A Thousand Tales of Dead Men: The Forensic Anthropology Cases of William R. Maples, Ph.D.

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ABSTRACT: This paper examines the nearly 1000 forensic anthropology case reports authored by the late William R. Maples during his 28 year career at the University of Florida, Gainesville. The types of case files reviewed include C.A. Pound Human Identification Laboratory reports; 999, US ARMY-CILHI reviews; 226, and historical or prominent persons. Although Dr. Maples performed private casework, these files were not available for examination. A demographic profile for the C.A. Pound Human Identification Laboratory sample is presented.

KEYWORDS: forensic science, William R. Maples, forensic anthropology, human identification

William R. Maples was born on 7 August 1937 in Dallas, Texas. In order to pay for his undergraduate education, Maples was an insurance claims adjuster, served as an ambulance attendant, was an orderly and emergency room assistant, and worked for a local funeral home. He received his MA (1962) and Ph.D. (1967) in anthropology from the University of Texas. After receiving his masters' degree, Maples served as manager of the Darajani Primate Research Station in Kenya from 1962 to 1963. Maples returned to Texas for a year before leaving again for Kenya to direct the Southwest Texas Research Center in Nairobi from 1964 to 1966 (1). Dr. Maples was an assistant professor of anthropology at Western Michigan University (1966–1968) before accepting a position at the University of Florida in 1968, where he spent the remainder of his professional career.

Throughout the late 1960's and early 70's, Maples' published research focused on both taxonomic concerns and the adaptive behavior of baboons he studied in Africa (2,3). His major emphasis was on re-examination of the classification of the Kenya *Papio* species. However, beginning in the mid-70's, he returned his energies to his first love, forensic anthropology (4,5). Dr. Maples began consulting with Florida medical examiners in the early 70's on a part-time basis, and by the mid-1980's was conducting more than a dozen forensic cases a year. During the 1980's, Dr. Maples established a relationship with the U.S. Army Central Identification Laboratory, Hickam Air Force Base, Hawaii (US ARMY-CILHI) providing oversight, expertise, and consultation on cases involving military personnel missing or killed in action during the conflict in Southeast Asia (6). Dr. Maples provided not only expert opinion,

but congressional testimony on at least three separate occasions which helped shape the reformation and professional mission of that laboratory. In addition to his work with Florida medical examiners, Dr. Maples was a forensic consultant to the New York State Police Forensic Sciences Unit.

Together with Dr. William Goza, a longtime friend and colleague at the Florida Museum of Natural History, Maples convinced a local Gainesville resident and notable University of Florida benefactor C. Addison Pound to help fund a human identification laboratory at the University. The C.A. Pound Human Identification Laboratory opened, in name only, in 1986 as part of the Florida Museum of Natural History. Four years later, Maples designed and helped raise funds for a separate facility, which opened in 1990. During its first full year of operation, 1991, the C.A. Pound laboratory received 114 separate forensic anthropology cases for skeletal analysis.

An expert and pioneer in the field of forensic anthropology, Maples was internationally known and respected for his rigorous and thoughtful analysis of human skeletal material, from the bones of the victim of an unsolved homicide in rural North-Central Florida to the remains of President Zachary Taylor, Francisco Pizarro, and Joseph Merrick - *The Elephant Man* (7). In 1992, Maples supervised a multidisciplinary team of American forensic scientists, that traveled to Russia to identify the remains of the last Russian monarch, Czar Nicholas II and his family. The Czar and his family were reportedly slain by revolutionaries in 1918 in Ekaterinburg, Russia. In 1996, Maples assisted medical examiners in Dade County, Florida identify the remains of victims of the Valu-Jet airline crash.

Maples was a *Fellow* of the American Academy of Forensic Sciences, a *Diplomate* of the American Board of Forensic Anthropology, served on the editorial board of the *Journal of Forensic Sciences*, was a *Fellow* of the American Anthropological Association, and a *Member* of the American Association of Physical Anthropologists.

William R. Maples died 27 February 1997 at his home in Gainesville. He was 59 years old.

During the 25 year period between April 1972 and November of 1996, Dr. William R. Maples authored or co-authored with his students over 1000 forensic anthropology case reports, each meticulously annotated and documented through photography and radiography. It is a rare and unique opportunity to examine, in full, the documented record of one component of such a storied career.

