



Fig 13 Fragment of the mammoth skin with remains of the left hind leg

Deel van de mammoethuid met resten van de linker achterpoot

ky Island. The 14C results on the skin gave an age of 26.860 +/- 290 yBP (Lazarev *et al.*, 2001).

○ Fragment of the skin of a woolly mammoth with the remains of the left hind leg (Fig. 13). It was recovered from Bolshoy Lyakhovsky Island 1995. The size of this piece of skin is 200 x 140 cm. It is from the posterior part of the body. Another part of this find is represented by the tibia and fibula with muscles and skin (Lazarev *et al.*, 2001).

○ Part of the front leg (Fig. 14) of a woolly mammoth, found in 1995 and excavated in 1997 on the bank of the Maksunuokha River, Ust-Yansky District. The front leg with the carpus and piece of the shoulder region was very well preserved. There are remains of wool on the front leg, it is dark red hair and the thickness of the skin is 29 mm. Short hair was preserved on the cranial and caudal side of the leg. Geological age: Late Pleistocene (Lazarev *et al.*, 2001).

○ Part of a front leg of a woolly mammoth (Fig. 15) found on Bolshoy Lyakhovsky Island in 1994. The preserved part of the leg is represented by the carpus with skin and the lower-arm without muscles and skin. The length of the lo-

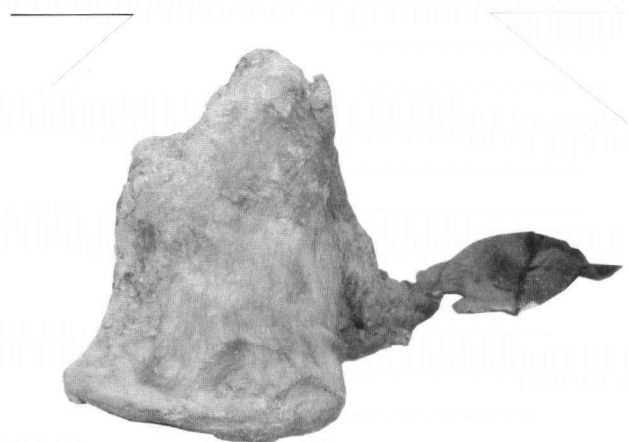


Fig 14 Part of the front leg of the Maksunuokha mammoth

Gedeelte van de voorpoot van de Maksunuokha mammoet

wer-arm is 53 cm. The sole of the front foot is cracked, its width is 28 cm. The long yellow coloured hair (up to 54 cm.) has fallen off the leg. According to Lazarev *et al.* (2001) this leg belonged to an individual which died at an age of approximately 18-20 years.

○ Section of mummified gastro-intestinal organs of the famous Shandrin Mammoth (Fig. 16). In 1971 the mammoth carcass of the Shandrin Mammoth was found near the Shandrin River,

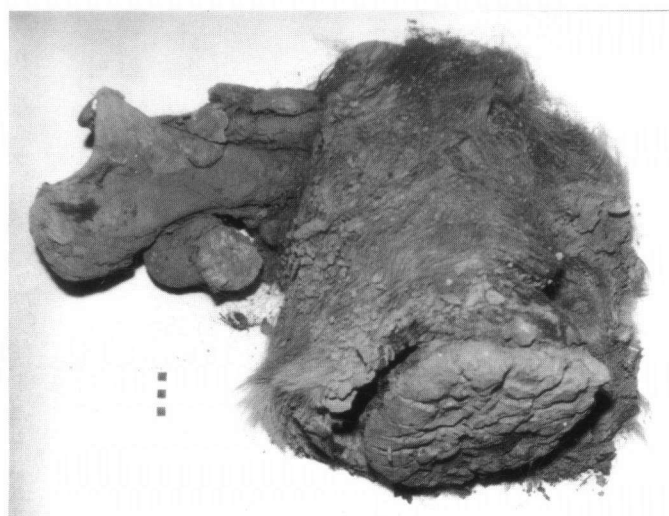


Fig 15 Part of the mammoth front leg found on the Bolshoy Lyakhovsky Island

Deel van een voorpoot van de mammoet gevonden op Bolshoy Lyakhovsky eiland

a tributary of the Indigirka River. The frozen parts of the gastro-intestinal organs inside the carcass were well preserved. The whole weight of the organs is about 300 kg. The frozen organs were cut into several slices, sizes of 70 x 35 x 15 cm. The remains of vegetation (grasses, bushes, tree branches, mosses and seeds) were preserved in good condition in the stomach and intestines. This exhibit is one of six unique remains of the internal organs which enables paleobotanists to examine the woolly mammoth diet (Ukrainitseva, 1993). Radiocarbon dates showed the Shandrin Mammoth died 41.000 yBP. The skeleton of the Shandrin Mammoth is on display in the museum in Novosibirsk. For more details on the Shandrin Mammoth we refer to Vereshchagin & Tikhonov, (1999).



