

GLOBEANDMAIL.COM

Print this Page

Report to predict big changes in Arctic

By JEFF SALLOT
From Monday's Globe and Mail

POSTED AT 7:31 AM EST

Monday, Nov 1, 2004

Ottawa — Some time this century, polar bears may disappear from Hudson Bay. The Northwest Passage may become a busy shipping lane, posing a challenge to Canadian sovereignty. The Inuit of the Arctic may suffer higher rates of skin cancer because of increased exposure to ultraviolet rays.

These are some of the possibilities outlined in a massive scientific study to be presented next week to senior government officials from Canada and seven other countries with Arctic territory. It predicts profound changes to the climate, wildlife habitat and human living conditions in the Far North because people living to the south are polluting the air.

The four-year study also suggests that what's happening in the North is the harbinger of changing climate conditions that, if unchecked, will eventually alter living conditions everywhere on Earth.

The 1,400-page report, dubbed "the brick" by the more than 250 scientists working on the project, is to be released Nov. 9 in Reykjavik at a ministerial meeting of the Arctic Council. The council countries are Canada, Iceland, Denmark, Finland, Norway, Sweden, Russia and the United States.

Portions of the report were leaked Friday to The New York Times by scientists in Europe, who said they were trying to thwart efforts by the Bush administration to keep the study under wraps until after the U.S. presidential election tomorrow.

Canadian officials familiar with the study say there was no political interference from Washington on the timing of the release, but they agree that the Bush administration has generally been out of step with an emerging global consensus on the risks of global warming.

The report warns that gases from factory and vehicular emissions are accelerating environmental changes in the Arctic -- shrinking glaciers, melting sea ice, thawing permafrost and changing weather patterns.

Robert Corell, an American oceanographer who headed the study, detailed some of the climate changes in testimony before the U.S. Congress this year.

He said the average winter temperature in the Alaskan and Western Canadian North has increased an average three degrees Celsius in the past 60 years. This is twice the rate of temperature increases globally.

Arctic sea ice has shrunk by 10 per cent in the past three decades, he said.

The permafrost line, which is important for transportation, petroleum exploration and construction, will retreat north by about 300 kilometres this century -- if trends continue.

The research, which has been previewed in technical publications and at seminars in recent

months, suggests that people living in the Arctic will find their world radically altered within a generation or two.

With warming temperatures and pools of stagnant water in the summer, they'll have to worry for the first time about diseases carried by mosquitoes.

The beaver population in Alaska is moving north, causing worries about the kinds of diseases it carries.

Inuit hunters are falling through ice more frequently. In European Nordic regions, birch trees are supplanting lichen pastures that have been the main food source for reindeer.

Dr. Corell told the Commonwealth North education group in Alaska that dramatically shifting wind patterns mean indigenous people can no longer depend on the wind to help them make their way across an Arctic landscape that has few distinguishing physical features to help navigate.

As sea ice disappears, polar bears, which rely on the ability to move on ice to hunt seals, will be forced ashore. But they don't have the ability to forage for food on land, Dr. Corell said.



© 2004 Bell Globemedia Publishing Inc. All Rights Reserved.