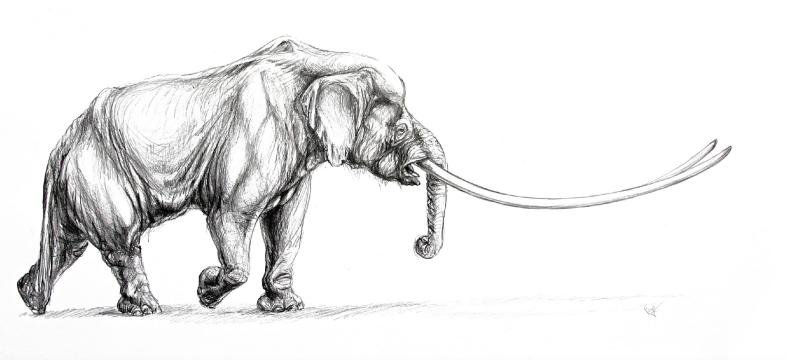


SCIENTIFIC ANNALS of the School of Geology, Aristotle University of Thessaloniki



SPECIAL VOLUME 102





ABSTRACT BOOK

Editors:

Dimitris S. KOSTOPOULOS, Evangelos VLACHOS, and Evangelia TSOUKALA

Preliminary data on the *Mammut borsoni* (Hays, 1834) from Otman Hill (Colibaşi, Republic of Moldova)

Theodor OBADĂ ☑

At the beginning of November 2011, Vasile Grigoriţa, history professor of the "Vasile Alecsandri" theoretical high school from Colibaşi village, Cahul District, was announced by the villagers that some very large teeth were found in the sand quarry from Otman Hill (45.73° N, 28.20° E), located north-east of the above-mentioned locality, and, in his turn, brought the discovery to the author's attention.

2011), other remains belonging to the so-called Borson's mastodont, *Mammut borsoni* (Hays, 1834), were unearthed, among which the most important are those of the skull. The braincase was found in situ, in the easternmost wall of the quarry, and was lying on a west-east direction, 50 cm deep (Fig. 1. A). Other remains were collected from the slopes near the braincase.

As a result of subsequent excavations (November 9-13,

The specimens were collected from horizontally stratified

Table 1. Features of the upper molars (M1-M2-M3 dex and sin) belonging to the *M. borsoni* specimen from Otman Hill, Colibaşi village.

	M1 dex	M1 sin	M2 dex	M2 sin	M3 dex	M3 sin
No. of crests	III	III	III	III	IV+t	IV+t
Length (cm)	92	94.6	112.1	113.1	160.02	160
Width (cm)	82.7 (III)	83.5 (II)	92.0 (III)	96.5 (III)	105.4 (II)	108.7 (II)
Height (cm)	>50.04 (III)	>51.5 (III)	61 (III)	62.5 (III)	64.5 (II)	69 (II)
Enamel thickness (cm)	-	-	-	3.9	-	-
Width index (3:2)	89.89	88.26	54.41	64.76	40.31	43.12





Fig. 1. Fossil remains of the *M. borsoni* individual from Otman Hill quarry. **A**, skull as it was found in situ. View from south to north (November 10, 2001). Arrow points to the occipital bones; **B**, during preparation at the "Vasile Alecsandri" High School, Colibaşi village (November 13, 2011). Braincase is 720 mm wide.

coarse alluvial sands, of yellow-gray and light brown colour, with local occurences of iron and manganese oxides, boulders of clay, and sandstones. Such deposits occur in the southern part of the Republic of Moldova, and are typical for the faunal sites of the Moldovian Faunal Unit of Eastern Europe, the MN 15 biozone (Vangengeim et al., 2005).

The material consists in: fragments of I2; left and right premaxillary fragments bearing fragments of I2 in the alveoli; the almost complete braincase; two maxillopalatine fragments bearing the left and right M1-M2s; left and right M3s; a crest of m3; rib fragments, and other bone fragments (Fig. 1. B and Table 1, 2 for measurements). Specimens belonging to other vertebrates were also found: 10 turtle shell fragments; the second phalanx of a (probably tragocerid) bovid; micromammals; coprolites; a beaver bone.

Prior to this discovery, skull fragments from a senile *Mammut borsoni* individual, of which only the maxillopalatines bearing the left and right M3s were preserved, were found at the Budăi site, about 23 km north-east from the Otman Hill quarry (Obadă, 2001).

References

von den Driesch, A., 1976. A Guide to the measurement of animal bones from archaeological sites. Peabody Museum Bulletin 1, 1–178.

Maschenko, E.N., 2002. Individual development, biology and evolution of the wooly mammoth *Mammuthus primigenius* (Bluemenbach, 1799). Cranium 19(1), 4–120.

Obadă, T., 2001. Discovery of *Mammut borsoni* Hays in Budăi village, Republic of Moldova. Analele Universității de Stat a Moldovei, Seria "Ştiințe chimico-biologice", 56–57.

Tassy, P., 1996. Growth and sexual dimorphism among Miocene elephantoids: the example of *Gomphotherium angustidens*. In: Shoshani, J., Tasssy, P. (Eds.), Proboscidea: evolution and palaeoecology of elephants and their relatives. Oxford University Press, New York, pp. 92–100.

Vangengeim, E.A., Pevzner, M.A., Tesakov, A.S., 2005. Ruscinian and Lower Villafranchian: age of boundaries and position in magnetochronological scale. Geological Correlation 13 (5), 530–546.

Table 2. Skull dimensions (after von den Driech, 1981; Tassy, 1997; Maschenko, 2002) of *M. borsoni* from Otman Hill, Colibaşi village.

Measured parameter	Size in mm		
Greatest length starting from the occipital margin	>350		
Occipital width	720		
Greatest supraorbital width	420		
Greatest width across the frontals	410		
Basal length	422		
Sagital occipital height	>450		
Gratest length of occipital condyle	218		
Greatest height of occipital condyle	119.9		
Greatest width of foramen magnum	154		
Length of M1-M2 sin and dex dental rows	M1-M2 sin: 209 M1-M2 dex: 209		
Greatest diameter of dex I2, at the alveolus	width: 59 height: 66		
Greatest diameter of sin I2 sin, at the alveolus	width: 63.4 height: 64		

theodorobada@gmail.com



Citation:

Obadă, T., 2014. Preliminary data on the *Mammut borsoni* (Hays, 1834) from Otman Hill (Colibaşi, Republic of Moldova). Abstract Book of the Vlth International Conference on Mammoths and their Relatives. S.A.S.G., Special Volume 102: 143-144