



Hot Times at the North Pole

TIME senior writer Michael D. Lemonick

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Climate scientists have known for some time that the Earth was considerably warmer about 55 million years ago than it is today--but new evidence from the Arctic shows that the word "considerably" is a considerable understatement. By drilling deep into the sediments at the bottom of the Arctic Ocean, says a report in this week's *Nature*, researchers were able to gauge ocean temperatures much further into the past than ever before for this region--and to their astonishment, discovered that the water averaged a balmy 73° F compared with today's -4°.

No climate model had suggested such balmy water the North Pole before; the excess warming, say the researchers, must have been caused by a greater outpouring of greenhouse gases into the atmosphere than anyone expected. One possibility is a huge release of methane--something that has been flagged by scientists as a danger as today's permafrost starts to melt and frozen marshlands begin to decompose. Is that what happened 55 million years ago? Nobody knows--but the evidence from the Arctic Ocean seabed suggests that unexpected factors could kick global warming into even higher gear than anyone is now predicting.