Fig 16 Section of mummified gastro-intestinal organs of the Shandrin mammoth

Gedeelte van het gemummificeerd maagdarmkanaal van de Shandrin mammoet

- The skeleton of the Late Pleistocene Churapcha Mammoth (Fig. 17) was found in 1990 near the village Diring (Churapcha District). The reconstructed skeleton contains approximately two-third of the bones of the same animal. The height at the shoulder of this specimen is 285 cm. The Churapcha Mammoth was a male woolly mammoth which died somewhere between 30-40 years old (Lazarev *et al.* 1998).

- A part of the skin of a woolly rhinoceros (Fig. 18) was found at the famous site Duvanny Yar outcrop in 1999. It measures 68 x 60 cm and the thickness is up to 19 cm. It dates to the Karginian interglacial of the Late Pleistocene.

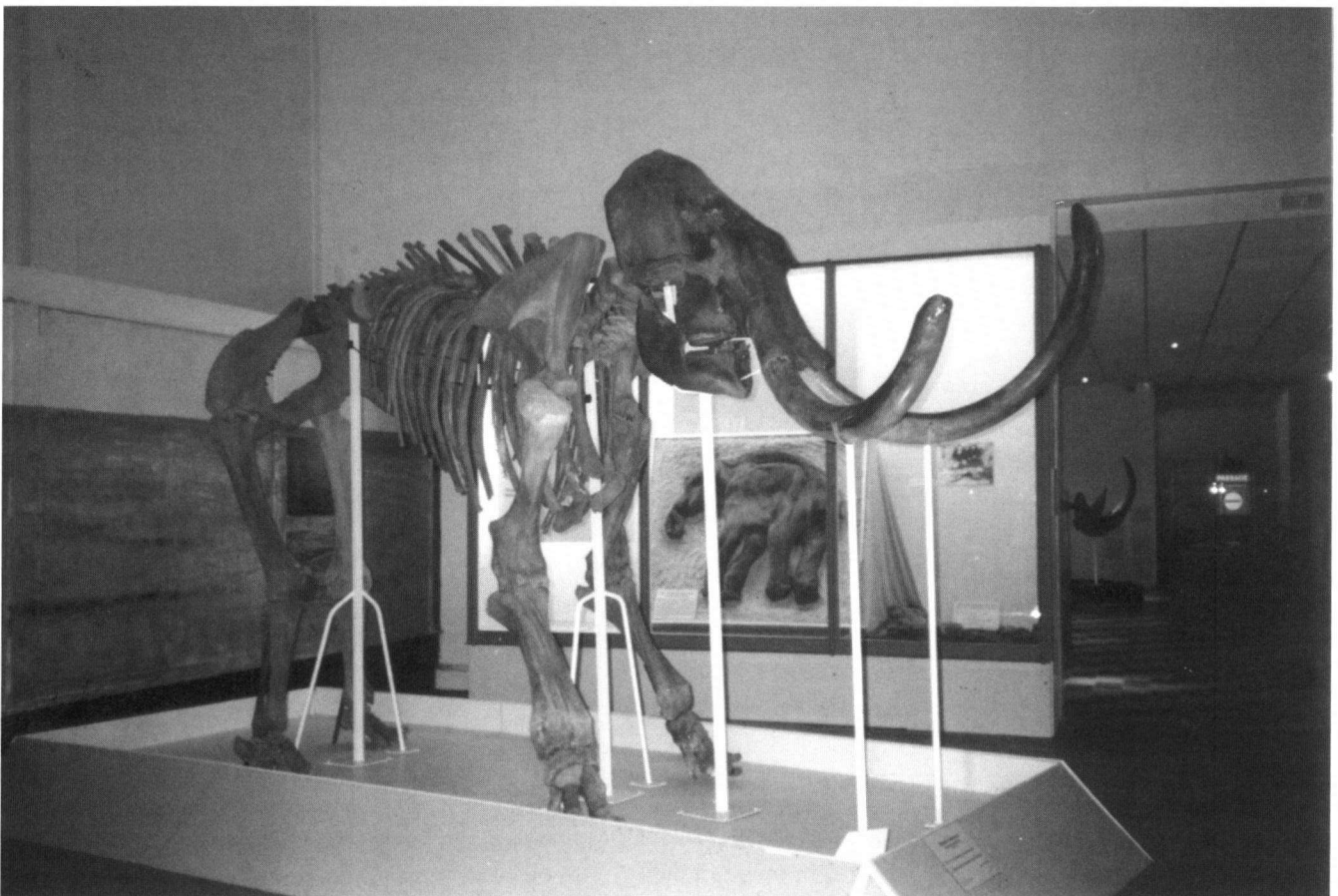


Fig 17 Skeleton of the Churapcha mammoth / Skelet van de Churapcha mammoet

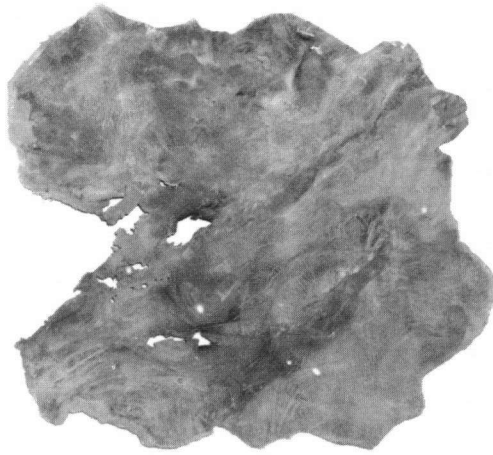


Fig 18 Part of woolly rhinoceros skin

Gedeelte van de huid van een wolharige neushoorn

○ Compilation skeleton of a woolly rhinoceros, *Coelodonta antoquitatis* (Fig. 19). About one-third of the bones used for the compilation ske-

leton belongs to one and the same relatively young individual (cranium with both horns, part of the vertebral column, ribs and limb bones). This partial skeleton was found near the Aldan River, Mamontova Gora outcrop, 1976, and the age is Late Pleistocene.

○ Compilation skeleton of the steppe bison, *Bison priscus* (Fig. 20). The compilation skeleton is built up from several individuals of the steppe bison which have been collected during different expeditions in the lower stream of the Kolyma River. The absolute radiocarbon date for the cranium is 38.500 yBP (GIN-11021).

