

Caribou, Carbon and Climate Change



Photographer: Evan Ferrati

When he first arrived in Canada in 1888, none would have guessed that seven-year-old Emanuel Hahn from Germany would have such a lasting impact on the Canadian landscape.

But Hahn undeniably made his mark, becoming a leading sculptor in Canada for his designs of war memorials, civic monuments, and life-size tributes to such notables as Sir Adam Beck – a fixture on Toronto’s University Avenue since 1934.

But our interest in Hahn is not as a sculptor, but rather as an artist. For Hahn is the creator of the familiar caribou design on Canada’s twenty-five cent coin – a tribute to Canada’s wilderness and natural heritage.

When Hahn chose the caribou as his subject in the mid-1930s, this majestic animal was plentiful on the Canadian landscape. Caribou existed in most of Ontario’s northern region, when forestry activity in the area was still relatively young and the landscape mostly intact. No doubt Hahn would be shocked to learn that today in Ontario the forest-dwelling woodland caribou is in serious danger of disappearing forever.

A major reason for the caribou’s decline is industrial development, such as logging,

what’s inside



CARIBOU, CARBON...



CARIBOU CAMPAIGN



LAND USE PLANNING



SUPPORTER PROFILE



PASSING THE TORCH

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which has both destroyed and fragmented caribou habitat. The forest-dwelling woodland caribou depend on large areas of mature forest and peatlands to avoid predators and find the slow-growing lichens that make up much of their winter diet. Clearcuts decimate their habitat and food source, while logging roads fragment the little habitat that remains.

Moose and deer move into newly cut areas to take advantage of young growth, bringing with them predators such as wolves and bears. Logging roads allow these predators, as well as human hunters, increased access to caribou, which can be devastating to their populations. Unlike moose and deer, woodland caribou have very low reproduction rates. A female caribou adds only one to two adult caribou to a herd in her lifetime.

In Ontario, industrial development has resulted in caribou becoming locally extirpated. One expert likens disappearance of caribou to a string of Christmas lights slowly flickering out (never to be turned on again). Woodland caribou have suffered a range collapse of approximately 34 kilometres per decade. Today caribou populations are typically found north of 50 degrees latitude – not coincidentally, the invisible line above

which large-scale forestry development is not permitted.

But caribou isn't the only species whose survival is affected by an intact Boreal Forest.

The Boreal Forest plays a critical role in shielding us from the damaging impacts of global climate change. Its soils and peatlands store more carbon than any other landform on the planet, thus preventing it from being released to the atmosphere. In addition to storing carbon, the Boreal Forest absorbs carbon dioxide from the atmosphere, reducing the climate change impact.

When the Boreal Forest is cut, its ability to absorb carbon dioxide and store carbon is degraded and carbon is released to the atmosphere. Forests disrupted by industrial activity are estimated to release up to 25% of their stored carbon.

As more forest is cut and more carbon is released, the impacts of climate change will increase. This will become a growing threat to the forest itself. Scientists are concerned that, if temperatures continue to rise, this will result in more boreal forest fires, outbreaks of insect infestations and large-scale disturbance. As more forest is disrupted, more carbon will be released to the atmosphere – in potentially catastrophic amounts. And so the cycle will continue.

It shouldn't be a stretch to understand that preserving significant areas of intact Boreal Forest is in our own best interest. Maintaining these carbon storehouses will curb the release of large quantities of carbon that would contribute to global warming and bring about potentially disastrous consequences. It will also ensure that Hahn's caribou on Canada's twenty-five cent coin remains a tribute to our wilderness heritage, rather than becoming another of his memorials.

Caribou CAMPAIGN



Help Support our Caribou Campaign

Purchase a Cute 'n' Cuddly Caribou \$25.00 each + shipping

As a cousin of reindeer this cuddly caribou is a perfect holiday season gift for the children or grandchildren.

Please help support our caribou campaign by purchasing one of these adorable stuffed caribou.

Holiday Season Limited Offer

Talk to family members and friends. Ask them to join CPAWS Wildlands League for \$50, and we will send them a cuddly stuffed caribou and a tax receipt for \$38.00.



Land Use Planning

Without question, climate change is the most serious threat facing our planet. In today's world, the science of climate change, and especially the impact of human-generated greenhouse gas (GHG) emissions, is generally understood and certainly widely discussed. Much less attention, however, has been given to the role of natural forests and peat lands in shielding us from warming trends.

Logging in Canada currently releases 33 Mega-tonnes of carbon into the atmosphere each year – approximately 16% of Canada's total GHG emissions. For every hectare logged, about 33 tonnes of carbon are released.

