Trees in Northwest Scandinavia during the Ice Age

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Ice ages within the uniformitarian paradigm are very cold, much colder than today. So, according to this paradigm, it is believed that during the last ice age Scandinavia was completely denuded of trees[1] and their range shrank as far south as the Mediterranean region.[2] Trees did not make a comeback in Scandinavia until after the ice melted some 9,000 years ago, within the uniformitarian time scale. However, the fossil evidence suggests otherwise.

Pine and spruce found in central and northern Norway during the Ice Age

Pine and spruce DNA and pollen are now found in central and northern Norway at the time of the last ice age.[3] They are believed to have survived in small ice-free pockets or refugia for tens of thousands of years and then spread to other areas of Scandinavia once the ice melted. The researchers write:

> "Coupling our findings with the results of previous megafossil based analyses(10), the overall evidence for presence of conifer trees in Scandinavia during the last glaciation seems the only explanation for our observations."[4]

This result accords with the finding of spruce and pine megafossils in the mountains of central Scandinavia, and of trees in the tundra of Alaska, the Yukon, Siberia, and Estonia during the last ice age.[5] These discoveries

are challenging some concepts of the Scandinavian Ice Sheet and suggest the possibility of an ice free corridor during glacial maximum along the coast of northern Scandinavia and the Kola Peninsula to the east.[6] The cause of such ice free conditions or a series of nunataks, peaks that stick above the ice, is the relatively temperate conditions of the Atlantic Ocean. But within the cold uniformitarian ice age in which sea ice expands well south of Norway, an ice free corridor is questionable. Regardless, the ice age fossils are difficult to explain within the uniformitarian paradigm.

Creationist Ice Age explanation

Such a discovery is not surprising within the creationist ice age model.[7] This model begins right after the Flood with very warm sea surface temperatures, even at high latitudes. The Arctic Ocean would likely have been warm enough to swim in at this time. Such warm sea surface temperatures would warm and moisten the air, which in turn would warm the adjacent continents along the Arctic Ocean and the west coasts of Europe and North America. This is because the average atmospheric flow is from west to east. Although sea surface temperatures would have cooled fast in the north, the mild winters and cool summers (caused by volcanic aerosols in the stratosphere) would have been conducive to tree growth along the edge of the Arctic Ocean and in western Norway for a while. So, it stands to reason that the coast areas of Norway and the Kola Peninsula would have trees growing for a few hundred years at the beginning of the Ice Age.

Such warm sea surface temperatures also mean that the Scandinavian Ice Sheet was not as extensive as uniformitarian scientists believe. With warm, moist onshore flow, the ice would have developed rapidly over the Scandinavian mountains. The ice would have slowly spread toward the ocean but with cooler sea surface temperatures and sea ice developing with time, the ice would have been thinner than uniformitarian estimates at glacial maximum. This is probably why the Lofoten Islands about 68°N latitude off the northwest coast of Norway had only local, thin ice glaciers that spread out from the mountains (figure 1). Since the ice caps spread from the mountains toward the east, it implies that the continental ice sheet was not as thick over the coastal areas of Norway as uniformitarians scientists believe.

Figure 1. The southern Lofoten Islands off the northwest coast of Norway showing evidence of thin mountain ice (view northwest). In the foreground is a small fjord with low altitude ice sculptured granite or gneiss (whaleback forms) that came from local mountain glaciers flowing southeast towards the viewer. Notice that the higher mountains are steep and pointed, indicating only thin ice.

References

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