2%), Nevada (6.6%) and El Dorado (6.6%). The remaining cases came from one of 27 additional counties in California or from Nevada.

The extensive data set from CSUC (n=319) will provide an interesting temporal and regional perspective for comparison to other studies, specifically: Hrdlicka's 37 cases from 1938-1942, Stewart's 167 cases from 1946-1969, Angel's 646 cases from 1962-1986, and Ubelaker's 667 cases from 1975-2000 (Ubelaker 2000). At CSUC, the number of case reports of remains determined to be human and non-human were examined by decade. Nonhuman remains comprised 28.6% of cases in the 1970s, although this includes only two cases. In the decades following, the percentage of nonhuman cases increased from 13.3% (n=4) in the 1980s, to 18.8% (n=26) and 20.6% (n=28) for the 1990s and 2000s, respectively. The frequency of human cases increased dramatically from five cases in 1970s to 108 cases from 2000-2008.

This study provides an assessment and summary of the casework conducted at the CSUC-HIL, which will serve as a basis for comparison with other regions of North America. The results of this study indicate a dramatic increase in the use of forensic anthropologists in Northern California beginning in the 1990s.



References:

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Demographic Analysis, Biological Profile, Northern California