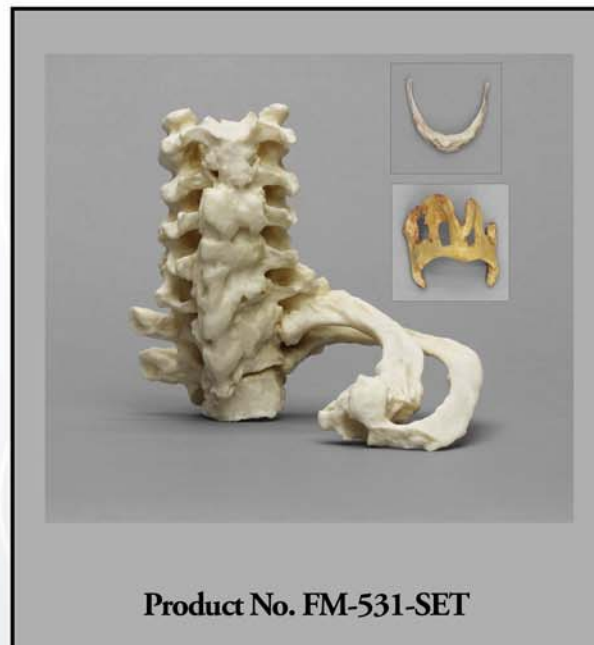


# OSTEOLOGICAL EVALUATION

*Prepared by*  
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*Consultant Osteologist*



**Human 68-year-old  
Male, Ossified Set**



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OSTEOLOGICAL REPRODUCTIONS

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# **Human, 68-Year-Old Male, Ossified Set**

**Product Number:** FM-531-SET

**Known Information:**

These remains come from a 68-year-old European American male who died of heart disease. This information was documented at the time of the individual's death.

**Maxwell Museum of Anthropology:**

The Maxwell Museum of Anthropology's Laboratory of Human Osteology, at the University of New Mexico, specializes in numerous facets of physical anthropology. The laboratory serves as a repository of human remains and includes prehistoric, historic, documented, and forensic remains.

Established in 1984 by Dr. J. Stanley Rhine, the Maxwell Museum's Documented Skeletal Collection has grown to include 237 individuals (as of July 2005) encompassing both sexes, all ages, and many population groups. The skeletal remains are obtained by donation, either by the individual before death, or by the family of a deceased loved one. Information on the sex, age, population affinity, and cause of death is available for the majority of these individuals, allowing students and visiting researchers to develop and test new techniques and theories.

Since 1995, prospective donors or their families have been asked to provide health and occupational data as well. With this information, researchers are able to examine the skeletal manifestations of particular diseases including degenerative joint and disc diseases, lymphoma, and osteoporosis, as well as the reaction of bone to repetitive motions and trauma. Recent research has included efforts towards the identification of handedness in individuals, determination of body mass from the skeleton, and variation in cranial damage from various projectiles. The importance of the Documented Collection cannot be overstated. No other institution in the American West has as large a collection of human skeletal remains with such extensive demographic data.

Bone Clones is grateful to the Maxwell Museum for allowing us to select specimens for reproduction from their valuable collection and granting us exclusive casting rights to these pieces.

# **Human, Diffuse idiopathic skeletal hyperostosis (DISH)**

**PRODUCT NUMBER:** FM-531-SET

**SPECIMEN EVALUATED:** Bone Clones® replica

**SKELETAL INVENTORY:** One partial hyoid bone (absent right greater horn tip)  
One partially calcified thyroid cartilage  
C3 – T2 vertebrae  
Left first and second ribs

**GENERAL OBSERVATIONS:**

In general, the molding process has preserved significant details necessary for evaluation. The remains are totally skeletonized.

**OSTEOLOGIC OBSERVATIONS:**

There is fusion of the third through sixth cervical vertebrae, and the first two thoracic vertebrae. The left first and second ribs are fused to the spine (proximally) and to each other (distally). The posterior articular facets of the vertebrae may be fused. There is ossification of the right anterior longitudinal ligament. All of the vertebral foramina and the spinal foramina are patent. The entire spine has a slight left lateral curvature.

**TRAUMA:**

All skeletal elements are atraumatic.

## ***Bone Clones® Osteological Evaluation Report***

### **SUMMARY:**

1. Partial cervical spine, proximal thoracic spine and left first and second ribs with diffuse idiopathic skeletal hyperostosis (DISH).
2. Subtotal calcification of the thyroid cartilage.
3. Tip of the right greater horn of the hyoid bone is absent.

### **EDUCATIONAL RESOURCES:**

1. This is an excellent example of diffuse idiopathic skeletal hyperostosis (DISH).[1]

### **REFERENCES:**

1. Aufderheide, A. and Rodriguez-Martin, C. (1998). *Cambridge Encyclopedia of Human Paleopathology*. Melbourne, Australia: Cambridge University Press.

### **DISCLAIMERS:**

This report is meant only as a teaching tool for introductory level students of the anatomical, anthropology or forensic sciences who might be using this specimen to learn human and forensic osteology. Evaluation of osteologic material is best done with original specimens. My evaluation was based solely upon studies of a Bone Clones® replica. My opinions are based solely upon the material presented to me. This is somewhat artificial as in real forensic investigations additional studies would be undertaken prior to the formulation of diagnoses, and the production of a report. These studies might include plain film radiography, computed tomography (CT) studies, histology, etc.

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