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Engaging Aboriginal Youth in Forestry

Sharing Our Experiences



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Introduction

Aboriginal youth are one of the fastest growing demographics in Canada and are poised to become a major factor in the success of Canada's natural resource economy. Many sectors are facing increasing retirement rates among their current labour base, including forestry. A 2011 study by the Forest Products Sector Council has identified a major labour shortfall in most forest industry occupations in Canada over the next two decades. This presents a great opportunity for Aboriginal youth across the country to enter careers in forestry at all skill levels.

Forestry has long been a central part of Canada's economic and environmental well-being. Emerging technologies, systems and uses of forest products, ranging from the production of clean energy to materials for eco-friendly housing, now make forestry an exciting field in which to work. A 2010 Canadian Forest Service fact sheet entitled *Aboriginal Communities and Forestry* notes that self-government agreements and treaty settlements have transferred control and management responsibilities to First Nations for almost 1.8 million hectares of land across Canada, most of which is forested land, indicating a rising demand for Aboriginal foresters in particular. Canada's forest communities are due to receive considerable benefits when Aboriginal youth explore forestry-related careers.

This publication showcases successful examples of how industry, governments, educators and communities are working together to help

position and mentor Aboriginal youth for careers in all aspects of forestry. These areas include community forest management, provincial or territorial forest tenure management, operational services and forest product commerce. Education is delivered via such modes as skills development, exploration, certification and school-to-work transitions. Emerging trends such as non-timber forest products and eco-tourism are identified to modernize Aboriginal youth's exposure to the evolving sector.

The success stories showcased in this publication are organized by age group, with the youngest participants being elementary age (6–12 years old). This organizational scheme shows how education can be tailored for age groups. The scheme also brings to light the need for continuous exposure to career options throughout a youth's life. The featured projects were deemed successful based on such criteria as job creation/transitions, program longevity, number of partnerships, viability of field application, and sector relevance. While some of these success stories are government-funded projects, most of them were run by schools, communities and associations.

This report demonstrates the realm of opportunities available to youth and the steps being taken to better integrate Aboriginal groups into the future forestry sector. We hope you find the publication a useful reference. We welcome your input as part of an ongoing discussion on engaging Aboriginal youth in forestry.



Chapter 1

The early years: Elementary school (ages 6–12)



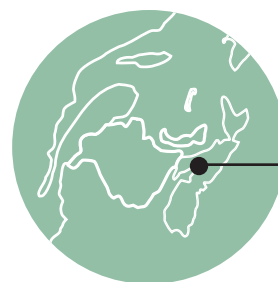
Survive & Stay Alive program, Nova Scotia

Survive & Stay Alive camps for First Nations junior students spark change in province's public schools

When the Confederacy of Mainland Mi'kmaq in Nova Scotia (CMM) decided to find ways to get young children more interested in their cultural heritage and traditional knowledge, the Survive & Stay Alive program seemed an ideal fit. Developed by HELP Group Management Inc. in New Brunswick, the program consists of a week-long day camp for children between 6 and 12 years old and focuses on five basic elements of survival: food, fire, water, shelter and first aid.

"We liked what we saw," says Alton Hudson, Manager of Natural Resources for CMM. "It was aimed at the right age group, and it used songs, games, projects and competitions to get the kids excited. It also provided simple survival lessons organized around topics that fit well with traditional knowledge. It was easy for us to build on that foundation and tailor the program for Mi'kmaq children."

The choice turned out to be a good one. The program was pilot tested at the Millbrook First Nation in summer 2006, with 15 to 20 youngsters



Confederacy of Mainland Mi'kmaq

participating. The program was so popular, with children and parents, that CMM was soon receiving requests to run the program in communities throughout the region.

So, in summer 2007, CMM worked with its members to offer Survive & Stay Alive in four First Nations: Saint Mary's and Eel Ground in New Brunswick, and Millbrook and Indian Brook in Nova Scotia. The communities made in-kind contributions, including space for the camps, buses and meals, while Natural Resources Canada's Canadian Forest Service provided financial assistance.

"We were able to introduce more Mi'kmaq content, even in small things such as team names," says Hudson. "The first year, the kids chose teams names like 'Lions' and 'Tigers.' In the second year, we encouraged them to pick Mi'kmaq team names."

The camps were well received in the communities and well attended, with each camp hosting about 15 children. "We found that the children were definitely more interested in the forest and traditional knowledge as a result of the program," Hudson adds. "I think they're more likely to consider careers in natural resources or the sciences."

Survive & Stay Alive was popular, but delivering the program throughout the region required more time and resources than CMM could afford. In 2008, it was offered only in Millbrook and Paq'tnkek First Nations in Nova Scotia.



