

World's last great forest under threat: new study

August 25 2009

(PhysOrg.com) -- The world's last remaining "pristine" forest - the boreal forest across large stretches of Russia, Canada and other northern countries - is under increasing threat, a team of international researchers has found.

The researchers from the University of Adelaide in Australia, Memorial University of Newfoundland in Canada and the National University of Singapore have called for the urgent preservation of existing boreal forests in order to secure biodiversity and prevent the loss of this major global carbon sink.

The boreal [forest](#) comprises about one-third of the world's forested area and one-third of the world's stored carbon, covering a large proportion of Russia, Canada, Alaska and Scandinavia.

To date it has remained largely intact because of the typically sparse human populations in boreal regions. That is now changing says researchers and co-authors Associate Professor Corey Bradshaw, University of Adelaide, Associate Professor Ian Warkentin, Memorial University, and Professor Navjot Sodhi, National University of Singapore.

“Much world attention has focused on the loss and degradation of [tropical forests](#) over the past three decades, but now the boreal forest is poised to become the next Amazon,” says Associate Professor Bradshaw, from the University of Adelaide's Environment Institute.

“Historically, fire and insects have driven the natural dynamics of boreal ecosystems,” says Associate Professor Warkentin. “But with rising demand for resources, human- disturbances caused by logging, mining and urban development have increased in these forests during recent years, with extensive forest loss for some regions and others facing heavy fragmentation and exploitation.”

The findings have been published online in *Trends in Ecology and Evolution* in a paper called 'Urgent preservation of boreal [carbon stocks](#) and biodiversity'. The findings include:

- * Fire is the main driver of change and increased human activity is leading to more fires. There is also evidence that climate change is increasing the frequency and possibly the extent of fires in the boreal zone.
- * Few countries are reporting an overall change in the coverage by boreal forest but the degree of fragmentation is increasing with only about 40% of the total forested area remaining “intact”.
- * Russian boreal forest is the most degraded and least “intact” and has suffered the greatest decline in the last few decades.
- * Countries with boreal forest are protecting less than 10% of their forests from timber exploitation, except for Sweden where the figure is about 20%.

Provided by University of Adelaide ([news](#) : [web](#))

Citation: World's last great forest under threat: new study (2009, August 25) retrieved 8 April 2024 from <https://phys.org/news/2009-08-world-great-forest-threat.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.