



Compendium of Forest Education Resources for Youth and Educators

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Acknowledgements

The Canadian Council of Forest Ministers (CCFM) acknowledges the tremendous work of educators. This compendium of forest stewardship materials intends to serve as a useful resource for youth and educators across the country. The CCFM believes in ensuring individuals have access to science-based information and resources to further their knowledge on forests and sustainable forest management.

The CCFM wants to acknowledge the valuable contribution from partners who provided input and shared their resources to develop this compendium. The CCFM recognizes the vital role of collaboration in an increasingly complex environment. A better understanding of Canada's forests provides opportunities to support the health, resiliency and sustainable management of the forest sector.



Introduction

The compendium responds to the key CCFM priority identified in 2020 where the Council expressed the importance of youth having access to factual information on sustainable forest management in Canada.

The majority of youth today live in densely urban environments with limited opportunities to explore and understand the complexities of Canada's vast forests. With a deluge of information on the internet, including unsupported messages being presented as science-based fact, it is increasingly difficult to access fact-based and balanced information about sustainable forest management and forest practices in Canada.

The purpose of this compendium is to help youth and teachers access educational resources on various forestry topics such as biodiversity of forests and trees, sustainable forest management, and forest based industries and products

The compendium was developed based on information submitted by participating jurisdictions and partners.



Compendium Layout

This compendium includes the resource title, resource type, author or developer, a general description identifying the resource, topics covered by the resource, and the year the resource was produced.


Resources are organized by education level:

- Kindergarten to Grade 3
- Grades 4 to 6
- Grades 7 to 9
- Grades 10 to 12
- Multiple Grade Levels

For each resource, the compendium also indicates the topics covered:

- Forest ecology
- Forest biodiversity (plants, animals, ecosystems)
- Forests and climate change
- Forests and water
- Indigenous forest-related knowledge
- Urban forests and trees
- Rights to forest use and products
- Contribution of forests and trees to human health and livelihoods
- Recreational value of forests and trees
- Cultural and social value of forests and trees
- Threats to forests and trees
- Sustainable forest management
- Forest conservation
- Forest/wood-based industries and products

NOTE: This compendium is not an exhaustive list of forest education resources in Canada. We welcome individuals and organizations to share additional resources. If you would like a resource to be added to the compendium or suggest edits, please email: ccfm-ccmf@nrcan-rncan.gc.ca.



Kindergarten to Grade 3

Resource Title	Resource Type	Organization	Description of Resource	Topics Covered	Year	Jurisdiction
Forest Ecology Blocks	Other	Government of Northwest Territories, Environment and Natural Resources	Wooden blocks with painted designs of forest ecosystem components used in a pyramid structure to teach about forest ecology, sustainability, values, etc.	Cultural and social value of forests and trees, threats to forests and trees, forests and water, forest ecology	Under Development	NT
Tree Bee	Other	Forests Ontario	Tree identification tool used to engage youth in learning more about the trees and forests in their own backyards.	Forest ecology, forest biodiversity	N/A	ON
Wood Product Scavenger Hunt	Worksheets/ activities	Work Wild	A game to teach students about different wood products and everyday essential products that come from the forest industry.	Forest/wood-based industries and products, cultural and social value of forests and trees, urban forests and trees, rights to forest use and products	2020	AB
Forest in a Backpack - Presentations	Pieces of curriculum	Model Forest	Power Point presentation on Forest Ecology.	Forest ecology	2007	NL
Forest in a Backpack - Presentations	Pieces of curriculum	Model Forest	Power Point presentation on Tree Identification.	Forest ecology	2007	NL

Grades 4 to 6

Resource Title	Resource Type	Organization	Description of Resource	Topics Covered	Year	Jurisdiction
Between the Stands	Poster kit & teacher's guide	Inside Education	Poster kit focuses on forest ecosystems and contains a guide to common trees in Alberta and forest regions of Canada.	Forest ecology, forest biodiversity	2020	AB
Mountain Pine Beetle Mania	Activity book	Inside Education	Activity book discusses science and issues related to the mountain pine beetle.	Threats to forests and trees	2020	AB
My Nature Journal	Worksheets/ activities	Government of Northwest Territories, Environment and Natural Resources	Journal designed to facilitate experiential learning through nature.	Forest ecology, forest biodiversity (plants, animals, ecosystems), forests and water	2009	NT
Forest in a Backpack - Updates	Pieces of curriculum	Model Forest	Guidelines for delivering forestry related program to school students.	Forest ecology	2009	NL
Forest in a Backpack - Presentations	Pieces of curriculum	Model Forest	Power Point presentation on Forest Measurement.	Sustainable management of forests and trees	2007	NL
Forest in a Backpack - Presentations	Pieces of curriculum	Model Forest	Power Point presentation on Native Trees in NL.	Forest ecology	2007	NL
Forest in a Backpack - Presentations	Pieces of curriculum	Model Forest	Power Point presentation on NL pine marten.	Forest biodiversity (plants, animals, ecosystems)	2007	NL
Our Natural Wealth	Classroom Presentation	Government of New Brunswick	Presentation highlighting New Brunswick's abundant natural resources, their uses, and efforts taken to manage and protect those resources.	Threats to forests and trees; Forest ecology; Forest biodiversity	2019	NB

