



SUSTAINABLE
FORESTRY
INITIATIVE

SFI-00001



SFI AND WOODLAND CARIBOU

Supporting Forest Management with Conservation Research

The Sustainable Forestry Initiative (SFI) Inc. is a sustainability leader that stands for future forests. We see a future where collaborative efforts including conservation science, public policies, community engagement and Indigenous expertise gives land managers the tools they need to make complex decisions on behalf of woodland caribou and other species at risk. These collaborative efforts have the potential to benefit both wildlife and the people that depend on forests.

THREATS FACING WOODLAND CARIBOU

Boreal caribou, a type of woodland caribou, live in Canada's boreal forest. Wide-ranging species, like caribou, rely on Canada's network of protected areas and well-managed forests to meet their habitat needs. Woodland caribou are listed as threatened under the federal Species at Risk Act, as well as under provincial legislation in British Columbia, Alberta, Manitoba, Ontario, Quebec, Labrador, and the Northwest Territories.

There are a number of factors that negatively impact woodland caribou and may contribute to their decline. For example, roads, powerlines, pipelines and forest harvesting contribute to habitat fragmentation, which gives predators like wolves and bears easier access to caribou habitats.

Younger forests that grow after disturbances like fire or harvesting also initially attract deer and moose, which in turn can increase the number of predators.

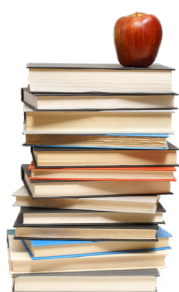
SFI is helping forest managers manage for healthier caribou populations by focusing on important themes such as habitat changes, nutritional needs, and the effects of climate change. SFI's work with its partners also recognizes the complexity of forest management planning when it comes to managing for multiple conservation objectives involving myriad species. The SFI community shares a goal of using responsible forest management practices to proactively manage risks to caribou and other species.

SFI IS FOCUSED ON LARGE-SCALE COLLABORATIVE SOLUTIONS

SFI funds research that helps inform decisions and provides clear action steps. We are committed to bringing researchers, community representatives, and forest managers together to make the best decisions possible. SFI's vast scale also has the potential to bring these solutions to a new level and magnify their impact. There are more than 125 million hectares of forestland certified to the SFI Forest Management Standard in Canada.

405 DIFFERENT CONSERVATION AND RESEARCH PROJECTS REPORTED BY SFI PROGRAM PARTICIPANTS IN 2017

Projects on the ground: In 2017, SFI Program Participants engaged with over 550 organizations in multiple sectors including research, conservation, government, academic and community.



MORE THAN

550

UNIQUE PARTNER ORGANIZATIONS

IN MULTIPLE SECTORS INCLUDING:

24% GOVERNMENT
16% CONSERVATION
17% COMMUNITY
7% RESEARCH
12% ACADEMIC
24% OTHER

Other includes:

Other SFI Program Participants • Associations • Consultant Groups and Firms • Non-SFI Landowners • Brand Owners

In Canada, forest managers harvest less than 1% of the land base annually and all management areas are promptly reforested.

PROJECT HIGHLIGHT: CARIBOU AND GRIZZLY BEAR RESPONSE TO LANDSCAPE CHANGE IN MANAGED FORESTS OF WEST-CENTRAL ALBERTA

Partners: University of Saskatchewan, fRI Research and SFI Program Participants



This project increased knowledge of functional habitat for caribou and grizzly bear in relation to areas of seismic activity and timber harvest. The project can be used to prioritize habitat restoration that will improve habitat for both species, and will help make decisions on future harvest plans to minimize impacts on both species.

It builds on past research and has improved the ability of forest managers to map habitat for both caribou and grizzly bear at a much finer scale. This means that different forest management plans can be developed and applied to address the needs of both of these important and far-ranging species. Research results will help identify the current size and locations of functional habitat. Results can then be input into a model that will project future habitat needs and harvest scenarios.

“Our research underlines the commitment of forest managers to maintain the viability of caribou within a shared working landscape in a very active way. The research methods we develop could ultimately be applied across a wide range of land certified to SFI.”

— Laura Finnegan

LEAD RESEARCHER AT THE fRI RESEARCH CARIBOU PROGRAM

PROJECT HIGHLIGHT: MANAGING CARIBOU HABITATS USING NEW SCIENCE ON SUMMER NUTRITION IN FOREST STANDS

Partners: NCASI Canada, University of Northern British Columbia and SFI Program Participants

ncasi



Part of the solution for caribou recovery will be addressing calf survival and maternal nutrition. In a given population, up to 50% of caribou calves may die within 50 days of birth. While predation is a major factor, the complex causes for such low survival rates are not fully known. The National Council for Air and Stream Improvement (NCASI) is working with top caribou researchers in Canada to investigate what role maternal nutrition may play in calf survival.

Nutrition can affect calves in many ways. Malnourished adult females may fail to become pregnant, have trouble surviving the winter, deliver calves late, deliver underweight calves and may have trouble feeding their young. In turn, if calf nutrition is compromised, their growth and ability to resist predation can be substantially affected. Better understanding of maternal nutrition and habitat needs could lead to new management options, such as silvicultural prescriptions to develop a robust and nutritious understory in forests grown post-harvest. Such practices could improve the nutritional environment for caribou without compromising forest management opportunities.

