



## Physical Anthropology Section – 2006

### H26 Missing, Present, and Left Behind

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After attending this presentation, attendees should better understand the taphonomy (including origins and dispersal patterns) and investigative value of isolated bones and fragments often unexpectedly encountered by law enforcement.

This presentation will impact the forensic community and/or humanity by reminding the forensic community of the significance and probative potential of isolated (or missing) human bones or fragments.

Forensic anthropologists are well aware that there are bits and pieces of human skeletons to be found in all sorts of places. Law enforcement should be mindful of this possibility, and the bone or fragment brought to them by a conscientious citizen should be examined by a forensic anthropologist and not dismissed as “animal” – as occasionally happens.

Sometimes these remains are from the past - Native American, or forgotten cemeteries - and therefore not of forensic interest. The abundance of ancient and historic remains may also confuse investigators who, while searching for a specific missing individual, locate Native American/historic remains instead.

A knowledge of taphonomy (what happens to bodies after death) helps explain unexpected body parts. In addition to animal activity, water, wind and other natural forces, human activity may be involved – especially agriculture and construction. Remains may even be unknowingly transported by trains and other vehicles after an accident. Clandestine removal of murdered victims' remains may result in small bones and fragments in unexpected places. Medical specimens, ritual and fraternal activities also provide us with “abandoned” human parts. Anthropologists frequently receive remains that lack varying numbers of small bones or fragments. The explanation may be failure to recognize small bones (or fragments) as being human, or even as being bone at all. However, hungry scavengers do make off with hands, feet, or other bones that “protrude” from shallow graves or surface deposits. The authors' proximity to several rivers, and especially Lake Erie, has made clear the importance of wind, currents, and aquatic scavengers in disappearing and dispersing body parts from both intact and dismembered bodies.

Occasionally, parts of bodies are apparently retained by the perpetrator, as was the case when a former husband severed his former wife's lower legs and feet to fit her into a too short homemade box in eastern Ohio in 1974. Body parts may also be deliberately dispersed to avoid identification.

The presence of bones can yield important information. The incomplete skeletonized remains of a young man were found on a Maumee River flood plain. He had disappeared three years earlier, some 30 miles upstream. Bones were scattered under leaves, tangled in weeds, with some partially buried by repeated flooding. Several bones were never recovered, but recovery of small bones of the hands and feet, as well as a few finger and toe nails, demonstrated that although he had traveled many miles and over a dam, his body had been relatively intact upon reaching the floodplain. Occasionally the refers is seen - situations where bones or fragments ranging from femoral heads to carpals, tarsals, phalanges and even partial maxillas and crania have been recovered as isolated finds.

The explanation for isolated finds may be more complicated, involving such aspects of taphonomy as the human and animal activity discussed above, erosion, agricultural or construction projects that involve removal and dispersal of soil. These processes are a frequent source of Native American and historic remains in many parts of the country, including Ohio and Michigan. It has also been noted in relation to the shallow burial of massacred Guatemalan peasants in recent times, whose remains were then dispersed by agricultural activity.

A variation on the non-recognition of small elements during recovery that actually serves the cause of justice involves attempts by perpetrators to cover up individual or mass clandestine deaths by returning to the original deposition site some time afterwards and “disappearing” remains by moving them elsewhere to avoid discovery and/or confound identification. During such procedures, the easily seen and recognized bones are more likely to be collected, while less easily located and recognized small bones, fragments and individual teeth may be left behind. In some cases, this “collection” seems to have been followed by disposal of remains in several different and widely separated locations. Fortunately, these small initially

unrecognized bones and fragments are sometimes left behind to bear witness to the original crime. Such instances of exhumation, reburial, and dispersal of victims of genocide have been documented in several countries, including Bosnia-Herzegovina.

#### **Forensic Anthropology, Taphonomy, Small Bones**