ForestEthics

A BRIGHTER SHADE OF GREEN

AN AGENDA FOR CARIBOU, CLIMATE AND CONSERVATION IN CANADA'S FORESTS

"ACTION TO PRESERVE THE REMAINING AREAS OF NATURAL FOREST IS URGENT."

—FROM *THE STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE*, BY FORMER WORLD BANK CHIEF ECONOMIST SIR NICHOLAS STERN

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CONTENTS

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SUMMARY

RECOMMENDATIONS

ESTABLISH OFF-LIMIT AREAS
Customers should not buy wood or paper products that originate in caribou range or other Endangered Forests.

MITIGATE CLIMATE CHANGE
Adopt a precautionary approach to timber harvesting to plan for forests' role in mitigating climate change. Set aside intact forest areas for ecosystem resilience and carbon reservoirs.

ADAPT COMMUNITIES AND BUSINESSES
Plan for and invest in an ecologically and socially responsible economy such as investing in production of higher value products from lower volumes of wood and in non-timber based rural businesses.

DROP THE CUT
Dramatically reduce the amount of forest logged annually.

RESTRUCTURE PULP
Build recycled and agricultural fibre pulp and paper infrastructure.

GO FSC
Certify logging operations through the Forest Stewardship Council, including stringent plans for maintaining caribou and other high conservation values.

Refer to page 8 for full recommendations.

OUR WORLD IS CHANGING. Scientists, governments and industry leaders from around the world agree that global warming threatens basic ecological systems and services that provide human well-being. Canada's forests, forest industry and consumers of forest products can play an important leadership role in addressing global warming and in creating successful adaptation strategies. Currently, logging is creating a feedback loop that exacerbates climate change while reducing the biological resilience and diversity necessary to cope with it. Conserving forests is everybody's business if we are to rise to the greatest challenge the world, and our civilization, has faced.

This report sets an initial framework for developing a truly sustainable forestry sector. It explains why Canada must set aside large tracts of ecologically important forests, significantly reduce the amount of logging and change current logging practices. Foresight, courage and conservation-based planning at a nation-wide scale—nothing less will be effective in turning the tide on habitat loss and climate change. In this effort, customers of Canada's forest products will play a key role in orienting their demands towards sustainability.

The *Stern Review on the Economics of Climate Change*[†] identifies the protection of large tracts of intact forests as one of the four primary strategies for national action. Canada, holding one quarter of the world's intact forests, can demonstrate responsible national action on the global climate and biodiversity crises through bold changes to forest management and land use planning. We cannot afford to squander the trillions of dollars in ecosystem services that forests provide through reckless industrial practices, weak legislation and poor planning.

The canary in the coal mine of Canadian forests is the caribou. Besides its presence both in Canada's wild landscapes and in the public imagination, the caribou is an important indicator of ecosystem health. But logging and other development have driven the caribou from half of its historic range, turning this charismatic animal into an endangered species. Caribou in the mountains of British Columbia and across the country's Boreal forests are in precipitous decline largely due to logging. Yet, unlike most places on earth, Canada has the opportunity and the means to reverse this extinction trend by protecting caribou habitat from degradation and planning for habitat recovery.

Half a decade ago a noticeable shift began. Buyers of Canadian forest products started to ask that their forest products meet a set of environmental and social standards such as Forest Stewardship Council (FSC) certification or recycled paper content. This trend continues. Businesses like Limited Brands—the parent company of Victoria's Secret—are becoming more actively engaged, demanding that both their suppliers and responsible governments change practices, protect caribou herds, conserve intact habitat areas and mitigate climate change.

The time to build an ecologically and socially responsible economy is now. There is no better time and no better place.