PROJECT HIGHLIGHT: IDENTIFYING HIGH-QUALITY HABITAT AND MOVEMENT PATHWAYS OF CARIBOU IN WEST-CENTRAL ALBERTA

Partners: fRI Research, University of British Columbia, Aseniwuche Winewak Nation, Safari Club International and SFI Program Participants



fRI Research
Informing Land & Resource Management



THE UNIVERSITY OF BRITISH COLUMBIA



Aseniwuche Winewak Nation of Canada



Caribou require a variety of forest habitats for foraging, movement and successful reproduction. To better understand these dynamics, this project modelled the distribution of high-quality habitat and caribou movement, and identified areas for habitat restoration. This project demonstrates the commitment of forest managers to actively maintain caribou viability within a shared working landscape, while working to meet federal targets outlined in the boreal and southern mountain recovery strategies.

RECOGNIZING AND RESPECTING INDIGENOUS RIGHTS

The SFI Forest Management Standard recognizes and respects Indigenous peoples' rights and traditional knowledge. Indigenous people in North America have long relied on forests for cultural, spiritual and material needs. Woodland caribou, moose, wolves and other wildlife all play an important role in the way of life and culture of Indigenous Peoples.

Conducting research to understand how forest management practices can be modified to be part of the solution for caribou recovery and species management is critical. However, it is not by research alone that decisions are made. Engaging and listening to Indigenous people to learn about their traditional knowledge and way of life is also critical to caribou recovery, just as it is to sustainable forest management.

That's why the SFI Forest Management Standard supports these approaches.

SFI HAS CONTRIBUTED

\$260,000

to caribou research

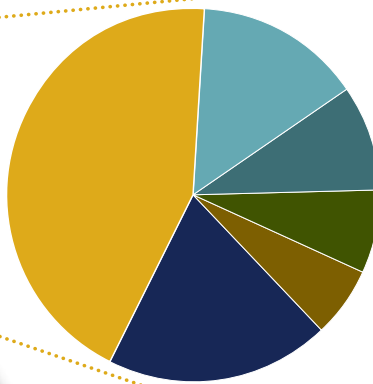
WHEN LEVERAGED WITH PARTNER CONTRIBUTION THAT AMOUNT EXCEEDS

\$1.9 million



DISTRIBUTION OF SFI PROGRAM PARTICIPANT RESEARCH DOLLARS IN 2017

ALMOST
\$59
MILLION IN FOREST
RESEARCH IN 2017



FOREST HEALTH AND PRODUCTIVITY - 43%

WILDLIFE AND FISH - 14%

LANDSCAPE/ECOSYSTEM MANAGEMENT AND BIODIVERSITY - 9%

FOREST OPERATIONS EFFICIENCIES AND ECONOMICS - 7%

WATER QUALITY - 6%

ALL OTHER RESEARCH AREAS - 19%

Other research areas include: Energy efficiency • Life cycle assessment •
Avoidance of illegal logging • Avoidance of controversial sources

\$1.6 BILLION

Since 1995, SFI Program Participants have directly
invested nearly **\$1.6 billion** in forest research.

IN 2017, MORE THAN 75% OF THESE INVESTMENTS WERE
ALLOCATED TO CONSERVATION-RELATED OBJECTIVES.

**SFI is the only
forestry standard
with a research
requirement.**

75%

**OF RESEARCH FUNDING IS LINKED
TO CONSERVATION-RELATED
OBJECTIVES**

FOREST CERTIFICATION AND CARIBOU CONSERVATION

The SFI Forest Management Standard has requirements for species at risk, as well as broader performance measures for conservation of biological diversity that help meet caribou management objectives, including:

- Stand- and landscape-level conservation
- Documenting diversity of forest cover types and age classes
- Incorporating results of provincial conservation planning
- Considering the role of natural disturbance when planning management actions
- Protecting forests with exceptional conservation value

In addition, the SFI Forest Management Standard and the SFI Fiber Sourcing Standard have provisions for research and training, which help to ensure that new science is brought forward that can help managers understand the needs of caribou.

By helping caribou thrive, responsible forest management can be part of the solution for caribou recovery.

The SFI Forest Management Standard requires the conservation of a variety of ecosystem goods and services including biological diversity and species at risk. Forest managers in Canada manage for a variety of wildlife species including important fur-bearing species such as marten, animals such as moose and deer, and birds, fish and amphibians. Species at risk management should recognize the role of forests in providing habitat for this wide variety of species and interests.

ABOUT THE SUSTAINABLE FORESTRY INITIATIVE® INC.

SFI® Inc. is a sustainability leader that stands for future forests. We are an independent, non-profit organization that provides supply chain assurances, delivers conservation leadership, and supports environmental education and community engagement. SFI believes caring for forests improves everyone's quality of life. Learn more: sfiprogram.org.

WANT TO KNOW MORE?

Learn more about SFI's support for caribou research and other conservation initiatives: sfiprogram.org/conservation.