

NWT, a critical shield against global warming

JOE FRIESEN

From Friday's Globe and Mail

January 4, 2008 at 12:07 AM EST

WINNIPEG — The boreal forest occupies nearly half of Canada's land mass, yet it's more significant to national myth and memory – as home to the coureurs de bois and the hewers of wood – than it is to any discussion of a shared future.

But the blanket of woodlands that runs all the way from Yukon to the coast of Labrador may play a huge role in the battle to protect the planet from climate change.

As one of the last great intact forests on Earth, along with the Russian taiga and the Amazon rain forest, the boreal is considered one of the world's largest carbon storage systems. The trees and soil of Canada's northern forest form a critical shield against global warming, storing a volume of carbon equal to 27 times the world's annual greenhouse-gas emissions.

That's why organizations such as the U.S.-based Pew Trust have invested more than \$40-million in the last seven years to lobby for greater protection of Canada's forests. Their efforts contributed to a major announcement by the federal government last month that removes more than 4 million hectares of land from development in the Northwest Territories.

Graphic of Canada's boreal forests  
[Enlarge Image](#)

(Tonia Cowan/The Globe and Mail)  
The Globe and Mail

Land around the East Arm of Great Slave Lake is designated to become a national park, and the area of the Ramparts River and Wetlands will become a national wildlife area. More than 60,000 square kilometres of land claimed by the Akaitcho Dene First Nations also will be set aside to prevent mining and mineral exploration over the next five years.

“In a world where so many natural ecosystems are under threat, the boreal stands out as one of those places where we might actually be able to turn the corner and strike the right balance between maintaining intact ecosystems, maintaining opportunities for local aboriginal [populations], while also benefiting from its tremendous natural-resource wealth,” said Larry Innes, director of the Canadian Boreal Initiative.

Proposed national park

The largest intact forest remaining on the planet, the Canadian boreal rivals the

Amazon in size and ecological importance. The federal government's land-conservation agreement will help protect a significant example of the Northwestern Boreal Uplands in Canada's national park system.

---

### East Arm Great Slave Lake National Park

.....

**Landscape:** The area is home to the spectacular Pethei, Kahochella and Douglas Peninsulas, the Lockhart River canyons, Tyrell Falls, and Christie Bay, the deepest water in North America, and an abrupt transition from a boreal forest to a tundra environment

**Wildlife:** The region teems with wildlife, including nesting grounds for billions of migratory songbirds and 40 per cent of North America's waterfowl. Canada's boreal is also home to some of the world's largest populations of grizzly and polar bears, wolves, woodland and barren-ground caribou

**History:** The proposed park region has been home to the Lutsel K'e Dene for 7,000 years and has suffered few effects from industrial development, but has recently been the focus of intensive mining exploration and claims

**Future:** Thaydene Nene (Lands of the Ancestors) is the Dene name for the proposed park. Work to establish the park is being led by the Lutsel K'e Dene First Nation and Parks Canada

\_\_\_\_\_ Akaitcho Settlement Lands

.....  
**Agreement:** As part of an aboriginal land-settlement agreement, the Akaitcho First Nation will be given control over these ecologically and culturally important lands

---

### Ramparts River National Wildlife Area

.....

**Culture:** The designated area will help maintain the culture and way of life of nearby Sahtu First Nation communities, and some of the most important wetlands and waterfowl habitat in the boreal forest.

— Compiled by Unnati Gandhi; Sources: Parks Canada, Boreal Songbird Initiative, Canadian Boreal Initiative and Pew Trusts

His group's Boreal Framework, endorsed by 1,500 scientists, calls for half the forest's 560 million hectares to be protected from development. So far more than 40 million hectares have been put aside, and the group hopes to add another 4 to 8 million hectares in the next few years.

Joshua Reichert, managing director of the Pew Environment group in Philadelphia, which funds the Boreal Initiative, said conservation efforts in Canada offer large-scale rewards, backed up by a level of democratic political stability that often can't be found in other parts of the world.

“We're focused on a different scale of protection than is often the case with some conservation organizations. We're looking to protect vast functional ecosystems ... and there's not very many areas of the world that offer those kinds of opportunities,” he said. “There's a lot of land [in Northern Canada] to be protected and once a political decision is made to protect it, there's no serious concern

about those decisions and the protections being enforced.

“We view it as one of the last great remaining wilderness areas on Earth,” he said.

The boreal is home to the world's largest population of wolves and grizzly bears, as well as the threatened woodland caribou, and serves as the nesting ground for three billion songbirds and waterfowl, he said. Its more than a million lakes and waterways form the world's largest freshwater reserve.

Considering what's at stake and what has been achieved, Mr. Reichert said Pew's \$40-million investment has paid off handsomely, with a cost per protected hectare of about 16 cents.

But there are still many threats to the boreal forest. One of the side effects of a warming climate has been the migration of the mountain pine beetle from British Columbia into northern Alberta. The pine beetle, which wiped out 40 per cent of B.C.'s pine trees, was once thought unable to survive the cold long enough to travel across the Rockies. But warm winters have allowed it to flourish, and it could have a devastating impact if it's allowed to cross the country.

“If we can no longer count on the cold winters the boreal has always had then not just the pine beetle but other pests can move into the boreal and cause problems,” Mr. Innes said. “In the East we're also seeing outbreaks of spruce budworm and hemlock looper, which we've never seen before and it's causing great concern.”

In Ontario, logging and mining expansion has pushed the woodland caribou into a shrinking range of forests and made them more vulnerable to predators. In Alberta, the massive development of the tar sands will have a major impact on the boreal forest, as trees are cut, roads are expanded and pools of contaminated water fragment the landscape, Mr. Innes said.

In Manitoba, a fierce debate is raging over whether to run a power line through the pristine boreal forest on the east side of Lake Winnipeg. Premier Gary Doer hopes to have the area designated a United Nations World Heritage Site, and is pushing ahead with plans to transport power from northern hydro dams via a longer, costlier route on the west side of the province.

He has ensured that more than 800,000 hectares around Poplar River First Nation on Lake Winnipeg's east side are protected by a land-use agreement, which led to a local woman, Sophia Rabliauskas, being named the winner of this year's prestigious Goldman Environmental Prize.

Conservation and economic development are often pitted as competing interests in the debate over environmental stewardship, Mr. Innes said. When oil hits \$100 a barrel – when uranium, diamond and other kinds of mineral exploration are bringing wealth to long-depressed northern regions and the embattled forestry sector is still Canada's largest exporter – it can be difficult to resist the urge to

develop first and worry about the environment later.

But the lands set aside in the Northwest Territories are an example of a working consensus reached between aboriginal communities and local and federal government.

“Because of the balance that exists in that jurisdiction, where the aboriginal people have a very strong voice, we’re seeing a real desire on the part of these communities to find a balance [between conservation and development] and set aside their important areas first,” Mr. Innes said.

“Conservation biology is often described as lifeboat biology: How much do we need to do to protect this remnant species? In the boreal we actually have the opposite opportunity,” he said. “How much development can we accommodate within this landscape without harming the underlying ecology? It’s a tremendous opportunity but one we need to keep our eye on, because it’s so easy to slip into the old mode of developing all of it and then designating a few parks to protect the remnants of what’s left.”