The program continued to evolve, however. "We focused more on the traditional belief that all living things possess a spirit. **We also started using Mi'kmaq names to identify trees, plants and animals, and added traditional crafts.** It became much more of a Mi'kmaq camp," says Hudson.

The Survive & Stay Alive camps were discontinued after 2008 but the content lived up to the name of the program: it survived. The Nova Scotia Department of Education has adapted the program and introduced it into the public school system as a Mi'kmaq culture and history module that promotes cross-cultural understanding.

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Project highlights

Aspects of forestry taught	Traditional ecological knowledge, survival skills
Methods used	Songs, games, projects, competitions, outdoor-learning camp
Age(s)	6–12
Activity duration	One week
Communities involved	Four (2007), two (2008)
Partners	Natural Resources Canada's Canadian Forest Service, four First Nation communities
Youth participants	Approx. 60 children (2007)
Legacy	The camps ended in 2008, but the Nova Scotia Department of Education has adapted the Survive & Stay Alive curriculum as a Mi'kmaq culture and history module that promotes cross-cultural understanding.



Focus on Forests – Aboriginal Education Initiative Online, Saskatchewan

Online curriculum helps bring focus to traditional teaching methods

The educational information available about Saskatchewan’s natural resources is as plentiful as the resources themselves. But it can only be of value if teachers and students can access the information and put it to good use. This is what the Saskatchewan Forestry Association (SFA) had in mind when it launched the Focus on Forests – Aboriginal Education Initiative Online.

The SFA has long been developing educational resources about Saskatchewan’s forests. But most teachers acquired the materials at conventions, which were not always accessible to teachers from First Nations. “There was a gap in getting the resources out to teachers at band schools,” says Bernadette Slager, SFA Education Coordinator. “We decided to create some Focus on Forests’ First Nations lessons and put them online so that any teacher in the province could access them.”



Saskatchewan Forestry Association

To create the lessons, the SFA worked in partnership with the Prince Albert Model Forest, with additional support from the First Nations Forestry Program, the Northern Lights School Division No. 113 and the Federation of Saskatchewan Indian Nations. The SFA created nine online lessons – three each for elementary, middle and high schools. The lessons combine modern forestry practices with historical and cultural knowledge and feature traditional educational methods, such as storytelling and talking-stick and circle teaching.

“Students of First Nation descent feel more comfortable being taught in a way they can relate to,” says Slager. She points out that storytelling is a particularly effective means of reaching these students because it connects with their way of life and offers a continuance of what they see at home and in their communities.

During the project’s pilot phase, Slager travelled to Ahtahkakoop First Nation to teach one of the lessons to a Grade 9 science class. **“Some of the students said that it was the first science class they had enjoyed,”** she says. “They related to the story and could see the link to the issues that it brought up.”

All the lessons are available through the SFA Web site at www.whitebirch.ca. They were also put onto CD and distributed to every band in Saskatchewan to ensure that First Nation teachers were aware of the new Focus on Forests curriculum.

Now in its second year, the program has been effective across the province, generating positive feedback from schools in all the bands. Given the warm reception Focus on Forests has received, Slager hopes that the SFA will be able to secure enough funding to continue developing lessons that incorporate traditional teaching styles. “The demand is clearly there; now, all the program needs is enough support to keep Saskatchewan’s First Nation youth thinking forestry,” she says.

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Project highlights

Aspects of forestry taught	Forestry practices with historical and cultural knowledge, traditional ecological knowledge
Methods used	Nine online lessons, three each for elementary, middle and high school students
Age(s)	6–18 (grades 1–12)
Communities involved	Several in Saskatchewan
Partners	Prince Albert Model Forest, Natural Resources Canada’s Canadian Forest Service, Northern Lights School Division No. 113, the Federation of Saskatchewan Indian Nations
Legacy	The curriculum became available online in 2010.





Chapter 2

Learning by doing: Junior high school (ages 13–15)



Envirothon, Newfoundland and Labrador

High school Envirothon program is a winner for youth and their community

Over the past three years, young people from Newfoundland's Miawpukek First Nation have been pitting their environmental knowledge and skills against those of students throughout the region and across the continent in North America's largest high school environmental education competition: Envirothon Canada.

The Envirothon program promotes environmental education based on teamwork, collaboration and competition, through a combination of in-class curriculum and hands-on field experience. During Envirothon competitions, teams of five students are tested on their knowledge of aquatic ecology, forests, soils, wildlife and a fifth topic that changes annually. They are also given an environmental problem for which they must develop and present a solution.

Winning teams from local competitions go on to regional and national events, and the Canadian winners get to compete against other youth from North America. The program reaches more than 500 000 students in grades 9 through 12.



