

Lab 2: Human vs. Non-human, Cremated Remains

Objective: In this lab, we examine some of the salient differences and similarities between human and non-human bones for determining whether the remains are human or non-human. Please consult the assigned reading for this topic and especially Chapter 3 in Byers (2005); Ch. 3 in Byers and Myster (2005); Hillson (1992). Other useful references are: Ubelaker (1999:44-52), Bass (1995: 310-317), and Schwartz (1995:335-341); Schwartz (2007: Appendix B, pages 365-371). This lab also briefly examines cremated remains and other materials often confused with bone.

1. Comparing the following specimens to that of a **human humerus**, identify which animal each represents. Further, indicate some of the important features which are useful in identification. All specimens are **humeri**.

Specimen	Identity
A	
B	
C	
D	

List a few of the more salient differences that allow you to determine that the specimens are not human:

- a.
- b.
- c.

2. Comparing the following specimens to that of a **human femur**, identify which animal each represents. Further, indicate some of the important features which are useful in identification. All specimens are **femora**.

Specimen	Identity
A	
B	
C	
D	
E	

List a few of the more salient differences that allow you to determine that the specimens are not human:

- a.
- b.
- c.

3. Comparing the following specimens to that of a **human tibia**, identify which animal each represents. Further, indicate some of the important features which are useful in identification. All specimens are **tibiae**.

Specimen	Identity
A	
B	
C	
D	
E	

List a few of the more salient differences that allow you to determine that the specimens are not human:

- a.
- b.
- c.

Comparing the following specimens to that of a **human scapula**, identify which animal each represents. Further, indicate some of the important features which are useful in identification. All specimens are **scapulae**.

Specimen	Identity
A	
B	
C	
D	

List a few of the more salient differences that allow you to determine that the specimens are not human:

- a.
- b.
- c.

5. Comparing the following specimens to that of a **human radius and ulna**, identify which animal each represents. Further, indicate some of the important features which are useful in identification. All specimens are **radii and ulnae**.

Specimen	Identity
A	
B	
C	
D	
E	

List a few of the more salient differences that allow you to determine that the specimens are not human:

- a.
- b.
- c.

6. Bear paws are often confused with human hands. Compare the human hand with a **bear paw** and make a list of the salient differences you observe.

Feature	Human	Bear
a.		
b.		
c.		
d.		
e.		

7. Identify these remains:
 - a.

 - b.

8. Cremated remains. Carefully examine the two specimens provided and comment on the type of firing involved and other circumstances surrounding the time of fire exposure.

Specimen A

Specimen B

Bass, W.M. 1995 *Human Osteology: A Laboratory and Field Manual of the Human Skeleton*. 3rd. ed. Missouri Archaeological Society. Columbia, MO.

Steven N. Byers (2002) *Introduction to Forensic Anthropology*. Allyn and Bacon, Boston.

Hillson, S. 1992 *Mammal Bones and Teeth. An Introduction Guide to Methods of Identification*. University College London. The Institute of Archaeology.

Schwartz, J.H. 1995 *Skeleton Keys. An Introduction to Human Skeletal Morphology, Development, and Analysis*. New York: Oxford University Press.

Schwartz, J.H. 2007 *Skeleton Keys. An Introduction to Human Skeletal Morphology, Development, and Analysis*. Second Edition. New York: Oxford University Press.

Ubelaker, D.H. 1999 *Human Skeletal Remains: Excavation, Analysis, Interpretation*. Third edition. Aldine Manuals on Archaeology. Washington: Taraxacum.