P. A. TLEUBERDINA, G. SH. NAZYMBETOVA

(Institute of zoology of the MES of the RK, Almaty, Republic of Kazakhstan)

ON FIND OF WOOLLY RHINOCEROS IN FOOTHILLS OF NORTH-WESTERN TYAN-SHAN

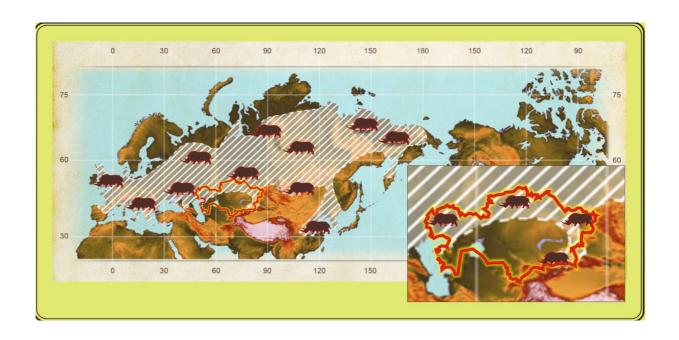
Summary. Woolly rhinoceros (*Coelodonta antiquitatis*) — is one of the most common satellites of the mammoth fauna of Eurasia. Dwelt on extensive open spaces of almost the entire territory of North Eurasia in the Pleistocene and early Holocene. South border of its area covered the Northern part of the territory of Kazakhstan, where they found the remains of woolly rhinoceros, dedicated mainly to местонахождениям mammoth fauna. For the first time in 2010, a geologist L. K. Didenko-Kislicinoj detected Nakhodka tooth woolly rhinoceros in the foothills of the Zailiysky Alatau mountain range in the North-Western Tien Shan).

Keywords: coelodonta antiquitatis, mammoth, fauna.

Тірек сөздер: жүндес мүйізтұмсық, мамонт, фауна, таралу аймағы, іздеп табу.

Ключевые слова: шерстистый носорог, мамонт, фауна, ареал, находка.

Wooly rhinoceros (Coelodonta antiquitatis) is one of the most widely distributed companions of Eurasia mammoth fauna. Outward morphological features of the animal and its parameters are known thanks to last researches of woolly rhinoceros remains, found in 2007 on gold-field Kolyma in the upper reaches of Malaya Filippovka. Woolly rhinoceros was very big animal, second by the size after mammoth among animals of mammoth fauna: length of its body – 320-360 c, height in withers – 145-160 c, mass – about 1500 kg. C. antiquitatis was well adapted to cold and dry climate of late Pleistocene. It possessed by very thick skin and was covered by thick and long hair and ears and tail, through which is usually occurred the loss of warmth, were relatively short. Long (up to 1,3 m) and thicken anterior horns, evidently served the animal for shovel of show during of winter pasturage [1]. Inhabited on vast open parts, practically on the whole territory of Northern Eurasia, from British islands on the west to Chukotka and Kamchatka on the east in the Pleistocene and early Holocene, finally disappeared 9-14 thou years ago (map 1).



Map 1 – The map of *Coelodonta antiquitatis* distribution on Eurasian continent

Very likely, the southern border of its area covered the northern part of Kazakhstan territory, where are found the remains of woolly rhinoceros, timed basically to mammoth fauna localities. Their spatial distribution is observed from the Lower Ural, through the Western Kazakhstan and further to the east through northern part of Central-Kazakhstan upland and to Altai [2].



Map 2 – The map of *Coelodonta antiquitatis* distribution in Kazakhstan

The finds of woolly rhinoceros were not observed on the south of Kazakhstan, although the remains of mammoth and elements of mammoth fauna are evidenced that woolly rhinoceroses could be in the south. Thus, in the valley of Ili river, approximately in 12 km eastern of Kalkan mountains are recorded first mentions of finds of mammoth fauna elements from Almaty region. E.I. Belyaeva [3] has defined two mammoth teeth from there. In 1958, there was also found the central bone of ancient maral [4]. In 2006, on beach of Ili river, in environs of Kapchagai town, was found the part of horn core of primitive auroch. It is said, that in Ili depression, in late Pleistocene epoch inhabited mammoth, primitive aurochs and ancient maral. It must be noted, that most probably, together with them inhabited woolly rhinoceros (Map 2). In confirmation of this is served the first find of woolly rhinoceros tooth in foothills of Transili Alatau (mountain ridge of North –Western Tyan'-Shan'). The tooth was found in 2010 by geologist L.K. Didenko-Kislitsina in first over- bottomland terrace on the left bank of Taldybulak stream (environs of Talgar town, Almaty region). By morphometric features, the described tooth is belonged to woolly rhinoceros (Foto1.).