Miawpukek
First Nation

Greg Jeddore is Forestry Manager for the Miawpukek First Nation in Conne River and is also in charge of youth programs. Three years ago, staff at the Model Forest of Newfoundland & Labrador approached him to build an Envirothon team at the local school. The school board was persuaded that Envirothon would help students learn scientific and traditional knowledge, develop life skills and have the chance to interact with youth from across the province.

Since then, the program has taken off. St. Anne's School on the Miawpukek reserve now boasts 2 of Newfoundland and Labrador's 10 teams and is entering its third year in competition. Miawpukek raises funds and makes in-kind contributions, local teachers and community members volunteer as coaches and chaperones, and Natural Resources Canada's Canadian Forest Service provides funding to help cover transportation costs.

Whether the Miawpukek First Nation teams triumph or not, Jeddore believes the participants are all winners. "Participants can win scholarships, but to me the most important thing is that the program is opening their eyes," he says. **"Kids look at forestry and see trees. Our goal is to get them to see that natural resources include more than just trees and fish. And it's working: Some the students are already considering careers in biology and forestry."**

The program also teaches important teamwork and leadership skills – Jeddore notes that the Miawpukek teams have remained intact, becoming more experienced and bonded every year.

"These youth are developing their life skills, and they're learning about Western science and traditional knowledge and how they compare," he says. **"As Aboriginal people, we try to protect the land. These young people, who are learning to bring science and traditional knowledge together, may find new ways to steer us into the future. They could become tomorrow's leaders."**

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Project highlights

Aspects of forestry taught	Environmental education, scientific and traditional knowledge, life skills
Methods used	Teamwork, competition, in-class curriculum, hands-on field experience, problem solving
Age(s)	14–18 (grades 9–12)
Activity duration	Since 2008
Communities involved	One community, two reserves
Partners	Natural Resources Canada's Canadian Forest Service, local teachers, community members
Youth participants	10 (two teams of five students each)
Legacy	Participants can win scholarships. Participants are considering careers in biology and forestry. Miawpukek continued to participate in the Envirothon as of 2011.

Youth Outreach Camp, Newfoundland and Labrador

Week-long camps introduce young people to science and traditional knowledge

The youth in the Miawpukek First Nation are learning traditional Mi'kmaq knowledge from elders through a series of day trips and week-long camps organized by the community to help preserve its language, history and spirituality.

This year, about 10 boys and girls participated in a youth outreach program. Guides from the community took them on day-long walking tours, showing them landmarks and talking about traditional skills as they followed the Gander River to a traditional gathering place. The youth learned how their ancestors travelled around and lived off the land, what plants and animals they used, and how beaver live and how to trap them. Another 30 youngsters, all boys, attended a week-long traditional ecological knowledge and science camp. The boys learned teamwork and survival skills and were shown how to make snowshoes, build campfires and track animals. They were also introduced to edible



Miawpukek First Nation

and medicinal plants, and the Chief taught them about sweat lodges and Mi'kmaq history. As well, they performed chores to help keep the camp running smoothly.

The youth outreach and the traditional ecological knowledge and science programs are open to boys and girls in grades 8 and 9. "The goal is to help the kids understand who they are and where they came from," says Greg Jeddore, Miawpukek's Forestry Manager, who organized and participated in the activities. "We want them to learn traditional survival skills and to think about working in natural resources or the sciences.

"I take the kids out and show them maps and compasses, the traditional guide teaches them about how to trap and hunt animals, and the Chief comes in and talks about traditional knowledge. So they have the chance to learn traditional and modern skills at the same time."

Jeddore was particularly pleased with the interaction between the children and elders. "Many of the kids didn't know any elders and weren't aware of the knowledge and experience they have," he says. "We asked them to come up with questions, and they were really blown away by the answers they got and the stories they heard. When I spoke to the elders later, I found they were just as excited as the kids. Several of them asked me to be sure to come and get them for the next event."

Jeddore has high hopes for the programs' impact on the community. "A lot of kids spend hours on their computers, and this is a chance to get them out to learn about the environment," he says. "It will help them become young men and women with knowledge of their culture and respect for themselves. I hope they will gain a respect for both traditional and up-to-date knowledge and will pass that respect on to another generation." The program was supported by the Model Forest of Newfoundland & Labrador, Fisheries and Oceans Canada, Newfoundland and Labrador's Department of Environment and Conservation's Wildlife Division, Natural Resources Canada's Canadian Forest Service, and St. John Ambulance Canada.