[†] Stern Review on the Economics of Climate Change, November 2006; www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm

CARIBOU: THE CANARY IN THE COAL MINE

SINCE 1937 the caribou has been featured on the Canadian twenty-five cent coin as a symbol of the country's vast wilderness. But unrestrained development of Canada's forests has placed both the woodland caribou and the Canadian forest wilderness it symbolizes under threat. Only half of Canada's forests remain intact. In response woodland caribou have disappeared from half of their historic range.[1] The other half of Canada's once great wilderness has been developed, dissected by roads, logged and converted to younger, less diverse forests. The fate of the caribou and Canada's wilderness are intertwined: failing to protect one will mean the loss of the other.

A 'SLOW MOTION CRISIS'

The plight of woodland caribou is a 'slow motion crisis'.[2] The species was first listed as 'rare' in Canada in 1984. In 1995 its status worsened to 'vulnerable,' and in 2000 it was declared to be a 'threatened' species—likely to face imminent extinction if limiting factors are not reversed.[3] Woodland caribou have been pushed north at a rate of about 34 km per decade, a rate that if continued would push the species to extinction in Ontario in 49-57 years.[4] In British Columbia the mountain caribou, an ecotype of woodland caribou, has been reduced from 2400 in 1997 to 1900 today, and some herds are facing extirpation in just a few years unless immediate measures are taken.

IN 2000 WOODLAND CARIBOU WAS DECLARED A 'THREATENED' SPECIES — LIKELY TO FACE IMMINENT EXTINCTION IF LIMITING FACTORS ARE NOT REVERSED.

Despite this fact, all of the draft caribou recovery plans written to date (by British Columbia, Alberta, Ontario, Manitoba, and Newfoundland & Labrador) focus on trying to mitigate the impacts of logging and roads, while continuing to build roads and log in caribou habitat. These recovery plans are required under Canada's Species at Risk Act (SARA), but none of them have taken the critical step of identifying and protecting critical caribou habitat.

Caribou experts agree that the survival of caribou requires the protection of intact forests containing critical habitat.[5] Canada's National Recovery Team for woodland caribou has defined critical habitat as all occupied caribou range. To be effective, the entire range of a herd must be protected from the impacts of logging. The average range size of a population of woodland caribou is 9,000 km^2, to which a 13 kilometre buffer of intact forest should be added.[6] Protecting forests on this scale should also meet the needs of other species like wolverine that also require large, old forests.

The caribou crisis is indicative of poor forest management and practices from coast to coast. Governments are failing to provide leadership to ensure the survival of umbrella species and Canada's wilderness. Those governments and companies that value ecological integrity and science, and that reject the notion that we have the right to drive species to extinction, should avoid logging, or purchasing forest products from, caribou range, and adopt and promote policies that ensure habitat protection.

THE CARBON RESERVOIR

Photo: Garth Lenz

THERE IS NO LONGER ANY QUESTION that human activity and the emission of greenhouse gases are causing an unprecedented warming of the Earth's climate.[7] The risks and impacts of global warming are also becoming clear: increased flooding, heat waves and droughts; increased damage from floods and storms; impacts on human health; mass species extinctions; and disruptions to natural ecosystems.[8]

Whether global warming will accelerate or slow down mostly depends on how we affect the planet's overall carbon budget—the balance between carbon emitted to the atmosphere as carbon dioxide and the carbon stored in the Earth's ecosystems.

The *Stern Review* cautions that it is important to keep the benefits of protecting old forests for carbon distinct from tree planting.[9] And while the forest industry argues that carbon is also stored in forest products like paper and lumber, studies in both coastal rainforest and Finnish Boreal forest show that even when counting carbon stored in forest products, managed forests store significantly less carbon than natural forests.[10,11]

"While planting new trees is an excellent long-term policy, trees take decades to absorb the equivalent amount of carbon to that which is instantaneously released into the atmosphere when mature trees are cut down and burnt." *(Stern Review)*

Protecting Canada's intact forests is an essential element of a national strategy for re-balancing our carbon budget and for helping our ecosystems adapt to the climate warming that is already underway. It is also one of the most economical.