Grades 7 to 9

Resource Title	Resource Type	Organization	Description of Resource	Topics Covered	Year	Jurisdiction
A Piece of the Land	Classroom activity	Inside Education	Activity has students take on the role of a land manager and consider the needs of forest stakeholders.	Sustainable forest management	2020	AB
Educational workshops in schools	Lessons plans	Regroupement des Associations forestières régionales du Québec	The group produces various school workshops on forest and wood products.	Forest ecology, forest biodiversity (plants, animals, ecosystems), forests and climate change, contribution of forests and trees to human health and livelihoods, cultural and social value of forests and trees, sustainable forest management, forest/wood-based industries and products	2021	QC
Bridging the Gap	Educational activities, in-class and outdoor activities	Nature Manitoba	Content about natural ecosystems and Indigenous cultural values.	Forest ecology, cultural and social value of forests and trees, Indigenous forest-related knowledge	N/A	MB
Carbon in your Community Forest	Worksheet and activities	Inside Education	Activity where students go outside and measure trees to estimate the amount of carbon stored within the trees.	Forests and climate change	2020	AB
Forest Health	Presentation	Science East	40 minute presentation on forest health, insects and diseases affecting trees and their projected impacts in the Acadian Forest Region.	Threats to forests and trees	2021	NB
Forest Management	Presentation	Science East	40 minute presentation on forest management. Includes even aged and uneven aged forest management, silviculture treatments, and sustainable forest management.	Sustainable forest management	2021	NB

Forest Measurements	Presentation	Science East	Presentation about the different tools and processes used in taking forest measurements such using air photos, how to measure age, diameter and heights of trees, and how to determine density and basal area.	Sustainable forest management	2021	NB
Forestry Field Trip Tool Kit	Lesson plan and resources for field trip to a forest	Inside Education	Tool kit includes instructions to lead students through community forest areas.	Forest ecology, forest biodiversity	2020	AB
Forestry in the Classroom	Other	Forests Ontario	Matches schools and community groups with local forestry professionals to deliver engaging lessons on different forestry topics.	All topics	N/A	ON
Guide to Common Native Trees and Shrubs of Alberta	Field guide and online interactive dichotomous key	Inside Education	Provides information about the native trees and shrubs of Alberta.	Forest ecology, forest biodiversity	2020	AB
It's Our Forest Teachers Guide	Series of videos and teacher resources	Inside Education	A guide for teachers with accompanying videos about the forest ecosystem, land-use planning and forest products.	Forest ecology, recreational value of forests, forest/wood-based industries and products, contribution of forests and trees to human health and livelihoods, Sustainable forest management	N/A	AB
Junior High Classroom Resources	Website with multiple resources	Inside Education	Forestry resources for teachers to use in their classrooms.	Sustainable forest management	2021	AB
Mois de l'arbre et des forêts (only in French)	Worksheets/activities	Department of Forests, Wildlife and Parks	Each May, the Department and its partners invite organizations, schools and municipalities to organize various activities in their communities to highlight the importance of forestry resources in our daily lives, work, pastimes, or through the use of thousands of tree products.	Cultural and social value of forests and trees, forests and climate change, forest biodiversity (plants, animals, ecosystems), contribution of forests and trees to human health and livelihoods	2021	QC
National Forest Week Colouring Poster	Worksheets/activities	Canadian Institute of Forestry	Colouring sheet including images from the 2021 National Forest Week poster.	All topics	2021	CAN