○ Part of the Pleistocene saiga antelope *Saiga tatarica (=borealis)* skull (Fig. 21). It was found on the Lena River bank near a mouth of Batamai River in the Late Pleistocene sediments.

○ An extremely large and heavy tusk of a male woolly mammoth (Fig. 22) collected in the



Fig 19 Compilation skeleton of a woolly rhinoceros

Samengesteld skelet van een wolharige neushoorn; een derde deel behoort tot een enkel individu, gevonden bij de rivier Aldan in een ontsluiting in Mamontova Gora in 1976. De ouderdom is Laat Pleistoceen

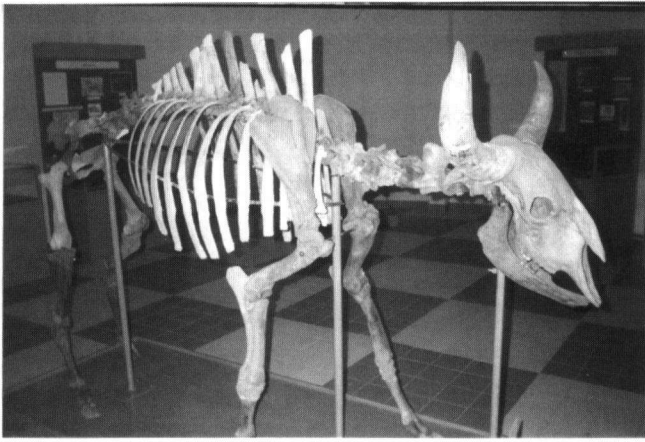


Fig 20 Compilation skeleton of a steppe bison

Samengesteld skelet van een steppewisent, bestaande uit een aantal individuen uit de benedenloop van de Kolyma. De schedel (GIN-11021) is gedateerd op 38.500 jaar B.P

Anabar District. The maximum length on the outer curvature measures 340 cm. The weight of this well preserved tusk is 80 kg.

○ Part of a mummified carcass of an adult female Lena horse, *Equus lenensis* (Fig. 23), was found in 1981 in the lower stream of the Indigirka River on the shore of Lake Dyokarskoye. The head (including the right ear, eye-opening and lips) and the anterior part of the torso are preserved. The hair on the neck and the anterior part of the torso are brown coloured, dense. soft and up to 8 cm. in length. Absolute age is



Fig 21 Part of the Pleistocene saiga antelope skull

Gedeelte van de schedel van een Pleistocene saiga-antilope

29.500 +/- 500 yBP (MAG-943) (Boeskorov, 2001b).