Globally, the Boreal forest stores over one third of the world's terrestrial carbon.[12] Canada's Boreal forests store 47.5 billion tons—seven times the entire world's fossil fuel emissions.[13] Canada's total forest stores of carbon, including temperate rainforests, total 84.4 billion tons.[14] The report 'Robbing the Carbon Bank: Global Warming and Ontario's Forest' is the first in a series on climate and forests that ForestEthics will be releasing. It details how logging the intact Boreal forest is escalating carbon dioxide levels and increasing global warming.

FORESTS: CANADA'S CARBON BANK

Stored carbon cannot escape to the atmosphere as CO_2 because it is trapped in plant material or in the soil. Natural, intact forests store up to 50% more carbon than the 'managed' forests that are planted by companies after logging.[15,16] Similarly, old forests store significantly more forest than young forests and can continue to sequester carbon for hundreds of years.[17, 18]

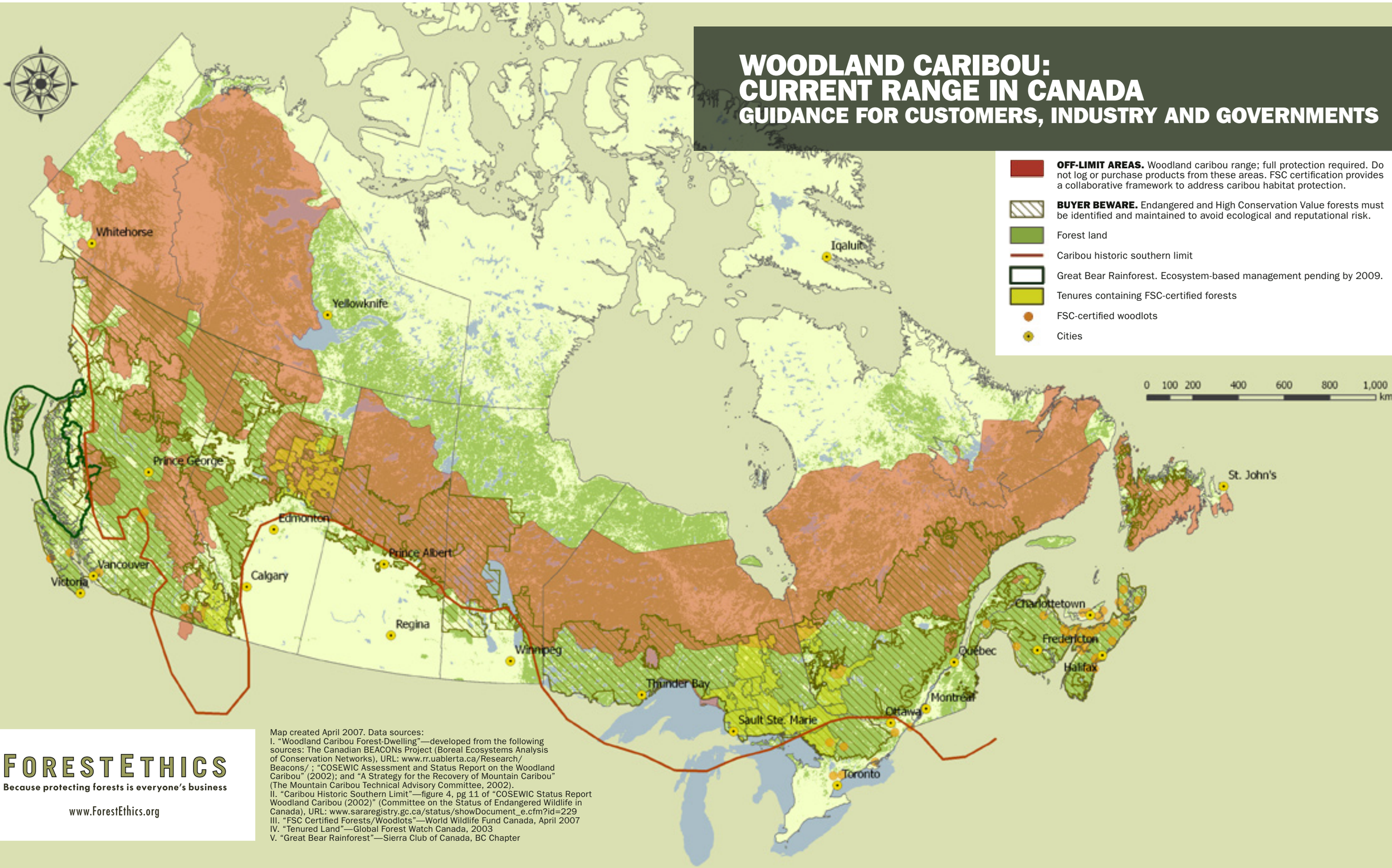
In addition to storing carbon, intact forests are also essential to help species and ecosystems adapt to climate change. Natural, old forests can survive for hundreds of years in the face of unfavourable conditions and are more likely to house the biodiversity required to adjust to a new climate.[19] Intact forests also have large core areas that can buffer temperature increases.[20] The world's scientists believe that unfragmented forests are already being used for climate change related animal migrations. [21]

