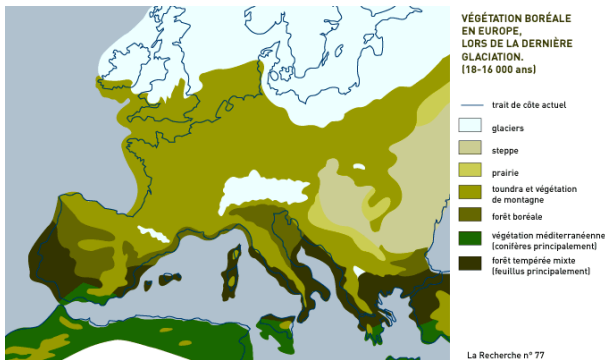


## ICE AGES AND WARMER PERIODS : HOW LIFE CHANGES

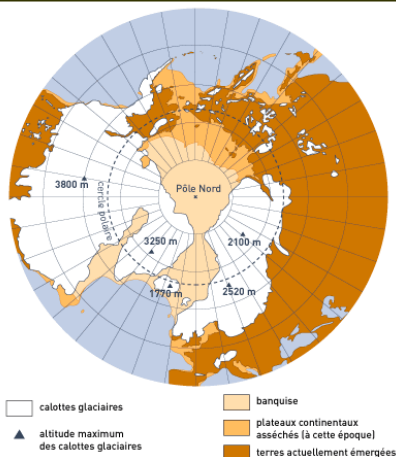
Arctic flora and fauna are all well adapted to their extreme environment. Not only this but the climate in the Deep North has changed over the millennia, with a succession of ice ages (glaciation) and warmer periods, and Arctic flora and fauna have had to display a remarkable ability to adapt to changing climate patterns.



## IN COLDER PERIODS, THE FORESTS PULL BACK

About 7 million years ago, at the end of the Miocene, the climate in the Arctic regions became colder. As result, the abundant forests of broad-leaved species and conifers that covered much of Siberia and Alaska were gradually replaced by taiga. To the north of the forests, the tundra was born – a new and harsher milieu to which the species that inhabited the taiga and the high mountains simply had to adapt.

L'ÉTENDUE DE LA CALOTTE GLACIAIRE AU MAXIMUM DE LA DERNIÈRE GLACIATION



## REINDEER AND MUSK OX : DIFFERENT ORIGINS

The reindeer belongs to the cervidae, but the other members of this family today live in wooded regions. Biologists think the reindeer is descended from a cervida that lived in the boreal forests and then had to adapt to the open tundra terrain. The musk ox, on the other hand, is a member of the bovidae family, typically animals that live in exposed milieus (steppes, meadows, savannah). Its ancestors undoubtedly migrated from the steppes of Central Asia. Most of the Arctic animals originally inhabited the steppes of the forests.

## MAMMOTH, WOOLLY RHINO & CO

When Prehistoric Man roamed the Earth, some 10,000 years ago, he had to share the Northern Hemisphere and its harsh climate with mammoths, woolly rhinoceroses, sabre-toothed tigers and other large mammals. Biologists estimate that during that period some 30 to 40 species became extinct, possibly because of over-hunting but more probably because they were too slow to adapt to climate change.