○ Part of an Early Holocene moose (*Alces spec.*) carcass (Fig. 24) found in 2001 on the Bykov Peninsula near the delta of the Lena River. The fragment of the cranium, part of the vertebrae, one hind leg, bones from the front leg and pieces of skin covered with hair are well preserved. Absolute age for this specimen is 8080 +/- 120 yBP (GIN-11727).

Some notes on mammoth remains of the New Siberian Islands

As is obvious from these lists, the major part is found in the Far North, above the Polar Circle, where the best conditions for the preservation of soft remains can be found. One of the most promi-

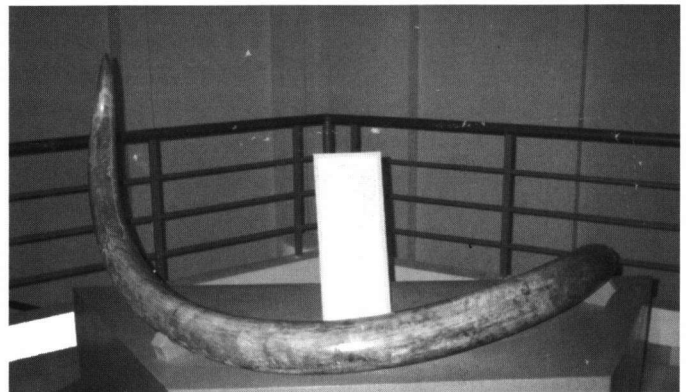


Fig 22 Large tusk of a male woolly mammoth

Grote slagtang van een wolharige mammoetstier

sing localities to search for remains of the Mammoth Fauna is the New Siberian Islands. On Bolshoy Lyakhovsky Island, belonging to the New Siberian Islands archipelago, at least three larger parts of mummified mammoth carcasses which are now in the Mammoth Museum have been found. Expeditions of the Mammoth Museum during 1994 and 1995 have also brought to the museum over 500 skeletal parts belonging to 9 further species of the Mammoth Fauna. The investigations for remains of mammoth started in the 19th century. The first important collections of mammoth remains of Bolshoy Lyakhovsky Island were made by an expedition of Dr. A. Bunge and Baron E. Toll in the years 1885 and 1886. A large monograph on the results of these

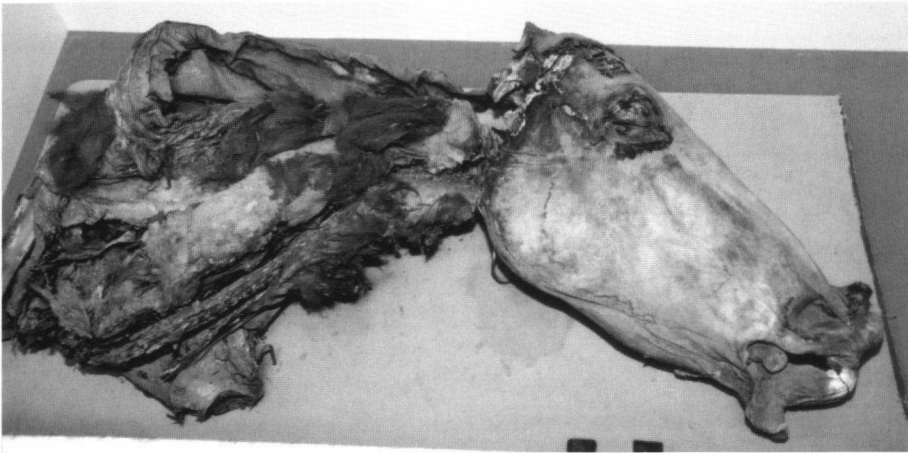


Fig 23 Part of the Lena horse mummy / Gedeelte van de mummie van het Lena paard

investigations has been published by I. Chersky (Chersky, 1891). Another Russian Polar expedition under the leadership of Baron E. Toll took place in 1900-1903. On the New Siberian Islands, including Bolshoy Lyakhovsky Island, an extensive collection of bones was made and subsequently studied by the famous Russian

paleontologist M. Pavlova (1906). An entirely complete carcass was dug out in 1906 on the Bolshoy Lyakhovsky Island. Many soft parts of the carcass were in extremely good condition, including skin of the head and complete feet. This beautiful specimen ended up in the National History Museum (Paris, France), and is the only woolly mammoth carcass (Fig. 25) outside Russia. For details of the history we refer to Garutt (1964) and Vereshchagin & Tikhonov (1999). Last but not least we need to mention that each

year, large quantities of mammoth tusks are collected on the New Siberian Islands by professional mammoth hunters who have licences for exportation of mammoth ivory worldwide. The tusks of the woolly mammoth, even up to sometimes 50.000 years old, are preserved in excellent condition, and are, for example, used in the ivory