National Forest Week Drawing Contest	Youth drawing contest	Canadian Institute of Forestry	Canada wide youth drawing contest for National Forest Week.	Recreational values of forests and trees, cultural and social value of forests and trees	2021	CAN
Online and Classroom Programs	Guest presentations: virtual or in-person	Inside Education	Teachers can request classroom or online presentations on various topics.	Forest ecology, forests and climate change, forest/wood-based industries and products	2020	AB
Tree Physiology and Identification	Presentation	Science East	Presentation looks at different parts and functions of trees. Explains how to use a simplified dichotomous key to identify trees of the Acadian forest.	Sustainable forest management	2021	NB
Trees & Forest Presentation	Video presentation	Inside Education	Recorded version of in-person classroom program: trees of AB, forest regions, social/enviro/ economic values of forests, and drivers of forest change.	Forest ecology, forest biodiversity	2020	AB
Trees of Manitoba: Field Guide	Field guide	Government of Manitoba	A digital version of the field guide is available for educators.	Forest ecology, forest biodiversity	N/A	MB
Trees of the Wabanaki	Presentation	N/A	40 minute presentation on trees of special significance to the Wabanaki, with examples of their traditional use. A simple dichotomous key is used to help students identify trees found in the Acadian Forest Region, which was home to the Wabanaki people.	Cultural and social value of forests and trees, Indigenous forest-relation knowledge	2021	NB
Work Wild Toolkit- Grade 6 Trees and Forests	Lesson plans	Work Wild	Toolkit is comprised of three activities. These activities will allow students to explore the ecology of Alberta's forests, compare historical and modern forest land use and understand current forest management challenges.	Forest ecology, forests and climate change, Indigenous forest-related knowledge, rights to forest use	2017	AB

Grades 10 to 12

Resource Title	Resource Type	Organization	Description of Resource	Topics Covered	Year	Jurisdiction
Le bois sous toutes ses facettes (only in French)	Worksheets/ activities	Formabois and the Regroupement des Associations forestières régionales du Québec	Workshop on understanding wood as a building material. Through experimentation, students discover the properties of wood and the physical and biological factors influencing its properties. They also explore its connection to the manufacturing of common objects such as baseball bats, guitars, skateboards, and new technologies.	Forest/wood-based industries and products, contribution of forests and trees to human health and livelihoods, forests and climate change	2020	QC
Cycles of Life in the Northern Forest	Informational brochure	Government of Northwest Territories, Environment and Natural Resources	This brochure provides information on forest management, cycles of life in the northern forest and uses of forest species for healing. It also discusses the effect of climate change on forests.	Forest ecology, forest biodiversity, forests and climate change, threats to forests and trees, contribution of forests and trees to human health and livelihoods	N/A	NT
Birch Sap Syrup Video	Video	Government of Northwest Territories	This video documents the traditional knowledge of gathering and processing birch sap syrup.	Indigenous forest-related knowledge, cultural and social value of forests and trees	N/A	NT
Camp forêt des profs (only in French)	Worksheets/ activities	Regroupement des Associations forestières régionales du Québec	An advanced training session for high school and college teachers to discover all aspects of the forest. The program includes visits to forests and factories, conferences, and workshops with passionate specialists.	Forest biodiversity (plants, animals, ecosystems), forests and climate change, cultural and social value of forests and trees, threats to forests and trees, sustainable forest management, forest/wood-based industries and products	2019	QC
"Touche du bois" careers and jobs (only in French)	Website with many resources	Formabois	Promotes career opportunities in the forest management, wood processing, nature conservation, recreation and tourism sectors. Highlights the educational institutions that offer these programs.	Cultural and social value of forests and trees, recreational value of forests and trees, forest/wood-based industries and products	2021	QC
Viens Vivre la forêt (only in French)	Website with many resources	ForêtCompétences	Events that promote forest management and wood processing trades.	Cultural and social value of forests and trees, forest/wood-based industries and products	2021	QC

Forestry Career Heads Up	Worksheets/activities	Work Wild	A game to help students learn about different forestry careers.	Forest/wood-based industries and products	2020	AB
Forestry Connects	Other	Forests Ontario	Offers students field trips to forest-dependent communities to gain a broader knowledge of Ontario's forest sector.	Forest ecology, forest biodiversity (plants, animals, ecosystems), forests and climate change, contribution of forests and trees to human health and livelihoods, sustainable forest management, forest/wood-based industries and products	N/A	ON
Forestry Heavy Equipment Simulator Loan Program	Other	Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry	A free initiative that allows Ontario teachers to loan out NDMNRF's forestry heavy equipment simulator to use with their students for several weeks at a time. This activity allows students to experience 'operating' forestry heavy equipment and consider this as a potential career pathway.	Forest/wood-based industries and products	2021	ON
Forestry Specialist High Skills Major	Other	Ontario Ministry of Education	Specialized program that allows students to focus their education on a specific economic sector (e.g., forestry) while meeting the requirements to graduate from secondary school.	Forest/wood-based industries and products	N/A	ON
Green Jobs: Exploring Forest Careers Educator's Guide	Guide	PLT Canada	Contains activities and resources that encourage students to explore green careers.	Forest/wood-based industries and products	N/A	CAN
How to Plant a Tree	Webpage	Tree Canada	Guide for students on how to plant and monitor trees.	Urban forests and trees	2019	CAN
Manitoba Envirothon	Academic competition	Manitoba Forestry Association	Annual hands-on environmental education competition for high school students. Designed to encourage team work, problem-solving skills, and public speaking skills while fostering an appreciation for current environmental issues.	Cultural and social value of forests and trees, recreational value of forests	N/A	MB