Materials and Methods

The sample includes all forensic anthropology cases handled by Dr. William R. Maples during his career at the University of Florida. The original sample included 1230 forensic reports, how-

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ever, cases pertaining to the US ARMY-CILHI (226 reviews), private casework, and historic or prominent persons (5 individuals) were excluded from the following analyses. Examples and extended discussion from several of these works are presented elsewhere in this volume (see 6,7). Summary statistics were calculated for the remaining 999 forensic anthropology cases.

Results and Discussion

Doc We've Got A Problem

Dr. Maples' first forensic anthropology case, in April 1972, was initiated by a call from the State Crime Laboratory in Tallahassee, Florida requesting an age assessment on human skeletal remains recovered from a peat bog in Washington County. A relatively simple inquiry that would normally require only a few minutes of examination evolved into a two-month effort by Maples and various medical specialists on campus for positive identification. Through the combined expertise of several individuals, the medical condition of the unknown person was so well described that many that knew him during life were able to readily identify him. *The Identifying Pathology*, was diagnosed as a cholesteatoma which presented on the right external auditory meatus (Fig. 1), and prompted Maples to write, it is the responsibility of the forensic anthropologist to exhaust all possible information presented in the remains under investigation (8).

Several basic questions come to mind when a large data set such as the Pound laboratory sample is available for analysis. For example, what is the rate or number of cases per year? Who makes up the forensic sample? At what time during the calendar year do cases come into the lab? And, finally, from where do the majority of forensic cases come?

From 1972 to 1986 Dr. Maples examined over 150 cases, a rate of approximately 10.1 per year. However, in 1987, the number of cases rose dramatically to 53. This increase coincides with the formal establishment of the C.A. Pound Laboratory. Thereafter, Maples and the personnel of the C.A. Pound Human Identification Laboratory worked on nearly 850 cases, averaging 84.8 a year between 1987 and 1996 (Fig. 2). Of the sample used for these analyses, 881 pertained to human material, 112 non-human remains, and 6 were unclassified (Fig. 3). The overwhelming percentage of the



FIG. 1—William Maples' first forensic anthropology case; the identifying pathology. Diagnosed as a cholesteatoma.

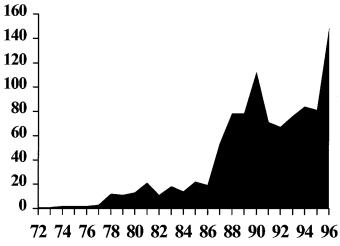


FIG. 2—William R. Maples' forensic anthropology cases: 1972 to 1996.

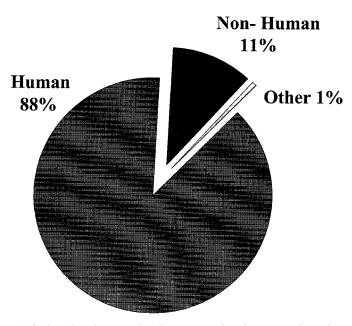


FIG. 3—Classification of William R. Maples' forensic anthropology cases. Number of cases used for analysis, 999.

total cases involved human skeletal remains; however, among the 11% recorded as non-human several of these were of forensic interest.

In March of 1996, the University of Florida Police Department (UFPD) delivered to Dr. Maples approximately 53 blocks of resin in which several dozen disarticulated mice had been encased. The mice had been placed in a mold, then a polymer compound was poured into the mold. When the resin hardened, the blocks were cut with a band saw, and hung in the fashion of a mobile. A University of Florida student created the mobile as a class art project. The question posed by the UFPD was, "were the mice alive when placed in the resin?" Not one to ever back down from a challenging problem, Maples photographed and radiographed the resin blocks in order to examine the issue. Dr. Maples concluded that because of arching of the spinal column, and the position of the limbs,

drawn in toward the body, that in fact several of the mice were alive when entombed. The case resulted in a heavy fine for the student.

A demographic breakdown of the human cases reveals that 43% of the sample is White, 15% Black, 3% Amerindian, 2% Asian-American, and 2% Hispanic (Fig. 4). The remaining 35% of the sample included cases where race was not accessed due to the incomplete nature of the remains. Further analysis of the case files reveals that of the human cases 293 are female and 398 male. Of the males, 234 were White and 82 were Black. White females represent 177 cases and Black females, 63. The overall sex ratio is presented in Fig. 5, and shows that males constitute 46% of the sample, and females 33%. As with the determination of race, not all cases presented morphological characteristics amenable to accurate sex assessment. Thus Maples was unable able to confidently ascertain sex in 21% of the 881 human cases.

