

## **2004 ANGLO-GEORGIAN NOKALAKEVI EXPEDITION.**

### **Osteological Assessment for Trench B**

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#### **SUMMARY**

*The Excavation of 10 burials in trench 'B' is reported. In total, 14 individuals were found plus an initial estimate of a minimal number of 6 individuals from the cemetery soil, context (303). All skeletons were aligned East-West.*

*The integrity of all skeletons had seriously been compromised in situ, thus significant restoration was undertaken in order to extrapolate metric and non-metric data. The study of the skeletal remains from Trench B indicates male, female, juveniles and neonate;*

The following assessment is divided into three parts. The first section will be a description of the grave cuts, with the second section detailing each inhumation within the grave. The third section will be a selective overview of the skeletal material, discussing the sample as a whole. Plans and plates are confined to the appendices.

#### **DESCRIPTION OF THE GRAVES**

The following description will detail the shape, size, depth, orientation and truncation of the 10 graves excavated in this 2003 season.

[329] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (328).

[334] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (333).

[337] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (336).

[343] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (342).

[346] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (345).

[349] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (348).

[352] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (351).

[355] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (354).

[363] A sub-rectangular East-West aligned cut with rounded corners. Dimensions are 1.93m east-west and up to 0.55m north-south. Contains skeleton (362).

[375] An indeterminate cut aligned East-West due to the grave fill being the same as the surrounding cemetery soil. Contains skeleton (374).

## GRAVE CATALOGUE

Aging, sexing and stature estimation was accomplished using standard osteological techniques based, where applicable on the degree of epiphyseal and cranial suture closure, changes of the pubic symphysis, dental eruption and attrition and the metrically morphological differences of the Os coxae and skull. The following is a description of each inhumation within the grave, detailing:

1. The context number
2. The orientation
3. The skeleton with comments on its sex, age, stature, position, preservation and pathology
4. Any associated artefacts.

Plans and Plates can be referred to in Appendix A and Appendix B and C respectively.

## TRENCH 'B'

**Skeleton I. (328)** *See plan in appendix A.* Juvenile, aged between 5 and 10 years old

An East-West aligned skeleton, with the head in the West facing skyward. Extended, supine, in partial articulation and moderate preservation, both feet are missing. The arms are flexed at the elbow to bring the hands to rest beneath the chin. Both legs lie un-flexed. The skull integrity has been compromised and is consequently severely fragmented. Possible burial movement towards the south occurs.

Observed pathology: Indications of dental hypoplasia on the canines and slight dental calculus occurs on all the mandibular incisors.

Lesions\* occur on the thoracic vertebrae.

*See plate in appendix B.*

*See pathology plate in appendix C.*

*Associated artefacts: /03\*

**Skeleton II. (333)** *See plan in appendix A.* Unsexed, age: greater than 20 years old

An East-West aligned skeleton, with the head in the west. Extended, supine, in partial articulation and moderate preservation, the upper appendicular and axial elements are disturbed and largely missing. Only the right leg is in articulation. There is copper staining on the distal ulna.

Observed pathology: Slight lipping on the lumbar vertebrae and slight spur formation on the patella.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton III. (336)** *See plan in appendix A.* Possible female, aged 30-35 years old, ht: 163.8 +/- 3.72cm

An SW-NE aligned skeleton, with the head in the SW facing north. Extended, supine, in full articulation and good preservation, both arms are slightly flexed at

the elbow to bring the hands to rest, palmer down, over the pelvis. The skull integrity has been compromised and thus fragmented.

Observed pathology: Caries on LM<sub>2</sub>, slight lipping on the inferior border of the mastoid process with significant markers of rugosity over its surface. Fine pitting over the left supraorbital margin and top of left parietal bone. Slight indications of occupational stress of hand phalange tendon sites. Dental calculus on mandibular incisors and canines.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton IV. (338)** *See plan in appendix A.* Possible male, aged >22 years old, ht: 160.42cm +/-3.27cm

A partially excavated skeleton from the west section, 14.20m north from the south west corner. From the presented lower appendicular elements, one can deduce it was supine, in good preservation and full articulation.

Observed pathology: none.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton V. (342)** *See in appendix A.* Juvenile, aged between 4-6 years old.

An East-West aligned skeleton, with the head in the west. Extended, supine, in moderate preservation and partial articulation all the left appendicular elements appear truncated away.

Observed pathology: none.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton VI. (345)** *See plan in appendix A.* Female, aged >20 years old.

An unaligned disarray of disarticulated skeletal elements.

Observed pathology: Hypertrophy of humeral shaft, significant spiny protrusions on the patella indicating arthritis, cortical thinning of the acetabulum and possible MOS on the posterior femur.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton VII. (348)** *See plan in appendix A.* Probable male, adult.