Conversely, the Boreal Forests store 164-266 tonnes of carbon per hectare – most of it in the forest floor. Additionally, Canada's north is home to over 27 million hectares of peat lands, storing on average well over 1,300 tonnes of carbon per hectare. This amounts to literally billions of tonnes of carbon stored in these northern ecosystems.

Unfortunately, Canada's Boreal Forests including northern peat lands are under serious threat from industrial development. Such development could mean the release of devastating quantities of carbon. For example, developing a single diamond mine in peatlands could result in the release of embedded carbon from an area over four times the size of Toronto.

Given predictions of warming by four degrees in this century, preventing loss of carbon from northern Boreal Forests and peat lands is critical. As deforestation and logging contribute 20% of global GHGs, forests must be part of the solution to reduce emissions. Simply put, converting our carbon reservoirs to industrial uses should be avoided at all costs.

We need a plan of action – one that will ensure our children are not saddled with a huge carbon debt because of poor resource decisions we make today. Ontario must insti-



Photographer: Ted Simons

tute rules for development before any resource decisions are made.

A comprehensive northern planning framework for all land uses must

- safeguard current carbon stores in the intact Boreal Forest and peat lands
- protect threatened species' habitat like the Woodland Caribou, Lake Sturgeon and Polar Bear
- protect landscape values such as intact watersheds, so these ecosystems continue to effectively clean water and filter air
- assess and assign the full range of benefits from resources (e.g., logging, mining) with complete transparency

- complete full cost carbon accounting before any development begins

- ensure that legacy of protected forests and waters is left for our children and grandchildren.

In addition, the rules must take into account the vital role First Nations have in resource decision making and sharing of any benefits that flow from resource extraction.

We must take our responsibility seriously to keep intact the carbon stored in our Boreal Forests and northern peat lands. We invite you to work with us to champion a northern planning framework.

Supporter Profile



Photographer: Reiner Arnold

As a rule, Glen was not one to speak at public gatherings. We were deeply honoured when he agreed to speak at our "Caribou: The Untold Story" event in the fall of 2006.

"We will carry Glen in our hearts and cherish our memories of him."

- Janet, Anna, Evan, Nicole, Trevor, Dave.

We had the pleasure of first working with Glen Davis during the Canada-wide Endangered Spaces Campaign. Glen generously funded our work from the beginning, through Ontario's Lands for Life process and far beyond. His unflagging belief and financial commitment resulted in Ontario gaining 378 new parks and conservation reserves.

Glen was imaginative and farsighted. He shared our vision for a new parks act in Ontario and supported our work to create one founded on the principles of ecological integrity. Due in part to his efforts, Ontario's new Provincial Parks and Conservation Reserves Act became law in 2007. Ontario now leads the country in parks protection.

In 2000 Glen also took on the challenge to raise the profile of Ontario's Boreal Forests. The funding he provided allowed us to visit and build relationships with 20 remote First Nation communities in Ontario's intact northern boreal region. This led

to an outcry for land use planning to take place in advance of development, and enabled us to work closely with the First Nations that called for a moratorium on mining and forestry in their traditional territories – an area spanning over five million hectares of pristine wilderness.

Glen financed many, many summer wilderness trips to take celebrities, reporters and people of influence to this last remaining intact wilderness. It was his hope that they would be similarly inspired to help raise the profile of Ontario's Boreal Forests. When he began funding this work, most people had never heard of the Boreal Forest or the critical reasons for its protection. Seven years later 90% of Ontarians have said they want the government to protect more of these forests as a defence against global warming.

Thank you Glen for everything you helped us achieve. We miss you.

PASSING THE TORCH



In the not-too-distant past, a group of passionate and dedicated environmentalists gathered to form the Algonquin Wildlands League. The year was 1968 and this group shared a dream and a vision to protect wilderness in Ontario. At that time the province had 84 parks covering 1.7 million hectares, yet not one was protected from resource development.

Almost 40 years later, thanks to countless hours of dedication from the Wildlands League and others, Ontario now boasts over 600 parks covering more than four million hectares. All but one, our beloved Algonquin, is now protected in law from resource development.

Yet we are far from done!

Ontario's far north holds over 37 million hectares of pristine boreal wilderness. Home to the endangered Woodland Caribou and millions of cherished songbirds, the boreal is a unique global treasure in our own backyard.

The Wildlands League's conservation vision is of a landscape that not only survives, but thrives. It includes intact forests, clean wetlands, waters and filtering systems. It means ensuring an intact ecosystem, a buffer against global warming, and protection of wildlife from extinction.

Next year marks the Wildlands League's 40th Anniversary and, as we are approaching "middle-age," the theme is appropriately "Passing the Torch to Our Children." Please help fulfill our vision. Let your torch be a priceless legacy by making a planned gift with a bequest in your will, or a gift of life insurance.

For information, please contact Nicole Thouard at 416-971-9453 ext. 41.

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