Figure 6 depicts the Pound Lab case sample from 1972 to 1996 by month. The busiest month over the 25 year period is May with an average of 126 cases. The next highest month historically is June

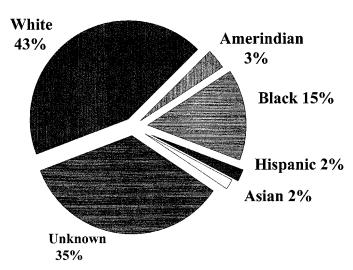


FIG. 4—Racial composition of William R. Maples' forensic anthropology cases. Number of individual cases used for analysis, 881.

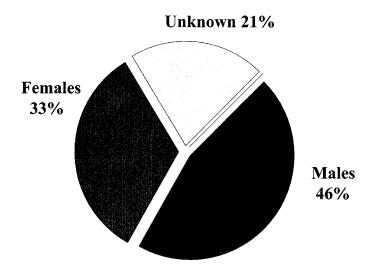


FIG. 5—Sex ratio of William R. Maples' forensic anthropology cases. Number of individual cases used for analysis, 881.

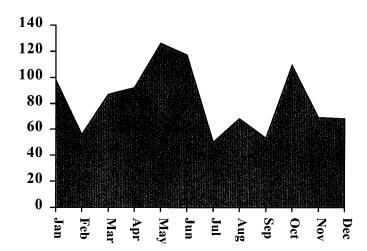


FIG. 6—William R. Maples' forensic anthropology cases by month: 1972 to 1996.

with just under 120 cases, followed by October with 109. The slowest month, least number of cases, of the year is July (50 cases), followed by September (53 cases).

These numbers do not necessarily reflect when death occurred, but rather, when the remains are discovered and recovered. That May and June are the busiest months is not surprising; these are the late spring and early summer seasons for most of the state of Florida. This is the time of year when people begin moving out into previously fallow fields, wooded areas, the Everglades, and state parks. All are popular places for bodies to be disposed.

The summer months, July, August, and September are noticeably slow. Why these months are responsible for comparatively few cases is not readily apparent. Perhaps due to the relatively high summer temperatures throughout most of the state, fewer people take to the wooded or heavily overgrown areas, but rather travel to the coastal beaches where bodies are easily and quickly discovered prior to decomposition. The large number of forensic cases in October is most likely due to dropping temperatures and the beginning of various (deer, dove, etc.) hunting seasons throughout the state. It is tempting to speculate that it is during the summer months when the bodies are being hidden, to be eventually discovered in October. Estimates of time since death, or the last date the individual was seen might help shed light on this speculation, however there was not sufficient data in the existing case files to fully address this intriguing issue.

Florida is a very large territory totaling 58,560 square miles, and carries the fourth highest population in the nation. The state of Florida contains three major interstate highways within its borders that travel north-south along both coasts (I-75, and I-95), and eastwest (I-10) from Jacksonville to the Pacific ocean. The state, by legislation, employs a medical examiner system, and is divided into 24 medical examiner districts, which parallel the state judicial districts

Figure 7 reveals the origination point for all Dr. Maples' C.A. Pound laboratory forensic anthropology cases. The overwhelming majority of cases (27%) Maples examined came from Metro-Dade County (District 11), which was responsible for over 200 cases, of these only 13 were non-human. Metro-Dade County, which encompasses the city of Miami, has the highest population density in the state, and the most elaborate medical examiner department. The large population size and high violent crime rates are the most

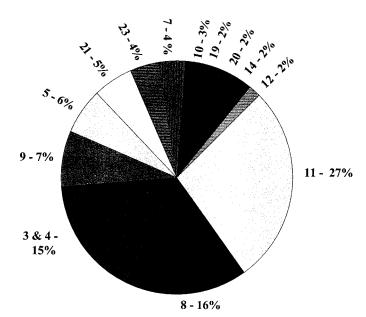


FIG. 7—Distribution of William R. Maples' forensic anthropology cases. District 11 - Miami; District 8 - Gainesville; Districts 3 & 4 - Jacksonville; District 9 - Orlando; District 5 - Leesburg; District 21 - Ft. Myers; District 23 - St. Augustine; District 7 - Daytona; District 10 - Bartow; District 19 - Ft. Pierce; District 20 - Naples; District 14 - Panama City; District 12 - Sarasota.

likely reasons for the high percentage of forensic anthropology cases. However, the friendship and respect between Bill Maples, and Dr. Joe Davis, the former Chief Medical Examiner for Metro-Dade County, cannot be overlooked. It was Dr. Davis who early on in Maples career recognized the benefit of having a forensic anthropologist examine all cases involving human skeletal remains. It was also Dr. Davis who arranged a formal appointment for Dr. Maples as forensic anthropology consultant to Metro-Dade County. The appointment, in addition to performing skeletal analysis, involved quarterly trips to Miami to lecture and present didactic sessions to the forensic pathology fellows performing their yearlong residency.

