

# The land rises – The Kemijoki River



After the edge of the continental glacier receded from Lapland, large areas of Southern and Central Lapland were submerged under the waters of the ancient Baltic Sea. The tops of the hills above the highest beaches remained untouched by water, and the areas below were washed into rock piles and exposed rock. The earth's crust pressed down by the continental glacier rose up, and on its slopes appeared the beaches of the ancient Baltic Sea, one beneath the other.

The area of Rovaniemi in the forefield of the glacier about 10,000 years ago. The area pressed down by the ice was covered by the Baltic Sea's Ancylusjärvi Lake. Ounasvaara Hill is a little island behind the archipelago at the bottom right.



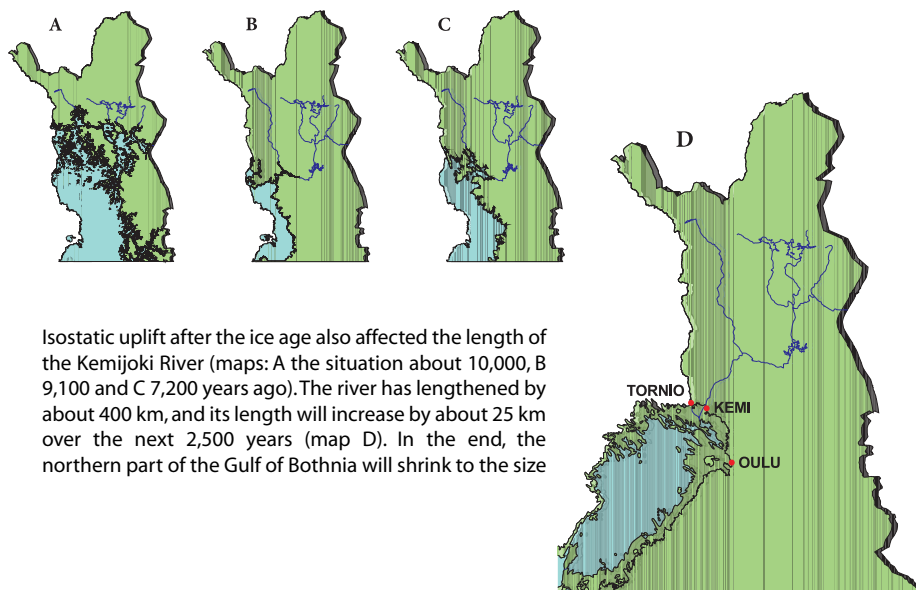
Ounasvaara Hill about 9,600 years ago. The altitude of the surface of the water is 160m above sea level.



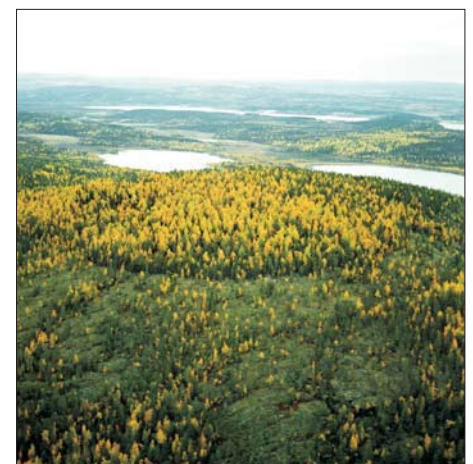
Ounasvaara Hill about 8,400 years ago. The altitude of the surface of the water is 100m above sea level.



A beach belonging to the ancient Baltic Sea.



Isostatic uplift after the ice age also affected the length of the Kemijoki River (maps: A the situation about 10,000, B 9,100 and C 7,200 years ago). The river has lengthened by about 400 km, and its length will increase by about 25 km over the next 2,500 years (map D). In the end, the northern part of the Gulf of Bothnia will shrink to the size



The tops of hills above the highest beach.