

# **Osteological Report on the Human Remains from Longoar Bay, Pembrokeshire Sk111 and Sk206 (Extreme Archaeology 2003)**

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## **Introduction**

Extreme Archaeology investigated burials eroding out of the cliff face at Longoar Bay, Pembrokeshire, in **October?** 2003. Two trenches were also dug on the cliff top; in both trenches, there was an adult burial, with preserved human remains as detailed in this report. The small (presumably infant or child) burials in trench 1 did not contain any preserved bones.

The bones were transported to the University of Bristol, where they were cleaned assessed by Dr Alice Roberts and Dr Jonathan Musgrave.

## **Methods**

The bones were assessed by Dr Roberts (Bristol Osteoarchaeology Research Group). Individual bones were identified and recorded as an inventory; the state of preservation and fragmentation of the bones was also recorded. The material was aged and sexed according to standard anthropological techniques, (Bass 1971, Brothwell 1981). Selected measurements were made, where possible, following the recommendations of the Palaeopathology Association (1991). The skeletons were also examined for a range of non-metric or discontinuous traits, according to the same recommendations. Any evidence of pathology was described, and differential diagnoses offered.

## **Skeleton 111 (trench 1)**

### **Inventory and description of skeletal and dental remains (sk 111)**

The bone was pale, reddish brown in colour and very fragmented. Less than 25% of the skeleton was preserved.

#### **Cranium and mandible**

There were many cranial fragments, comprising 50-75% of a cranium. These included a large fragment of cranial base (body of sphenoid, basiocciput and right petrous temporal), a large fragment of the left temporal, a large fragment of the occipital, and numerous fragments of cranial vault.

*Photograph of the teeth, mandible and larger fragments of the cranium of Sk 111*

There was a fragment of the left ramus and angle of the mandible (~25%), with part of the condyle attached but the coronoid process missing.

#### **Teeth**

There were 12 teeth including 7 molars and 5 premolars, and varying in their state of preservation. In some, only the enamel crown was preserved. All of these teeth were loose, their sockets missing. There were also some other, small fragments of enamel.

#### **Upper right quadrant**

The crown of the first premolar (4) was present, with polish on both cusps. There was a fragment of the crown of the second molar (7), with dentine exposed on the tips of the cusps. The crown of the third molar (8) was present; the cusps were polished but no dentine was exposed.

#### **Upper left quadrant**

Both upper left premolars were present. The upper left first premolar (4) was polished on both cusps; the second premolar (5) was also polished on both cusps, with a tiny spot of dentine exposed on the buccal cusp. The crown of the second molar (7) was almost intact; there were areas of dentine exposed on all cusps. The crown of the third molar (8) was present, with polishing on all three cusps, and a minute spot of dentine exposed on the distobuccal cusp.

#### **Lower right quadrant**

The crowns of both premolars (4,5) were present, each with polish on both cusps. The crown on the second molar (7) was present, with well polished cusps and a minute spot of dentine exposure on one cusp.

#### **Lower left quadrant**

The first molar (6) was well preserved, with the entire crown and about half the length of the roots present; there was dentine exposed on all five cusps, with larger areas exposed on the buccal cusps than the lingual. The crown and upper part of the roots of the second molar (7) were also preserved; there was polishing on all cusps, and spots of dentine exposure on two.

## Postcranium

There was an almost intact **atlas** (C1) vertebra, with damaged right transverse process. There was an almost intact **axis** (C2) vertebra, with damage to transverse and spinous processes.

There were fragments of two other cervical vertebrae.

There was a fragment of the distal half of a **left humerus** (25-50%), missing most of the distal epiphysis. There was a similar fragment of the distal half of a **right humerus** (25-50%), missing the distal epiphysis and metaphysis.

There was a fragment of the distal epiphysis of a **left tibia** (<25%).

There was an almost intact **left talus** and an almost intact **left calcaneus**.

***sk111 left talus******sk111 left calcaneus***

There was a fragment of the distal two thirds of a right **first metatarsal**. There were three other fragments of tarsals, and a fragment of a proximal phalanx.

*sk111 metatarsal and phalanx*

There were several small fragments of long bone shafts.

### **Age and Sex**

The large mastoid process, slight suprameatal crest and moderate external occipital protuberance of the cranium suggest a possible male, but the overall gracility of the skeleton would not seem to support this. In the absence of any pelvic indicators of sex, this skeleton must be judged to be of indeterminate sex.

It is difficult to assign an age range based on dental attrition, as all cusps of the first molar displays moderate dentine exposure on all cusps, but only a minute spot of dentine is exposed on one of the cusps of one of the third molars. This is slightly more wear than incorporated in Brothwell's 17-25 age range, but much less than the 25-35 year age range. It must also be noted that a determination of age based on the attrition of these teeth is an extremely tentative estimate as the dentition is incomplete and the teeth are loose.

### **Pathology**

There was no skeletal or dental pathology evident.

## **Skeleton 206 (trench 2)**

### **Inventory and description of skeletal and dental remains (sk 206)**

The bone was pale, reddish brown in colour and very fragmented. Less than 25% of the skeleton was preserved.

#### **Cranium, mandible and teeth**

The cranial vault was almost intact. Together with fragments of the cranial base, these represented 50-75% of a cranium.

#### *Sk 206 cranial vault*

There were no surviving fragments of mandible, nor any teeth.

#### **Postcranium**

There were no fragments of vertebrae, ribs or sternum and most of the long bones were extremely fragmentary.

There were some tiny fragments of the **right humerus**.

There was a fragment of the acetabulum of the **left innominate bone**.

#### *Sk 206 left acetabulum and left femoral head*

There was a long fragment of the distal half of the shaft of a **left femur**, a fragment of the head, and numerous smaller fragments of the same bone. There were numerous small fragments of the **right femur**.

There was a long fragment of the shaft of the **right tibia**. There was a long fragment of the shaft of a **left tibia** (25-50% ), and smaller fragments of the same bone.

There were a few tiny fragments of the **left fibula**.

There was a fragment of a **left tarsal**.

### **Age and Sex**

There was no brow ridge or external occipital protuberance on the cranium, and the mastoid processes were small. Together with the general gracility of this skeleton, these features would suggest that this individual was a female.

The fusion of the cranial sutures, although not an accurate or precise method of ageing, suggests that this was a mature individual.

### **Pathology**

There was no pathology evident.

### **Summary and interpretations**

In summary, the two skeletons were poorly preserved and highly fragmented with less than 25% of each skeleton remaining; thus little data could be obtained from either. The first skeleton (sk111) was of indeterminate sex, and probably aged between 17-25 years, although this is a very tentative estimate based on the few surviving, and loose, teeth. The second skeleton (sk206) was probably a female, and a mature adult.

There was no evidence of pathology or non-metric traits in these fragmentary remains. The bones were too poorly preserved to allow any metric data to be collected or for stature to be determined.

### **References**

Bass WM (1971) *Human Osteology* (2<sup>nd</sup> edition). The Missouri Archaeological Society.

Brothwell DR (1981) *Digging Up Bones* (3<sup>rd</sup> edition). Oxford University Press/British Museum (Natural History), Oxford.

Mays S (1998). *The Archaeology of Human Bones*. Routledge, London.