

2025 SUMMARY REPORT

Biodiversity in the Boreal Summer Institute

Teacher Professional Development Program



JULY 2-6, 2025

Edmonton - Lac La Biche - Fort McMurray

An experiential learning event for educators to gain first-hand information about the innovations and technologies used to monitor and manage the unique landscapes and species-at-risk in the boreal region.





INTRODUCTION

The *Biodiversity in the Boreal Summer Institute* was a *five-day immersive experience* that gave teachers the opportunity to explore the interactions between natural resource industries, land management and boreal forest ecosystems. Over the course of the program, participants heard from a wide range of experts including representatives from government, researchers, non-profits, and industry, and learned from a diversity of perspectives about the opportunities and challenges of managing boreal ecosystems for sustainability, biodiversity, and human use.

Highlights of the program included tours of two different oil sands operations, open pit mining with Canadian Natural and a SAGD operation with Cenovus; learning about trapping as wildlife management at the 50th Annual Trappers Rendezvous; and a guided tour of Elk Island National Park that focused on landscape impacts of bison and managing species-at-risk.

Inside Education is proud to report on the outcomes of the 2025 Summer Institute and the ways in which networking with like-minded educators, listening to subject matter experts, and touring industry sites impacted the 29 participating teachers on this program and the ways that it will enhance wildlife and natural resource education in their classrooms.

THE PROGRAM

Through this dynamic program, 29 educators:

CONNECTED with forestry, wildlife, energy, and climate change topics through a unique program with a hands-on, experiential and inquiry-based learning model.

PARTICIPATED in meaningful conversations with a variety of stakeholders, experts, and educators who hold multiple perspectives.

CREATED lasting networks with passionate educators from across Canada.

ENHANCED their lessons with current, accurate and meaningful content related to sustainability topics affecting the boreal region that will engage students of all ages.

PROGRAM TOPICS & THEMES

- Reclamation Strategies in Forestry and Oil and Gas
- Wildlife Conservation
- Trapping and Wildlife Management
- Project-based Learning and Environmental Education Strategies

Wednesday, July 2

Introductions & Program Kickoff

Forestry Site Visit - Alberta Pacific Forest Products

Thursday, July 3

Oil Sands Mine Tour - Albion Sands, Canadian Natural

Environmental Monitoring Workshops - Athabasca Watershed Council and Owl Moon Environmental

Friday, July 4

SAGD Site Tour - Christina Lake, Cenovus

Environmental Education Workshop - Alberta Parks

Saturday, July 5

Project Learning Tree Workshop - Inside Education

Lac La Biche Museum Tour - Lac La Biche Museum

Trappers Rendezvous - Alberta Trappers Association

Sunday, July 6

Guided Interpretive Hike - Elk Island National Park, Parks Canada

Classroom Connections Workshop

Program Wrap-Up



THE PARTICIPANTS

The **2025 Summer Institute** attracted applications from all across Canada, from which Inside Education invited 29 engaged educators from Alberta, along with three teachers from outside the province - two from Newfoundland and one from Manitoba. The invited teachers came from a wide range of backgrounds and teaching experiences.

One goal of Inside Education's professional development programming is to provide an opportunity for like-minded educators to network and share their ideas to incorporate experiential natural resource education into their classrooms. In the post-program survey, participants are asked about the value of the PD as a networking opportunity, and **100% of the surveyed respondents agreed that the PD was a good networking opportunity.**

