

## Russia may lose 30% of permafrost by 2050

July 29 2011

---



Russian scientists dig up food products buried in the Arctic permafrost in the Taymir peninsula. Russia has warned that vast permafrost areas may shrink by a third by the middle of the century due to global warming, endangering infrastructure in the Arctic zone.

Russia's vast permafrost areas may shrink by a third by the middle of the century due to global warming, endangering infrastructure in the Arctic zone, an emergencies ministry official said Friday.

"In the next 25 to 30 years, the area of permafrost in Russia may shrink

by 10-18 percent," the head of the ministry's disaster monitoring department Andrei Bolov told the RIA Novosti news agency.

"By the middle of the century, it can shrink by 15-30 percent, and the boundary of the permafrost may shift to the north-east by 150-200 kilometres," he said.

The temperature of the zones of frozen soil in oil and gas-rich western Siberia territories will rise by up to two degrees Celsius to just three or four degrees below zero, he predicted.

Permafrost, or soil that is permanently frozen, covers about 63 percent of Russia, but has been greatly affected by [climate change](#) in recent decades.

Continued thawing of permafrost threatens to destabilise transportation, building, and energy extraction infrastructure in Russia's colder regions.

"The negative impact of permafrost degradation on all above-ground [transportation infrastructure](#) is clear," Bolov added.

Scientists have said that permafrost thawing will set off another problem because the process will release massive amounts of greenhouse gas methane currently trapped in the [frozen soil](#).

(c) 2011 AFP

Citation: Russia may lose 30% of permafrost by 2050 (2011, July 29) retrieved 20 April 2024 from <https://phys.org/news/2011-07-russia-permafrost.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.