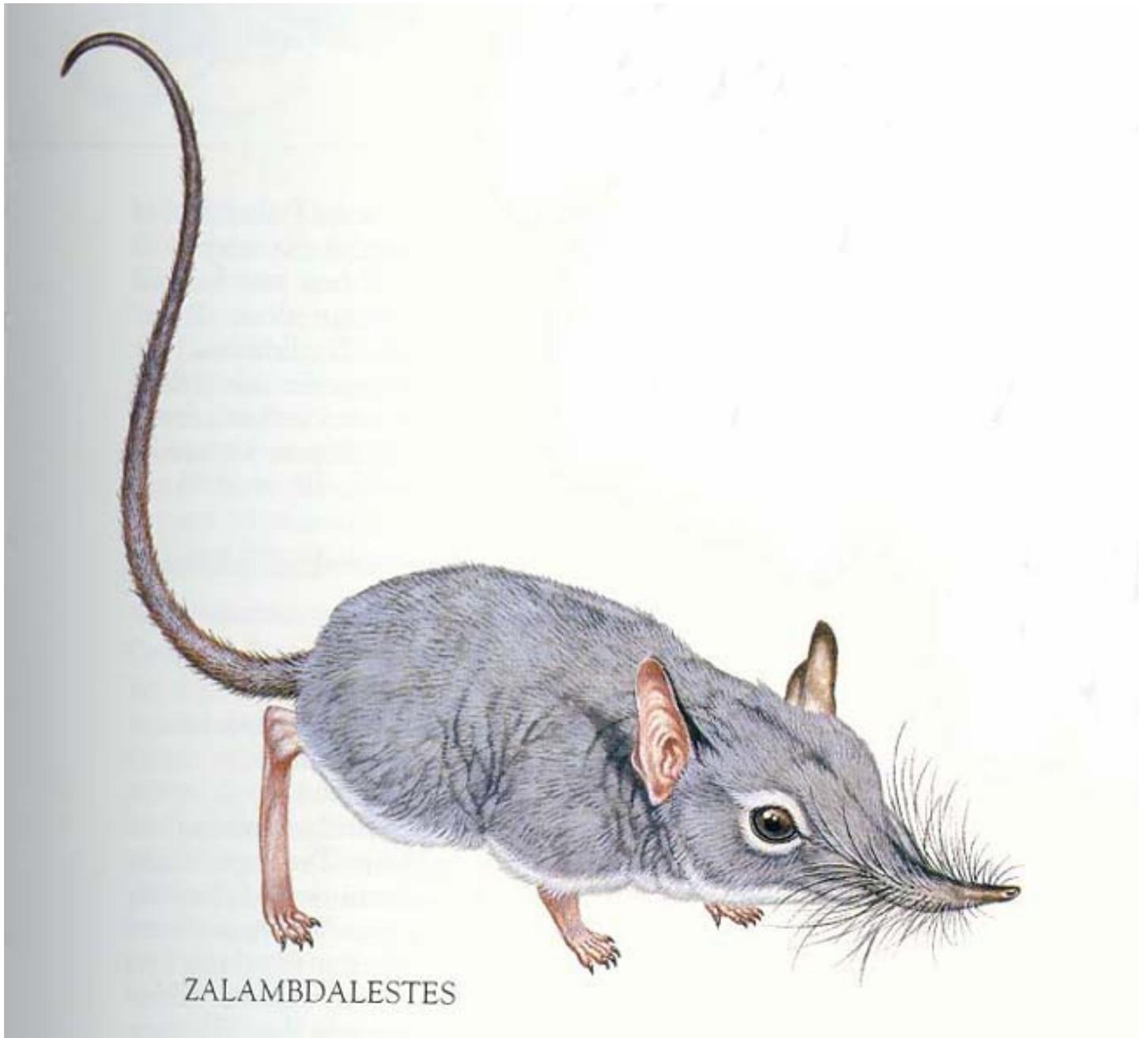


SURVIVABILITY OF A FAUNA TO A BOUNDARY



-Each periodically extinction is connected to the huge and small geo-catastrophes.

-Life on the Earth permanently is fighting to the inner geo-forces and outer space forces.

-Survivability of the mankind is closely connected to the extinction of the many species.

-Mankind has to keep other species as well as the Earth, because all are guest of the universe temporary.

In fact, the global environmental changes occurring 12,000 years ago caused mammoths' vast extermination, but survived eventually were hunted to extinction by early humans. Uncommonly low temperature and frost was disastrous for mammoths and all mammals in the depth of the Asian

continent. Global environmental changes were dangerous for a mammoth as well as for others. Small mammals' and reptiles' survivability across the boundary may have resulted from their underground niche and ability to burrow, which reduced susceptibility to negative environmental effects at the boundary. Smaller species in the underground holes, burrows, caves and hollows almost did not die.

The periodic glacial is especially dangerous for animals gathered in herds; the last glacial periods were occurring approximately 10 times during last 110,000 years. Each ice age is closely connected to the global environmental changes after each geo-catastrophe. It's final stage of all events. Of course the last biblical event was finished by glacial 12,000 years ago. Scientists are believed that, last glacial period began 110,000 years ago and ended between 10,000 and 15,000 BP. It's unacceptable, because ancient arctic fauna is proof of another version. Each of them could be died during permanently glacial. Their survivability was closely connected to the periodic changing warm and cold seasons. Whole modern arctic animals for 12 months of glaciations would be died. White bear needs periodic feeding and the dormant seasons. Only the well fat bears can survive during the dormant as well as the other dormant arctic species.

Survival of mammoth within long winters was connected to tusk. They could tusk up the icy ground. Huge mammoth herds could not be ever found giant caves for the dormant. Their survivability mainly was connected to the tusk off crust of trees during long winters as well as during a glacier period after a geo-catastrophe. Their tusks are proof about million and million year's evolution in the snowing ancient forests. The permanently unbelievable glaciations for 90000 years could be gone to the extinction whole polar biota.

Mammoths had been surviving different dangerous glacial approximately 10 times during last 110000 years and a lot of environmental changes and eventually were hunted to extinction by early humans. The early hunters lead to the extinction not only giant mammoths in later centuries. Woolly rhinoceros, greater one-horned rhinos, saber-toothed tiger, woolly dwarf mammoths, dwarf elephants and many other species went extinct. Little by little the "built material" bones and skin of mammoths and other giant animals had disappeared to build family houses. I think a tropical elephant's survivability was connected to the live ability of early humans there. There was no need for an early human to build family houses by the bones and skins and has no problem of feeding.

In fact the ancient and modern arctic species had been surviving a lot of periodic global environmental changing and glaciations. How happened that? A slowly **EB** geo-transfer creates huge streams of hot and warm water masses all over the Earth. Arctic icy cap fully and Antarctic cap partially were melting by this time. Huge hot and warm water masses create huge evaporation of water and forms dangerous strong cyclones and anticyclones and heavy rainfalls within the tropical and zones for centuries. The sky is fully covered by thick black and dirty clouds for months. Cooling of oceans little by little produces environmental changes again. Periodic heavy rainfall changes snowing within continental lithosphere platforms onto the polar zones and surrounded territories of the zone and covers fully by ice and snow. The warm polar Coastal zones are fully covered by sea animals. There is no problem hunting for white bear, white fox or others. They even can forget about dormant temporarily. Many polar mega-faunal species temporary are within the tropical zones for surviving. Within polar zones are not enough places for surviving all of them to the warm coastal zones. Uncommon situation with warm seas and oceans and glacier on the polar islands and continents is one of the last stages of global environmental changes after all slowly **EB** geo-transfer.