Giuliana Anderson | Old Elm Colony School, Spring Coulee
 Christine Avey | Westmount Charter School, Calgary
 Nicole Bly | Old Elm Colony School, Spring Coulee
 Daniel Coffey | Thelma Chalifoux School, Edmonton
 Lisa Corbett | Rundle College Jr/ Sr High School, Calgary
 Jared Elenko | Chestermere High School, Chestermere
 Jenna Forslund | River East Collegiate, Winnipeg MB
 Breanna Gadzosa | River Valley School, Calgary
 Trevor Goodman | Almadina Language Charter Academy, Calgary
 Brian Ha | York School, Edmonton
 Ann Hu | Brentwood School, Calgary
 Douglas Li | Calgary Board of Education, Calgary
 Brittany Madden | Ralph McCall School, Airdrie
 Ashley Marshall | Graminia School, Spruce Grove
 Josh McCrea | Duggan School, Edmonton
 Kerry McCutcheon | St. Mary's University, Calgary
 Tania Nichiporik | École Lendrum School, Edmonton
 Rachelia Pawluk | M.E LaZerte High School, Edmonton
 Michelle Rogers | Steinhauer School, Edmonton
 Nicole Rousseau | St. Augustine Catholic School, Ponoka
 Julie Shea | Graminia School, Spruce Grove
 Susie Sirman | Lumen Christi Catholic Education Centre, Edmonton
 Jonathan Sirman | Austin O'Brien High School, Edmonton
 Allison Somers | Clarenville High School, Clarenville NL
 Michael Spurrell | Clarenville High School, Clarenville NL
 Billie Tobin | Holy Redeemer Jr/ Sr High School, Edson
 Jessica Torres | Father Doucet Catholic School, Calgary
 Samantha Ur | Four Winds Public School, Morinville
 Jessica Vargas | Canyon Meadows School, Calgary



“I learned more in this PD, getting to explore nature, than I ever could sitting down in a conference or online course. It was the most inspirational PD I've attended in over a decade!”

- Trevor Goodman, Almadina Language Charter Academy



BIODIVERSITY IN THE BOREAL

This professional development tour explored how industry stakeholders work to protect and preserve the biodiversity of Alberta's boreal forest so that the health and productivity of forests can be sustained for generations to come. Over the course of the five-day tour, participants explore the relationship between biodiversity and the many industries that are active in the boreal ecoregion.

Boreal Diversity and...

ENERGY

Tour stops with [Canadian Natural](#) and [Cenovus](#) gave participants a firsthand look at the reclamation process at both an open pit oil sands mine and a SAGD facility. Reclamation specialists at each site shared details of the reclamation process, and these tours were complemented by a presentation by a wildlife biologist with [Owl Moon Environmental](#) who shared her experiences with monitoring wildlife population and how they are impacted by oil and gas extraction on active areas and reclaimed sites.

Site specialists at Canadian Natural and Cenovus highlighted that the goal of reclamation was to match the biodiversity of what was previously there before the area was disturbed, and shared the strategies used to achieve that goal.

FORESTRY AND LAND MANAGEMENT

Forestry experts from [Alberta Pacific Forest Products](#) shared how the forestry industry mimics the natural fire cycle of the boreal forest when harvesting timber, and participants were taken to a site that had been previously harvested to demonstrate how a forest is managed post-disturbance. By mirroring the behaviour of natural forests, the biodiversity is better preserved compared to other harvesting methods. Speakers from the [Alberta Trappers Association](#) gave insight on wildlife management and the ways in which trapping can be used as a strategy for maintaining biodiversity and the natural balance of the ecosystem.

WILDLIFE AND RECREATION

Interpreters at the [Lac La Biche Museum](#) shared insights into the natural history of the boreal forest and the local fur trade, which offered a more in-depth look at the boreal forest ecosystems and the local history of the Lac La Biche area.

Participants joined [Parks Canada](#) for a guided hike to learn about the work being done by scientists at [Elk Island National Park](#). The park interpreter highlighted the ongoing projects that aim to protect and preserve vital wildlife habitats and species at risk, such as the Plains and Wood Bison populations. This tour showed the conservation strategies used to ensure wildlife has the space and resources they need to thrive, while minimizing human-wildlife conflicts and allowing space for recreation in Alberta's forests.

TOOLS FOR THE CLASSROOM

Program participants were given opportunities to explore how they can bring biodiversity topics into their classroom through various workshops over the course of the program. The [Project Learning Tree \(PLT\)](#) Workshop shared PLT's K-8 Activity Guide, which is a resource that aims to help teachers bring forest education into their classrooms. [Inside Education](#) facilitators shared how to use the resource and demonstrated several activities featured in the book.