Rhinocerotidae Owen.1945 Coelodonta Bronn., 1831

Coelodonta antiquitatis (Blummenbach, 1799)

Material. Tooth − P4 (N2153/2010) was found in the first over- bottomland terrace on the left bank of Taldybulak stream (environs of Talgar town, Almaty region)

Description. Tooth is well preserved, its length – 36,93 mm, width – 34,60 mm. Thickness of



enamel -2,45 mm, height of crown -43,25 mm. The tooth is worn slightly, tooth enamel is very smooth, marmoreal, thickness is middle (2,45 mm). For woolly rhinoceros are characteristic clearly expressed all three valleys. Posterior valley is formed by fusion of hypocone with crista; there is additional valley and well expressed middle valley. The stage of tooth is worn and its sizes are indicative of its early but not adult age of individual.

The given find is said that woolly rhinoceroses have reached the foothills of Northern Tyan-Shan, where in Late

Pleistocene have preserved the conditions for their life. However, at the end of Pleistocene is happened the sharp rise in climate temperature, rapid start of glacier thawing, followed by changes in animal and vegetable world, though not in the best way for inhabitation of mammoth and woolly rhinoceroses. By opinion of researches, to extinction of mammoth and *C. antiquitatis* has led, namely, the rise in climate temperature and wetting.

The work is done at support of Grant financial scientific researches of Committee of Science MES RK – 1660 / GF.

- 1 Boeskorov G.G. Some morphologic and ecological peculiarities of fossil woolly rhinoceros *Coelodonta antiquitatis* (Blumenbach, 1799). Zool. Journ. 2012. Vol. 91, N 2. P. 201-236.
 - 2 Kozhamkulova B.S. Late Cenozoic Ungulates of Kazakhstan. Alma-Ata, 1981. 142 p.
- 3 Belyaeva E.I. On find of *Elephas primigenius* Blum. remains in the Ili river valley. Bull. Committee on study of Quaternary period. 1947. N 10. P. 34-36.
- 4 Kozhamkulova B.S. New finds of Anthropogene fossil mammals in Kazakhstan in stratigraphic interpretation. Transaction of SNIIGIMS. 1960. Issue 4. P. 67-69.

ЛИТЕРАТУРА

- 1 Боескоров Г.Г. Некоторые морфологические и экологические особенности ископаемого шерстистого носорога Coelodonta antiquitatis (Blumenbach 1799) // Зоологический журнал. -2012. -T. 91, № 2. -C. 201-236.
 - 2 Позднекайнозойские копытные Казахстана. Алма-Ата, 1981. 142 с.
- 3 Беляева Е.И. О находке остатков Elephas primigenius Blum. в долине р. Или. «Бюлл. Комиссии по изучению четвер-тичного периода». М., 1947. № 10. С. 34-36.
- 4 Кожамкулова Б.С. Новые находки ископаемых млекопитающих антропогена в Казахстане в стратиграфическом освещении // Ученые записки СНИГИМС. Ташкент, 1960.- Вып. 4.- С. 67-69.

Резюме

П. А. Тілеубердина, Г. Ш. Назымбетова

(ҚР БжҒМ Зоология институты, Алматы, Қазақстан Республикасы)

СОЛТҮСТІК-БАТЫС ТЯНЬ-ШАННЫҢ ТАУ БӨКТЕРІНЕН ТАБЫЛҒАН ЖҮНДІ МҮЙІЗТҰМСЫҚ ТУРАЛЫ

Жүндес мүйізтұмсық (Coelodonta antiquitatis) — Еуразияның мамонт фаунасының серіктестерінің бірі болып табылады. Плейстоценде және ертеплейстоценде Солтүстік Еуразияның барлық аумағына дерлік кең ашық кеңістігін мекендеген. Оның таралу аумағының оңтүстік шекарасы Қазақстанның солтүстік аймағы болатын, оның сүйек қалдығы табылған жерлер мамонт фаунасының негізгі қазба орындарына сәйкес келеді. Алғаш рет 2010 жылы геолог Л.К.Диденко-Кислицина Іле Алатауының тау бөктерінен (солтүстік-батыс Тянь-Шанның тау жоталары) жүндес мүйізтұмсықтың тісін тапты.

Тірек сөздер: жүндес мүйізтұмсық, мамонт, фауна, таралу аймағы, іздеп табу.

Резюме

П. А. Тлеубердина, Г. Ш. Назымбетова

(Институт зоологии МОН РК, Алматы, Республика Казахстан)

О НАХОДКЕ ШЕРСТИСТОГО НОСОРОГА В ПРЕДГОРЬЯХ СЕВЕРО-ЗАПАДНОГО ТЯНЬ-ШАНЯ Шерстистый носорог (Coelodonta antiquitatis) является одним из самых распространённых спутников мамонтовой фауны Евразии. Обитал на обширных открытых пространствах практически на всей территории Северной Евразии в плейстоцене и раннем голоцене. Южная граница его ареала охватывала северную часть территории Казахстана, где найдены остатки шерстистого носорога, приуроченных в основном к местона-хождениям мамонтовой фауны. Впервые в 2010 г. геологом Л. К. Диденко-Кислициной обнаружена находка зуба шерстистого носорога в предгорьях Заилийского Алатау (горный хребет северо-западного Тянь-Шаня).

Ключевые слова: шерстистый носорог, мамонт, фауна, ареал, находка.

Поступила 22.10.2013 г.