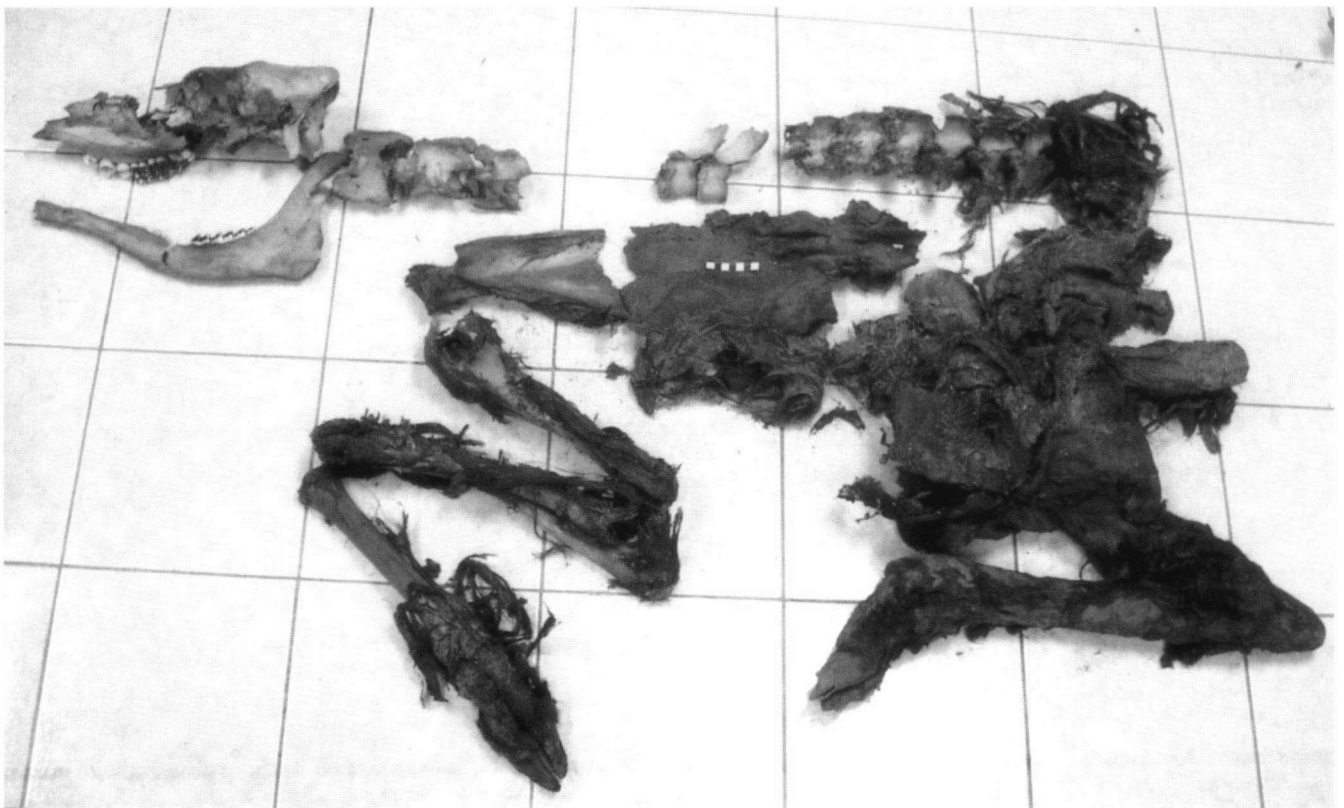


Fig 24 Part of an Early Holocene moose carcass / Gedeelte van een Vroeg Holoceen elandkarkas

industry in South East Asia (Hong Kong) and Japan because of the lack of ivory from (by CITES regulations protected) present day elephants.

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Fig 25 The complete mammoth dug out on Bolshoy Lyakhovsky Island; now in MNHN at Paris

Complete mammoet, in 1906 opgegraven op Bolshoy Lyakhovsky eiland, nu in het Museum National d'Histoire Naturelle in Parijs. Veel zachte delen waren in een uitstekende conditie, waaronder de hoofdhuid en de voeten

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