[Athabasca Watershed Council](#) led a workshop that demonstrated activities that can be used to test water quality and assess how actions on the landscape impact aquatic biodiversity. [Alberta Parks](#) highlighted a variety of activities from their environmental education programs which help to inspire teachers and give them new ideas on how they can incorporate outdoor education into their lessons.

EXPERT GUESTS AND TOUR HOSTS

A special thanks to the fantastic expert speakers and tour hosts, and their commitment to advancing sustainability practices and education of the public in the boreal region!



Courtney Miller | Alberta Pacific Forest Products
Remi L'Heureux | Alberta Pacific Forest Products
Ainslie Campbell | Canadian Natural
Petra Rowell | Athabasca Watershed Council
Sarah Shortt | Athabasca Watershed Council
Chris Godwin | Owl Moon Environmental
Reg Curren | Cenovus
Jaclyn Denman | Alberta Parks
Jennifer Mueller | Lac La Biche Museum
Tara Jacklin | Lac La Biche Museum
Ross Hinter | Alberta Trappers Association
Perry Kulmatyski | Alberta Trappers Association
Tristan Drozdiak | Parks Canada

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“This PD means lots to me as a new teacher. To have experience with Alberta oil sands and forestry and biodiversity allowed me to see Alberta in an alternative way and allow me to be confident teaching in the future.”

- Douglas Li, Calgary Board of Education

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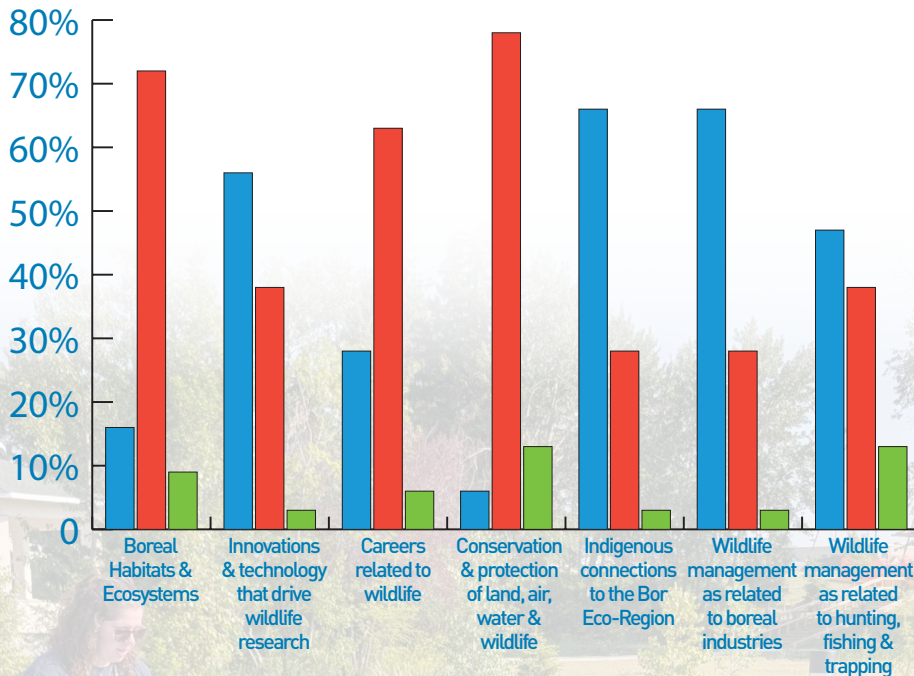
PROGRAM IMPACT AND FEEDBACK

Inside Education is proud of the many success of the Biodiversity in the Boreal Summer Institute, and overall the feedback received during the program was overwhelmingly positive. Applicants were asked to complete a survey both before and after the program, indicating their level of understanding of various themes related to the program topic. As demonstrated in the graphs below, understanding of each individual program theme drastically increased from when teachers were surveyed before the program to after the program concluded.