Logging in Canada alone removes 33.42 megatons of forest carbon stores every year.[22] This is more carbon than is emitted annually by all passenger vehicles in the country. [23]

Canada has an international obligation to protect its forest carbon stores and help its ecosystems adapt to climate change. Protecting an array of intact natural forests will contribute significantly to both of these objectives. Governments currently are failing to provide leadership.

WOODLAND CARIBOU: CURRENT RANGE IN CANADA

GUIDANCE FOR CUSTOMERS, INDUSTRY AND GOVERNMENTS



OFF-LIMIT AREAS. Woodland caribou range; full protection required. Do not log or purchase products from these areas. FSC certification provides a collaborative framework to address caribou habitat protection.

BUYER BEWARE. Endangered and High Conservation Value forests must be identified and maintained to avoid ecological and reputational risk.

Forest land

Caribou historic southern limit

Great Bear Rainforest. Ecosystem-based management pending by 2009.

Tenures containing FSC-certified forests

FSC-certified woodlots

Cities

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Map created April 2007. Data sources:
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II. "Caribou Historic Southern Limit"—figure 4, pg 11 of "COSEWIC Status Report Woodland Caribou (2002)" (Committee on the Status of Endangered Wildlife in Canada), URL: www.sararegistry.gc.ca/status/showDocument_e.cfm?id=229
III. "FSC Certified Forests/Woodlots"—World Wildlife Fund Canada, April 2007
IV. "Tenured Land"—Global Forest Watch Canada, 2003
V. "Great Bear Rainforest"—Sierra Club of Canada, BC Chapter

Photo: Pat Bates

A BRIGHTER SHADE OF GREEN MARKETS

THERE ARE A SERIES OF COMMERCIAL CONSUMERS—publishers, large retailers, home-building companies—whose purchases are at such a scale that their buying decisions can influence logging companies' practices and government policies. An increasing number of these major forest product buyers are engaging as active solution-builders in the heated debate over forest management. Their voices as advocates follow a commitment to corporate social responsibility and a growing perception in the business community that 'green' is good for business.

"IF YOU CAN SHOW ME THE BUSINESS CASE, YOU'RE ALREADY TOO LATE." —BILL GATES

In the last five years some 200 Canadian and US companies have developed active environmental wood product purchasing policies. As a result demand for Forest Stewardship Council (FSC) certified wood has skyrocketed and, in the US, all recycled/deinking paper facilities are now functioning near maximum capacity for the first time in over a decade. And while the conventional paper industry has been experiencing record lows in Canada, recycled and FSC-certified papers are showing growth trends.

The leanings of the past half-decade have become even more pronounced in the past year, with major players such as Limited Brands (publisher of the Victoria's Secret catalogue) taking steps beyond developing and implementing a leadership procurement policy. Several purchasing companies, including Limited Brands, Lowe's, Home Depot and others, have begun speaking directly with mills, logging companies and government officials, stating their support for the protection of High Conservation Value and Endangered Forest areas and the development of laws, policies and practices to protect critical habitat. Major solid wood buyers continue to create market pull for more FSC-certified products and increasingly green builders are looking for alternatives to controversial wood.