Medical Examiner District 8, which encompasses the city of Gainesville and several surrounding counties, provided 131 (16%) forensic cases over the past 25 years. Only six of these cases involved non-human material. Dr. William Hamilton, the Chief Medical Examiner for District 8, and Bill Maples have been friends and colleagues since the early 1980's. Bill Hamilton, like Joe Davis, recognizes the benefit of forensic anthropology to the overall investigation of death. That coupled with the close proximity between the Pound Lab and the medical examiners office facilitated the long standing professional cooperation. The 4th Medical Examiner District is based out of Jacksonville, Florida, and referenced 101 (15%) forensic anthropology cases to Bill Maples during his career at the University of Florida. A Southern city on the rise, Jacksonville has a rapidly increasing new population, and a somewhat transient working group. Those factors, plus a very active group of medical examiners and investigators, and the geographic proximity to Gainesville all played a role in the large number of cases sent to the Pound Lab. Districts 5 (Leesburg, FL) and 9 (Orlando) referred 47 (6%) and 54 (7%) cases respectively.

The remaining medical examiner districts and their percentage of referrals are shown in Fig. 7. What is apparent by examining the

percentages by city, is that Bill Maples served the entire state of Florida. From the panhandle, Panama City, North-Central, Gainesville, Central, Orlando, to Miami, Dr. Maples worked on skeletal remains from all across the state. The result of having worked on such a large number of cases often required Dr. Maples to be called to testify to his findings. Most of this came in the form deposition, although his court appearances were many. Since 1985 Maples gave 66 depositions, and appeared in court 38 times.

Doc We've Got A Problem II

On 10 November 1996, Dr. Maples received a phone call from the District 9 Medical Examiner in Orlando requesting his expert opinion on a set of human skeletal remains. The police had a possible identity, but the remains were too decomposed for fingerprinting, and no dental records were available. The next day, a university holiday, Bill and Margaret Maples and the author traveled to Orlando to examine the remains. The individual had been missing for approximately six months, was 18 years of age at death, and reportedly 6 ft 7 in. in height. After establishing the basic biological profile, white male, 18 to 20 years of age, with a mean stature of approximately 76 in., Maples began a careful study of the entire skeleton. Several defects that appeared to be gunshot wounds were noted and photographed. All of this concurred with what was known of the individual's demise. He had been involved in the drug trade in the Orlando area, and something had gone wrong with his relationship to his business partners. The medical examiner had all the available medical records, including X-rays, but little was thought useful for establishing a positive identification. One set of radiographs was of the left foot and ankle and derived from a visit to the local emergency room two years prior. The patient had complained of a "broken foot." The radiological reported no unusual clinical findings.

Dr. Maples then began to examine more closely the bones of the lower leg, and discovered what appeared to be a bony abscess in the process of healing on the distal left tibia. Maples then referred back to the antemortem ankle films and found the same defect. Postmortem radiographs were then made and compared to the antemortem. When studied side by side the outline of the bony defect and surrounding trabeculae were identical.

It is somehow appropriate that Dr. Maples' last case involved a similar, identifying pathology to that of the first case in 1972.

Summary

For nearly 30 years Dr. William R. Maples served the state of Florida by providing expert forensic anthropological analysis. Cases referred to Maples originated from the Panhandle to the Florida Keys. Cases involving Blacks, Whites, Asians, males and females, gunshot wounds, blunt trauma, sharp force trauma, videosuperimposition, burned, and buried, Maples covered the entire forensic spectrum. The stories told; the dead men's tales were performed with the utmost scientific rigor, and compassion for the families. Each tale was different from the other, and extraordinary in their own way.

Acknowledgments

The author is grateful to Bill and Margaret Maples. For several months, I had the pleasure to work with Dr. Maples, to hear the tales, and acquire the history of forensic anthropology in Florida. Both Margaret and Bill made me and my family feel welcome in Gainesville. Dr. Bill Goza provided invaluable assistance and background on the history of the C.A. Pound Human Identification Laboratory. Dr. Goza continues as a friend and colleague. To the students, past, and present at the C.A. Pound Lab, much appreciation for all their careful analyses and thoughtful documentation. Finally, my thanks to Dr. Dana Austin-Smith for inviting me to be a cosponsor of the symposium in honor of Dr. Bill Maples.

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