

Finds of Proboscidean remains in the territory of the Southern Urals region

G.A. Danukalova, A.G. Yakovlev

Institute of Geology Scientific Centre of Ufa, Russian Academy of Sciences, Ufa, Russia
danukalova@anrb.ru, a_jakovlev@mail.ru

SUMMARY: All published materials about fossil elephants remains from the Southern Fore-Urals region (Russia) are presented in a short review. Finds of fossil elephants are of the Pliocene-Pleistocene age and belong mainly to alluvial deposits. At present more than 50 localities with remains of fossil elephants are known. Half of all finds belong to *Mammuthus primigenius* Blumenbach, remains of *Mammuthus chosaricus* Dubrovo, *Mammuthus trogontherii* (Pohlig) are less numerous. Finds of *Archidiskodon meridionalis* (Nesti), *Archidiskodon gromovi* Garutt et Alexeeva, *Mammut borsoni* (Hays), are rare.

1. INTRODUCTION

The great bulk of Proboscideans remains was found in the flat territory of the Fore-Urals. In the mountain part, bones of fossil elephants often occur in caves during archaeological excavations and sometimes in river terrace deposits. On the eastern slope of the Southern Urals bones finds are rare, but this is related to the absence of data: during last 30 years there was no the information about finds (Fig. 1).

2. INFORMATION AND PUBLICATIONS

2.1 Information about finds

As a rule, inhabitants convey news about bones finds. In accordance with experts estimation such cases may occur 10-15 times per year, in 3-4 cases bones are delivered to the museums network of the Bashkortostan Republic and only in 1-2 cases finds may be identified by specialists-paleontologists.

2.2 Publications and studying

So far in geological literature information about more than 50 finds of bones of fossil elephants has been published, which were determined by paleontologists: E.I. Belajeva (1948;

Nikiforova 1940, 1948;. Yakchemovich 1965), Plotnikov, Dubrovo (Yakchemovich 1965; Yakchemovich 1965), Yakchemovich (1965), Gromov (1940, 1941; Yakchemovich 1965; Yakchemovich 1965), Garutt (1972; 1985; Garutt, Shokurov & Yakchemovich 1977; Yakchemovich *et al.* 1983; Garutt & Urbanas 1988), Kozhamkulova (Kozhamkulova & Ismagilova 1990), Urbanas (Garutt & Urbanas 1988), Vangengeim (Yakchemovich 1965; V. Yakchemovich 1965), Kosincev.

3. FINDS AND LOCALITIES

3.1 *Mammuthus primigenius* (Blumenbach)

Half of all finds belongs to *Mammuthus primigenius*. Bones material presented by isolated teeth, fragments of tusks, vertebrae, bones of extremities, pelvic bones, shoulder blades, occasionally fragments of scale and ribs. Local people gather such materials and then transfer it to different museums for storing. Often exact places of finding are unknown and in our opinion bones were collected from rivers beaches. As in the Fore-Urals in the basins of Belaya, Kama, Ufa Rivers and their tributaries. 18 such localities are known. On the territory of the eastern slope of the Southern Urals bones located in the modern alluvium of Ui, Khudolaz, Ural Rivers

and their tributaries are known from 4 localities. Finds of whole skeletons are rare. An incomplete mammoth skeleton is known from Tabulda. In Novobelokatai locality only fragments of mammoth tighbone are known. Only 4 localities with isolated mammoth bones *in situ* are known, which are Novikovka, Krasnousolsk, Pavlovka and Kabakovo – all of them from terrace deposits.

3.2 *Mammuthus chosaricus* Dubrovo

Only five finds of *Mammuthus chosaricus* remains are known. Finds were *in situ* at Orjebash, Klimovka, Sultanaevo, Sukharevka. Whole skeletons were found at Orjebash and Suharevka. At Klimovka and Sultanaevo only isolated teeth were found. One tooth was discovered in alluvium of the Belaya River near the Gornova locality.

