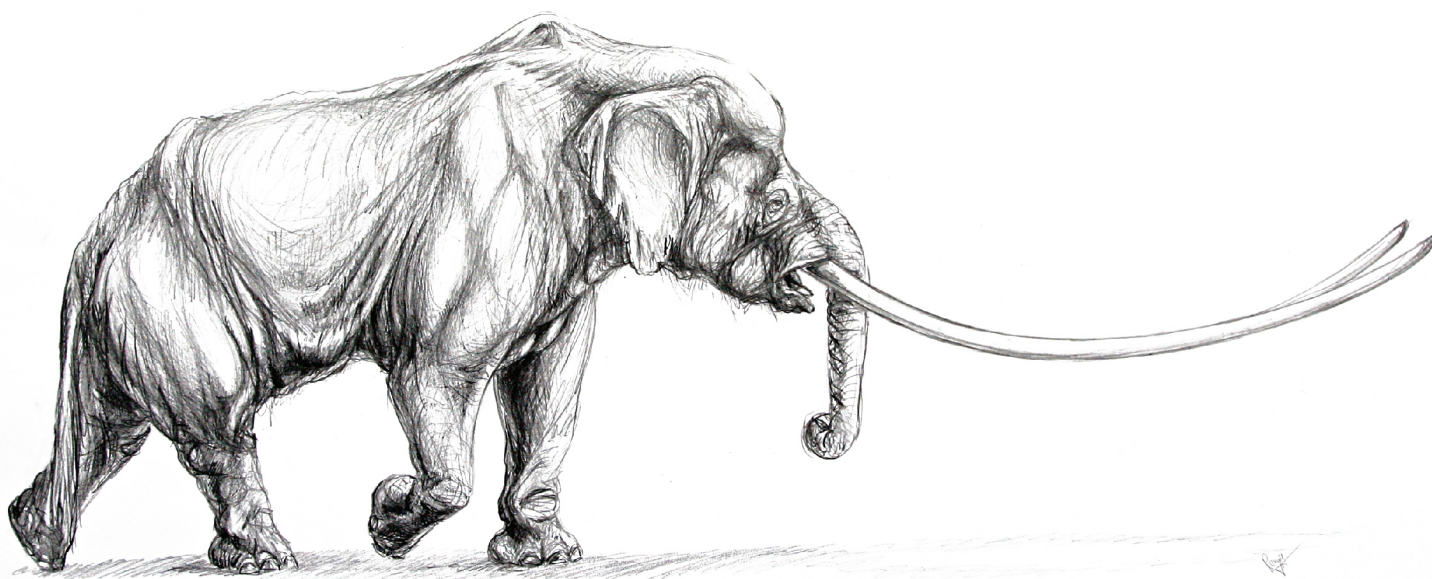




SCIENTIFIC ANNALS of the School of Geology,
Aristotle University of Thessaloniki



SPECIAL VOLUME 102



GREVENA
SIATISTA
GREECE 2014

VIth International
Conference
on Mammoths
and their Relatives

ABSTRACT BOOK

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THESSALONIKI, MAY 2014

Preliminary data on the remains of woolly mammoth *Mammuthus primigenius* (Blum.) with soft tissues from the Anabar river basin, North-Eastern Siberia

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In the period from July 31 to August 5, 2013, an expedition to the lower reaches of the Anabar river was undertaken with the aim of excavating skeletal remains of a male woolly mammoth (*Mammuthus primigenius* Blum.) with partially preserved soft tissues, found by local residents in September, 2012. This is the westernmost finding of a woolly mammoth carcass within the territory of Yakutia.

The skeleton was found in deposits of the first terrace above the floodplain, on the right bank of Morgogor creek in the Anabar river basin, approximately 78 km northeast of Saskylakh settlement, which is the administrative center of the Anabarsky district (Yakutia). The locality has a northward-facing exposure.

The material was collected from two separate loci divided by a recent slump with its principal displacement in a westward direction. The main elements of the skeleton were revealed in the central part of the excavated portion of the site, in a detached sediment block. Three vertebrae were found in articulation, in vertical position; complete pelvic bones and separate ribs were found in a horizontal position.

While clearing the site near the western edge of the excavation, in order to collect hair and wool, two fragments of the sole of the animal's foot and a portion of the gastrointestinal tract were revealed under a covering layer of hair. This suggests that the animal's corpse was eroded, and parts of the body were displaced by flowing water from their initial burial location.

Pieces not found: vertebrae thoracicae - nr. 3-19; vertebrae lumbales; vertebrae caudales; sternum; humerus (sin.), radius (sin.), scapula (sin.), some foot bones.

Collected material: cranium with M3 sin. and dext.; mandible with m3 (sin. and dext.); atlas; axis; 5 vertebrae cervicales; first 2 vertebrae thoracicae; 22 costae: 10 sin. (nr. 1, 2, 3, 6 et al.), 12 dext. (nr. 1, 2, et al.) and other fragments of costae; humerus (dext.); radius and ulna (dext.); scapula (dext.); pelvis; femur (sin. and dext.); tibia (sin. and dext.); fibula (sin. and dext.); metacarpale (II, III, IV, V. dext.); external cuneiforme (sin.); trapezium (sin.); scaphoideum (dext.); lunare (dext.); magnum (dext.); trapezoideum (dext.); cuneiforme (dext.); unciforme (dext.); phalanges (3 ex.).

Several dozen skull fragments were collected from the excavation site. During preparation, under laboratory conditions, the overwhelming majority of fragments were successfully joined and bonded. However, due to extreme deformation of some skull parts (cracks and compressed areas) its three main assembled blocks cannot be securely joined, although it is possible that they could be mounted using a supporting framework. 21 fragments of the external skull surface remain non-joined. The age of the individual was determined by



Fig. 1. A, Soft tissues of the right knee. B, Foot sole with two corneous nails.

comparison with living elephants (stages of dental wear and replacement in modern African elephants; Laws, 1966) and was inferred to be approximately 43 years.

Soft tissues (fragments of skin, tendons, muscle and fat) were found on the ribs, the right femur, tibia and fibula (Fig. 1A) and on some foot bones, and the nearly complete sole of the foot with two nails (Fig. 1B). Some

fat accumulations were discovered while rinsing hair and wool.

Osteological investigation of this material revealed signs of trauma and illnesses of the individual during his life: a non-united rib fracture and a fistula trace on the forehead. The latter is caused either by Nematoda (parasitic worms) or by larvae of the gadfly (Vereschagin, 1981). Most of the epiphyses of longbones (radius, ulna, femur, tibia) and flat bones (scapula, pelvis), the rib epiphyses and separate skull bones were non-fused.

The size of the bones suggests that this individual mammoth was unusually large. Using I.A. Dubrovo's methodology (1982) based on the length of longbones (we took into account the measurements of the fibula (sin) – 677 mm and humerus (dext.) – 1000,5 mm), the shoulder height of the skeleton was calculated as 310-315 cm.

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Citation:

Tikhonov, A., Obadă, T., Fedorov, S., Savvinov, G., Fisher, D., Grigoriev, S., Cheprasov, M., Novgorodov, G., Boeskorov, V., 2014. Preliminary data on the remains of woolly mammoth *Mammuthus primigenius* (Blum.) with soft tissues from the Anabar river basin, North-Eastern Siberia. Abstract Book of the VIth International Conference on Mammoths and their Relatives. S.A.S.G., Special Volume 102: 198-199.