In 2006/2007 Williams-Sonoma, Dell, Random House and Limited Brands all made groundbreaking environmental leadership policies including time-bound procurement actions that include significant recycled and FSC-certified paper content (*e.g.* Dell targeting 50% recycled and Williams-Sonoma 95% FSC-certified paper). With a combined purchasing volume of more than 250,000 tonnes of paper, these corporations can transform markets.

"We will no longer buy from suppliers operating in caribou range in Canada. We are also stating today a strong preference for product that is certified by the Forest Stewardship Council."

— Tom Katzenmeyer
Senior Vice President Community and Philanthropy
Limited Brands
December, 2006

Suppliers to Limited Brands, which purchases approximately 100 million dollars of paper per year, have now agreed not to include fibre from either caribou range or West Fraser Timber operations due to West Fraser's refusal to ensure conservation of critical forests or move towards Forest Stewardship Council certification. Limited Brands has also stated its support for the Boreal Forest Conservation Framework, a visionary initiative to bring together all stakeholders to ensure a balanced approach to conservation and development.[24]

Today's customers demand that corporations go green—shareholders expect it and brands need it. The new breed of CEOs sees the environmental bottom line as relevant to their business — and they are increasingly showing up on decision-makers' doorsteps.

A GOOD REPUTATION IS A DIFFICULT THING TO BUILD AND AN EASY THING TO LOSE. CANADA'S REPUTATION AS A SOURCE OF SUSTAINABLY LOGGED WOOD AND PAPER HAS PLUMMETED.

Photo: Garth Lenz

FOREST STEWARDSHIP COUNCIL CERTIFICATION: CREDIBLE ON THE GROUND AND IN THE MARKETPLACE

COMMERCIAL CONSUMERS ARE INCREASINGLY REQUIRING PROOF that their products do not cause environmental problems, but instead contribute to solutions. This has created a role for credible third-party certification of forestry practices as a cornerstone of a sustainable forest industry. The Forest Stewardship Council (FSC) represents the leader and threshold for credible forest products certification. Other certification schemes such as the Sustainable Forestry Initiative (SFI), Canadian Standards Association (CSA) forest certification system, and American Tree Farm System (ATFS) certification system do not provide credible and environmentally sound standards as they don't meet the criteria outlined below.

The growing ranks of conscientious wood and paper buyers need to have confidence that their products come from operations that:

- adequately protect high conservation values such as intactness, old growth forests, endangered species' habitats, and representation targets;
- have meaningful limits on clearcutting, chemical applications, and other harmful forest management practices;
- preclude the conversion of forests to plantations and non-forest land uses; and
- adequately protect First Nations' and other indigenous peoples' rights.

FSC ensures all of the above, tracks chain of custody and assesses logging companies' forest management practices and their impacts on the ground. It is a genuinely independent third-party certifier and is recognized internationally.

Certification must ensure the customer that the products they purchase, throughout the supply chain, reflect their values. Many large paper and wood buyers are now specifying FSC because the system was developed to address environmental and social concerns from the forest floor to the product on the shelf. As a result FSC products have the advantage of being preferred in the marketplace. Demand for FSC products is now greater than the supply, which, in a competitive market, has direct financial returns.

FSC HAS SEEN CONTINUED GROWTH in the market for FSC-certified products in Europe, North America, Asia and Latin America. This growth has resulted in a 25% increase in FSC Chain of Custody certificates for each of the past two years and a doubling of hectares of forest certified to FSC standards in the same period.
(FSC International)

FSC certification has a basic international standard and regional variations. FSC has the capacity to require that extra conservation measures be taken to maintain biological diversity. Such measures are needed to ensure caribou survival where FSC logging is being considered in or near their range.

A good reputation is a difficult thing to build and an easy thing to lose. Canada's reputation as a source of sustainably logged wood and paper has plummeted. The cause is logging practices that have been hotly defended while their negative effects on the environment have been widely understood. Credible, independent third-party FSC certification broadly applied to logging operations across the country is necessary to give the public what they want: practices for a healthy planet, not false assurances.