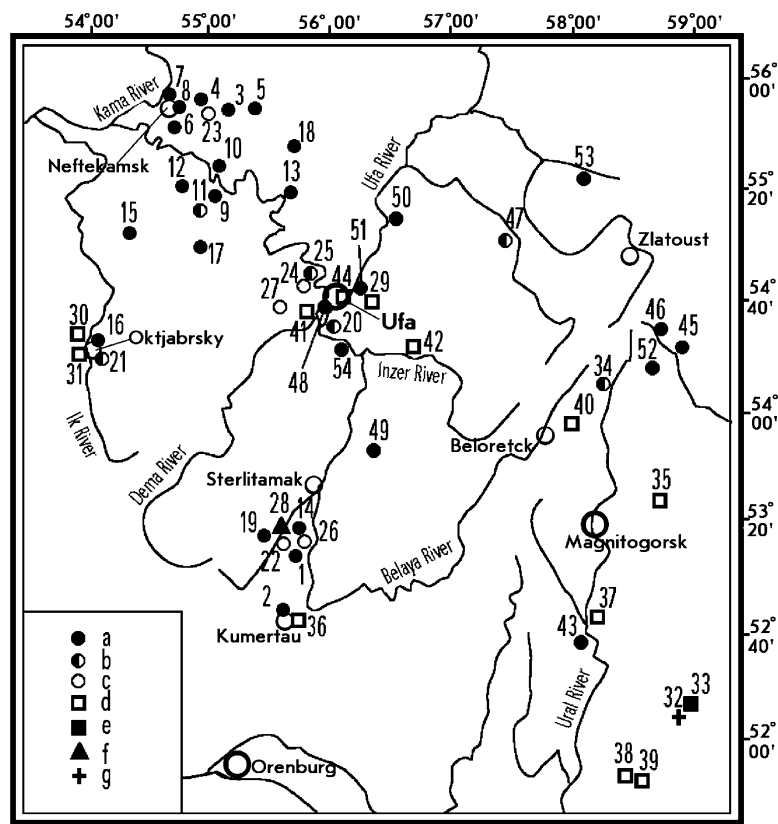


Fig.1 - Location of the sites with Proboscidean remains on the territory of the Southern Urals region

Legenda:

Species: a - *Mammuthus primigenius* (Blumenbach); b - *Mammuthus chosaricus* Dubrovo; c - *Mammuthus* sp.; d - *Mammuthus trogontherii* (Pohlig); e - *Archidiskodon meridionalis* (Nesti); f - *Archidiskodon gromovi* Garutt & Alexeeva; g - *Mammuthus borsoni* (Hays).

Localities: 1 - Meleuz; 2, 36 - Kumertau; 3 - Kaltasy; 4 - Muzyak; 5 - Nikolsk; 6 - Arlan; 7 - Nikolo-Berezovka; 8 - Koreevo; 9 - Dyurtyuly; 10 - Angasyak; 11 - Semiletka; 12 - Verkhneyarkeev; 13 - Birsk; 14 - Salavat; 15 - Bakaly; 16 - Oktyabrsky; 17 - Chekmagush; 18 - Buraevo; 19 - Tabulda; 20 - Nagaevo; 21 - Tukmakly; 22 - Sukharevka; 23 - Orjebash; 24, 25 - Gornova; 26 - Klymovka; 27 - Sultanaevo; 28 - Mustafino; 29 - Mynzytyarovo; 30, 31 - Oktyabrsky; 32, 33 - Kvarkeno; 34 - Berezovaya Roscha; 35 - Kisil-Chilik; 37 - Proletarka; 38, 39 - Shuburtau; 40 - Mindyak; 41, 44, 48 - Ufa; 42 - Inzer; 43 - Khudolaz; 45 - Malaya Kulakhta; 46 - Polyakovka; 47 - Kluchevskaya cave; 49 - Krasnousolsk; 50 - Pavlovka; 51 - Klyashevo; 52 - Ilchino; 53 - Novobelokatai; 54 - Kabakovo.

3.3 *Mammuthus trogontherii* (Pohlig)

Seven finds of *Mammuthus trogontherii* are known. Three find spots are located on the eastern slope of the Southern Urals: Proletarka, Shuburtau, Kyzyl-Chilik (in situ) and lifting material from the Mindyak locality. In the Southern Fore-Urals finds of isolated teeth of *Mammuthus trogontherii* occur in the overdeeping alluvium of Belaya and Big Ik rivers, at Ufa and Oktyabrsky. One locality is on the Inzer River and near Kumertau Town where a tooth was found in situ. At Minzityarovo was probably a whole skeleton, but only some bones were extracted: a fragment of the scale base, part of the lower mandible, a fragment of the wright tusk, fore teeth, three heavy damaged vertebrae (thoracic, lumbar, sacral), a fragment of the pelvic bone.

3.4 *Archidiskodon meridionalis* (Nesti)

A single find, i.e. an isolated tooth of *Archidiskodon meridionalis* is known on the territory of the eastern slope of the Southern Urals in the Kvarkeno locality.

3.5 *Archidiskodon gromovi* Garutt & Alexeeva

One isolated tooth of *Archidiskodon gromovi* was found in the Southern Fore-Urals in situ in the Mustafino locality.

3.6 *Mammuthus borsoni* (Hays)

One isolated tooth of *Mammuthus borsoni* was found on the eastern slope of the Southern Urals, in situ in the Kvarkeno locality.

3.7 *Mammuthus* sp.

There are some localities with remains of Proboscideans, which were determined as *Mammuthus* sp.: Semiletka, Tukmakly (in situ), Gornova, Kluchevskaya cave, Klyashevo (in situ).

4. RADIOCARBON DATES

The age of *Mammuthus primigenius* from Tabulda is >34,900 years (LU-1377A). In Novobelokatai locality (Fore-Urals) the age of deposits with fragment of *Mammuthus primigenius* Blumenbach thighbone is 41070±1570 y. (LU-4149).

5. CONCLUSIONS

There is ground to believe that the Quaternary deposits of the region are remains of Proboscideans and rich of that the region is adequate for the study of Quaternary Proboscidean faunas.

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