Ontario Envirothon	Academic competition	Forests Ontario	An environmentally-themed academic competition that engages students in hands-on learning and exploration of environmental education/career paths.	Forest ecology, urban forests and trees, contribution of forests and trees to human health and livelihoods	N/A	ON
Skills Ready	Other	Construction Foundation of BC	Provides training sessions and resource materials to support high school students as they prepare for jobs in the skilled trades.	Forest/wood-based industries and products	2019	BC
Tree Killers	Webpage	Tree Canada	Discusses the biggest tree killers in Canada, including insects, plants and diseases affecting trees.	Threats to forests and trees	2017	CAN
Trees of Canada	Webpage	Tree Canada	Online resource describing the unique characteristics of trees in Canada.	Urban forests and trees, forest ecology	2018	CAN
Work Wild Toolkit-CTS Forestry	Lesson plans	Work Wild	Lesson plans for group and individual activities. Students can watch videos, view infographics and explore government policy to learn how Alberta's forests are managed.	Indigenous forest-related knowledge, rights to forest use and products, contribution of forests and trees to human health and livelihoods, cultural and social value of forests and trees, sustainable forest management, forest/wood-based industries and products	2017	AB
Futures from Forests	Video series	Model Forest	Video series highlighting the forest sector in NL.	Sustainable management of forests and trees	2012	NL
Futures From Forests	Presentation	Model Forest	Educational series for the forest sector in NL.	Sustainable management of forests and trees	2015	NL
Think Forestry Career Presentation	Presentation	Adapted from CIF	Presentation on Choosing a Forestry Career.	Contribution of forests and trees to human health and livelihoods, Recreational value of forests and trees	2016	NL
Careers in Forestry	Presentation	Model Forest	Presentation on Careers in Forestry.	Sustainable management of forests and trees	2017-present	NL

Multiple Grade Levels

Resource Title	Resource Type	Organization	Description of Resource	Topics Covered	Year	Jurisdiction
Association of BC Forest Professionals (ABCFP) Educational Resources	Website with multiple resources	Association of BC Forest Professionals	ABCFP's website consists of various educational resources, including forestry articles, quizzes, lesson plans and more.	Forest conservation , forest/ wood-based industries and products, forests and climate change, Indigenous Forest-related knowledge	2020	BC
BC National Forest Week	Other	BC National Forest Week Coalition	Resources to support forest education and awareness. This includes in-person activities during national forest week.	Forest conservation , forest/ wood-based industries and products, recreational value of forests and trees	2020	BC
"A forest of possibilities" information campaign	Website with many resources	Collectif pour une forêt durable	Articles, quizzes, interesting facts and videos on forestry and wood processing, trades and training in these sectors, and job prospects.	Contribution of forests and trees to human health and livelihoods, cultural and social value of forests and trees, sustainable forest management, forest conservation, forest/ wood-based industries and products	2021	QC
Canada's Forests Teaching Kit Series	Teaching booklets	Canadian Institute of Forestry	Teaching kits to help educate youth about the value of forests, and the importance of protecting and conserving them. Includes a series of 9 volumes in English and French with links to the curriculum and lesson plans.	Forests and climate change, forest ecology, forest biodiversity (plants, animals, ecosystems), forests and water, contribution of forests and trees to human health and livelihoods, sustainable forest management, forest conservation	2000 (Under revision)	CAN
COFI Forest Education	Website with multiple resources	BC Council of Forest Industries	Online forest education program that includes a virtual classroom lesson and activity book.	Forest conservation, forest/ wood-based industries and products	2021	BC
Festival of Forestry and Resources for Teaching Forestry	Website with multiple resources	Festival of Forestry British Columbia	Offers teachers tours of the forest and a website with teaching materials and resources about forestry.	Forest conservation, sustainable forest management	2020	BC