An East-West aligned skeleton, with the head in the west. Supine, in poor preservation and partial articulation, the lower axial and appendicular elements including both hands, left and right ulna and right radius have been truncated away at the mid thoracic region.

Observed pathology: Alveolar resorption of RM<sub>1</sub>, heavy attrition of teeth occurs. Possible healed trauma or lesion to the anterior body of thoracic vertebrae, characterised by smooth cortical bone in-filling a sharply demarcated horizontal groove.

Lipping occurs on the cervical vertebrae,

Possible pathology involving the supraorbital margin.

Congenital: mid point suture through the frontal bone running from the bregma to the glabella.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton VIII. (351)** *See plan in appendix A.* Adult.

An East-West aligned skeleton, with the head in the west. Supine, in moderate preservation and partial articulation, it has been truncated to leave only the distal end of the left femur, patella, both tibia's and fibula's and some tarsals and metatarsals. Copper staining can be seen on the lateral aspect of the right tibia.

Observed pathology: none.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton VIII. (354)** *See plan in appendix A.* Male, adult.

An East-West aligned disarray of disarticulated and moderately preserved skeletal elements. A fragment of copper alloy occurs in the east of the inhumation.

Observed pathology: none

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton X. (362)** *See plan in appendix A.* Female, aged 39.4 years old +/- 9.1 years, ht: 148.21cm +/- 3.72cm.

An East-West aligned skeleton, with the head in the west. Extended, supine, in good preservation and full articulation, some elements have been fragmented. The inhumation has been carefully placed with 2 stones placed either side of the right and left humerus. The right arm is flexed at the elbow to bring the hand over the left ilium, the left arm is flexed at the elbow to bring the hand across the right elbow. A near complete flagon was found directly over the head. The right tibia and fibula has suffered slight in-situ movement to the south.

Observed pathology: possible necrosis or alveolar resorption of the maxillary and mandibular bone, especially of the incisor area.

Possible resorption of the left lacrimal bone

Multiple alveolar abscesses of the maxilla around LI<sup>2</sup> and RI<sup>2</sup>.

Severe dental caries occur on the LC<sup>1</sup>, LPM<sup>1</sup>, LPM<sup>2</sup>, LPM<sub>1</sub>, LM<sub>1</sub>, and LM<sub>2</sub>.

Extensive levels of attrition occur with all surviving teeth exhibiting large areas of exposed dentine.

Microporosity occurs on the medial aspect of the right clavicle.

Lipping occurs on the thoracic and lumbar vertebrae;

Cortical thinning of the acetabulum,

Spiney lipping on both patella's indicating arthritis.

*See plate in appendix B.*

*See pathology plate in appendix C.*

**Skeleton XI. (374)** *See plan in appendix A.*

An East-West aligned skeleton, with the head facing

Observed pathology:

*See plate in appendix B.*

*See pathology plate in appendix C.*

## **DISCUSSION**

### **Setting**

The settlement of Nokalakevi was constructed on the edge of the Colchian plain on a high ridge beside the River Tekhuri. The acropolis atop the escarpment commands views to the south and east across the plain and northwards into the mountains. Walls running down the mountainside connect it to a lower town enclosed by a loop of the river as it exits the mountains via a narrow gorge. On the east side of the town, successive rulers built three parallel defensive walls with towers and a strongly fortified gate. Several churches, two bath-houses, two 'palaces' and other standing and buried remains of the 4th to 6th century are set within these fortifications.

**Cultural and phase indications through orientation and associated artefacts.**

*Through the nature of this interim report, the following is not a comprehensive or systematic analysis of the skeletal material found at Nokalakevi during the 2004 season. Of the time given during the excavation, the author had 2 weeks to assess 12 skeletons. In Addition to the basic assessment, the physical nature of the inhumations were observed and a number of gross pathologies and traumas identified, some of which are discussed here.*

## **PATHOLOGY**

### **Overview.**

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## APPENDICES

### A: Plans

Skeleton ()	Skeleton ()
Skeleton ()	Skeleton ()

Skeleton ()
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**B: PLATES**

**TRENCH B**

Plate A *skeleton ()*

Plate B *skeleton ()*

Plate C *skeleton ()*

Plate D *skeleton ()*

Plate E *skeleton ()*

Plate F *skeleton ()*

Plate F *skeleton ()*

Plate G *skeleton ()*

Plate H *skeleton ()*

Plate I *skeleton ()*

Plate J *skeleton ()*

Plate K *skeleton ()*

**C: Pathology, Trauma and other Plates**

Plate

Plate

Plate

Plate

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