Participants were asked to rate their understanding of the following major themes that relate to wildlife in Alberta.

■ I don't know much about this
 ■ I understand the basics
 ■ I have a strong understanding

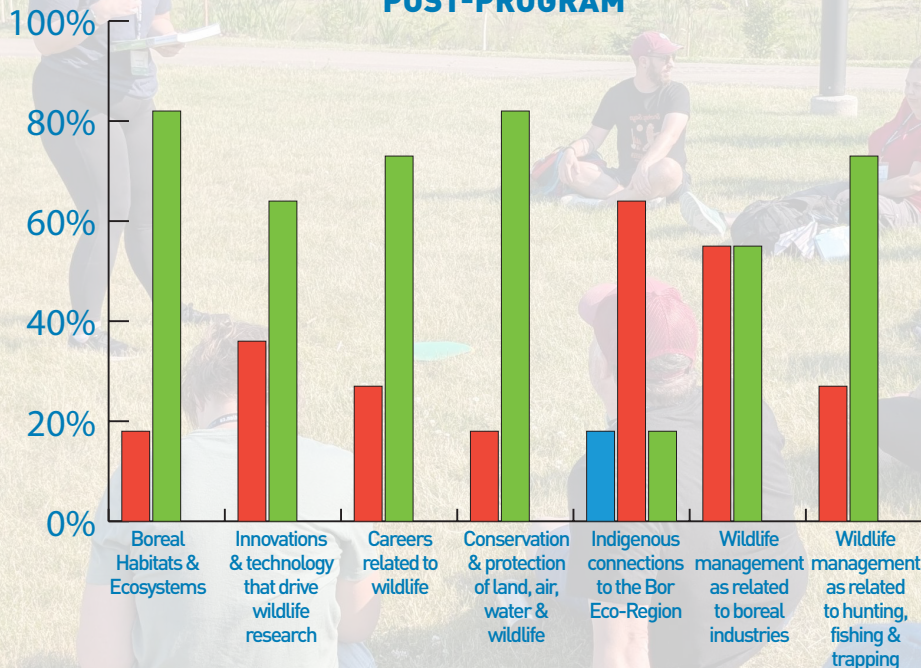
PRE-PROGRAM



“The ability to see it in person makes all the difference. The opportunity to connect with other educators from other areas of Alberta and Canada is also such a huge asset.”

- Nikki Bly, Old Elm Colony School

POST-PROGRAM



“Love the diversity of each tour/speaker. Receiving different perspectives on topics relating to biodiversity was very eye opening.”

- Allison Somers, Clarenville High School, Clarenville NL

SUMMARY AND FUTURES

Inside Education is thrilled with the outcomes of the Biodiversity in the Boreal Summer Institute and the positive feedback we received from participants both during the program and in the post-program survey. Forest and wildlife education continues to be an important pillar in Inside Education's suite of programs, and the feedback from this program indicates that high-quality, accessible and locally-relevant PD is in high demand for teachers in Alberta and beyond.

With programs like **Women in Outdoor Careers**, **Alberta Boreal Careers**, and **Regenerate** all scheduled for the 2025-2026 school year, and the return of no-cost forest field programming at seven forest field sites across the province, we look forward to continuing to support students and teachers in forest and wildlife education and providing high-quality opportunities that enhance and enrich classrooms all across the province.



THANK YOU TO OUR FUNDERS

We extend our sincere thanks to our program funders for their generous support of the 2025 Biodiversity in the Boreal Summer Institute Program. The ability to provide teachers from across the country with full scholarships to attend our programs is critical in allowing us to deliver financially accessible natural resource education.



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This program toured through regions inhabited by the First Peoples of Treaty 6 and Treaty 8 and the Métis people of the North Saskatchewan River Territory and the Lower Athabasca River Territory since time immemorial. In the spirit of reconciliation and reciprocity, Inside Education respectfully acknowledges all Indigenous Peoples whose deep respect for the environment forms the foundation of our personal responsibility for the stewardship of our environment and natural resources, a connection we strive to foster through all of our programs.