Focus on Forests	Website with multiple resources	Forests Ontario	A free collection of lesson plans, study guides, activities, fact sheets and presentations to help teachers bring forestry to the classroom and take learning outdoors.	Forest ecology, recreational value of forests	2021	ON
Focus on Forests Combined K-12 Teachers Guide	Lesson plans	Saskatchewan Forestry Association	Guidebook for teachers with activities.	Forest ecology	2005	SK
Forest Literacy Framework: A Guide to Teaching and Learning about Forests	Other	PLT Canada	Framework offers forest concepts for Grades K-12, organized into four themes: What is a forest? Why do forests matter? How do we sustain our forests? What is our responsibility to forests?	All topics	2021	CAN
Foresthood	Lesson plans	Momenta	Program developed to introduce students to the benefits of nature.	Cultural and social value of forests and trees	2020	MB
Guest Speakers for Educators	Other	PLT Canada	Educators can reach out to the Sustainable Forestry Initiative (SFI) to arrange for a forestry professional to speak to students about sustainable forest management.	Sustainable forest management	N/A	CAN
K-12 Forest Education Collaborative	Website with multiple resources	Healthy Forests - Healthy Communities	Provides resources focused on forest education programs for K-12 students.	Forest conservation	2019	BC
Love Alberta Forests	Campaign	Alberta Forest Products Association	Campaign encouraging Albertans to talk about sustainability practices, including planting trees, forest management plans and forest research.	Cultural and social value of forests and trees, recreational value of forests and trees, forest/wood-based industries and products	2019	AB
Learning Material 2019	Other	Laurentian Forestry Centre	Collection of existing web links for teachers provided by various forest associations. These links include activities and resources available by subject/organization.	All topics	2019	CAN
National Forest Week Educational Materials	Worksheets/ activities	Canadian Institute of Forestry	Activity sheets including: bingo, crossword, forest products, this or that, tree ID and word search.	Forest ecology, forest biodiversity (plants, animals, ecosystems), forests and climate change, urban forests and trees , sustainable forest management, forest/wood-based industries and products	Under Development	CAN

National Tree Day Educational Toolkit	Toolkit	Tree Canada	Toolkit describing why trees are important.	All topics	2019	CAN
Online and Classroom Guest Presentations	Website with multiple resources	Inside Education	No-cost presentations on various natural resource related topics, including forestry.	Forest ecology	2021	AB
PLT Canada Worksheets	Website with multiple resources	PLT Canada	Downloadable and printable worksheets and activities to connect students to the outdoors.	Forest ecology, recreational value of forests and trees, forest biodiversity	N/A	CAN
Resource Finder	Search tool	PLT Canada	An online resource finder with a search tool for SFI-PLT produced forest educational resources.	All topics	2021	CAN
Saskatchewan Forestry Association Classroom Resources	Website with multiple resources	Saskatchewan Forestry Association	Website containing a collection of lesson plans for K-12 and several activities for kids.	Forest ecology, forest biodiversity, forest/wood-based industries and products	2000's to present	SK
Tree Canada Educational Toolkit	Worksheets/ activities	Tree Canada	Booklet providing a selection of tree-related activities and learning ideas for ages 5 to 7, 8 to 10, and 11 to 16.	Forest biodiversity (plants, animals, ecosystems), forests and climate change, urban forests and trees	Under development	CAN
Trees Species of the NWT	Webpage	Government of Northwest Territories	PDFs for each of the tree species found in the NWT with descriptions and photographs.	Forest ecology	N/A	NT
Virtual Forest Tour	Interactive video	Alberta Forest Products Association	Interactive virtual tour of a forest describing the importance of forests and the sustainable forest sector.	All topics	2020	AB
Wild & Wacky Plants of the NWT	Other	North West Territories Arts	Botanical reference booklet of 35 plant and tree species of the NWT.	Cultural and social value of forests and trees	2010	NT
Work Wild	Website with multiple resources	Work Wild	A campaign to educate youth about forestry careers and the benefits of working in the forest industry.	Forest/wood-based industries and products	2021	AB

Ready to go lesson plans and online programing	Website with multiple resources	Lesser Slave Forest Education Society	Lesson plans for educators regarding forests and environmental education. Information on virtual field trips is also available.	Forest ecology, forest biodiversity	2021	AB
Forestry Tool Box	Other	Model Forest	Forest related topics for elementary/secondary school students.	Forest ecology	2012	NL