RETHINK AND CHANGE COURSE

ACTION TO AVOID CLIMATE CHANGE AND THE BIODIVERSITY CRISIS should have been taken early—but it wasn't. Now swift and decisive measures must be taken. Understanding that forests play a role in climate change mitigation, and recognizing the precipitous decline in caribou and other umbrella species, underscores the need for strong, responsible leadership. A growing and active voice from the marketplace calling for conservation of intact and endangered forests means that Canada will either find its niche as a leader in forest sustainability or suffer ecological, social and economic challenges.

RECOMMENDATIONS TO START ON A PATH OF FOREST SUSTAINABILITY

ESTABLISH OFF-LIMIT AREAS. **Protecting umbrella species habitat, such as caribou range, also protects other animal and plant species, as well as ecosystem services. Customers should not buy from the off-limit caribou range areas identified on our map.** Areas where high conservation values can be maintained through high-standard FSC-certified management have also been indicated on the map. A path towards sustainability begins with governments and logging companies immediately deferring and then protecting large areas of habitat to ensure caribou abundance and distribution is maintained and restored.

MITIGATE CLIMATE CHANGE. **Adopt a precautionary approach to timber harvesting to plan for forests' role in mitigating climate change. This will require set asides of large tracts of intact and old forest both to maintain carbon reservoirs and to maximize forests' resilience to climate change.** The best defense against the effects of climate change is to maximize ecosystem resilience through conservation. Forests' role as carbon storehouses and for carbon sequestration forms part of a natural cycle that logging and other industrial activities degrade. Prioritizing conservation of caribou range, and carbon-rich intact and old forests, will also ensure maximum carbon storage and ecological resilience as our society adapts to our changing climate.

ADAPT COMMUNITIES AND BUSINESSES. **Develop a national strategy in concert with the provinces, First Nations and NGOs to adapt the economy to a lower rate of logging.** Canada's wood economy has been based on a high-volume/low-value structure, to the detriment of the environment and climate. Focused regional economic diversification strategies coupled with green venture capital from the private and public sectors will aid rural communities and the forest sector to transition away from dependence on an unsustainable level of cut.

DROP THE CUT. **Dramatically reduce the amount of forest logged annually.** Too much is being logged too fast. A working group of scientists, NGOs, and government must come to an agreement on a sustainable level of cut.

RESTRUCTURE PULP. **Build recycled and agricultural fibre pulping infrastructure.** Waste not want not. Greater paper efficiency by major paper users is the first step to conservation. Maximizing recycled content and reinforcing it with non-wood and FSC wood fibres represents the best method to minimize paper's ecological footprint. Investments in recycled/deinking mills and pulping of agricultural fibres from farmers' fields will significantly reduce the pressure on old growth forests.

GO FSC. **Apply Forest Stewardship Council certification to all logging operations to assure the marketplace that Canada's forest practices are environmentally and socially sound.** FSC can ensure that provisions for caribou habitat conservation are incorporated into certifications. Forest Stewardship Council is internationally recognized as a credible certification system for responsible forest practices.

ENDNOTES

Photo: Jens Wieting

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[23] Environment Canada. 2006. National Inventory Report: Greenhouse Gas Sources and Sinks in Canada 1990-2004. Submission to the United Nations Framework Convention on Climate Change. April 2006 Advance Copy. Logging in Canada releases on average 33 Mt of carbon (122 Mt CO2) into the atmosphere each year, which is equivalent to 16 percent of Canada's total GHG emissions. According to current IPCC 2003 methodology, emissions from forest management comprise all the CO2-C contained in harvested roundwood and harvest residues. All carbon transferred out of managed forests as wood products is deemed an immediate emission. All light duty cars, trucks & motorcycles running on gasoline, diesel, propane and natural gas combined release 96 Mt CO2.

[24] http://www.borealcanada.ca/framework_e.cfm

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