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Project highlights

Aspects of forestry taught	Traditional ecological knowledge, plant use, science, survival skills, orienteering
Methods used	Series of day trips, week-long camp, walking tours, teamwork
Age(s)	13–14 (grades 8–9)
Activity duration	One week
Communities involved	One
Partners	Model Forest of Newfoundland & Labrador, Fisheries and Oceans Canada, Newfoundland and Labrador's Department of Environment and Conservation's Wildlife Division, Natural Resources Canada's Canadian Forest Service, St. John Ambulance Canada
Youth participants	10 boys and girls participated in the youth outreach program; 30 boys attended the traditional ecological knowledge and science camp
Legacy	Participants learned the value of both traditional ecological knowledge and science.



Chapter 3

Determining a career path: Middle to senior high school (ages 16–18)



School To Work Program, Saskatchewan

School To Work Program provides career options for Saskatchewan youth

For more than a decade, the Meadow Lake Tribal Council (MLTC) School To Work Program has provided forestry training and employment for dozens of Saskatchewan First Nations youth. Each year, up to 15 high school students are selected to spend six weeks on a summer work placement, learning valuable lessons about the forestry industry. The participants come from each of MLTC's nine First Nations.

"The purpose is to expose them to the different types of forestry careers," says Gordon Iron, Director of Programs and Services for MLTC. "We want them to have a better understanding of what the industry entails."

The community has good reason for wanting to prepare its youth for careers in forestry. MLTC is the sole owner of NorSask Forest Products Inc., the largest First Nations forest products company in Saskatchewan. By running the School To Work Program, MLTC is not only enabling local youth to find short- and long-term employment but also ensuring that the NorSask sawmill will continue to acquire skilled, qualified workers.



Meadow Lake Tribal Council

As Iron explains, the School To Work Program was initially developed in partnership with Mistik Management Ltd., a local woodlands company of which NorSask and the local pulp mill own 50 percent. But with the downturn in forestry, the program has expanded to include a range of industry partners. School To Work has also received support from Natural Resources Canada's Canadian Forest Service and Aboriginal Affairs and Northern Development Canada. Iron feels particularly indebted to the two departments' First Nations Forestry Program (FNFP). "The FNFP has been involved pretty much from the beginning," he says. "It's been really supportive over the years."

One of the key factors in the program's success has been a concerted effort to recruit the right people. Selecting participants requires more than simply finding a mix of 15 male and female high school students. As Iron sees it, MLTC ensures that all participants understand the significance of the opportunity being offered to them and show up ready to work hard.

"You have to spend time on recruitment, because at the end of the day, you're trying to get the participants interested in a career," says Iron. "We've had to remove students because they weren't following instruction. We're teaching them how to work, teaching them employment skills that they'll carry over if they get full-time work."

MLTC's recruitment efforts have definitely been paying off. Because of the Council's high standards, the School To Work Program has continued to be an integral part of the community, generating a solid workforce and contributing to the success of the NorSask sawmill.

"If the School To Work Program wasn't in place, there would be 15 students a year who aren't getting that exposure to forestry careers," says Iron. "We're getting them good exposure. We're helping them expand their horizons."

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Project highlights	
Aspects of forestry taught	Forestry industry career possibilities, employment skills
Method used	Summer work placement
Age(s)	16–18 (grades 9–12)
Activity duration	Six weeks
Communities involved	Nine
Partners	Natural Resources Canada's Canadian Forest Service, Aboriginal Affairs and Northern Development Canada, NorSask Forest Products Inc., Mistik Management Ltd.
Youth participants	Approx. 15 per year
Legacy	Possibility of short- and long-term employment at NorSask sawmill



Youth Environmental Leadership Forum, Ontario

Environmental forum aims to lead youth along better career paths

Since 2002, Mamaweswen, The North Shore Tribal Council (NSTC), has been offering a Youth Environmental Leadership Forum (YELF). This forum exposes First Nations high school students to career possibilities in the forest and environmental sectors and creates an awareness of their role as stewards of the land. Every year, 28 young men and women from each of the NSTC's seven First Nations are invited to spend one week taking part in training workshops that combine industry practices with traditional ecological knowledge passed down by elders. Focusing on the themes of land, air and water, the forum helps guide First Nations youth in making post-secondary school and career choices.

Over the years, dozens of NSTC members have benefited from the program. Marnie Yourchuk, NSTC Education Program Manager, proudly recalls Michael G. Wabegijig, a two-time YELF participant currently studying Environmental Sciences at the University of Guelph. Wabegijig recently wrote Yourchuk a letter of support in



Mamaweswen,
The North Shore
Tribal Council

which he praised the program's ability to make education fun and credited it for his decision to pursue environmental studies.

Many students like Wabegijig were inspired and enlightened by YELF. Based partly on their recommendation, the NSTC developed an additional eight-week program in 2007 that offered even more opportunities to explore environmental studies. "We called it the Natural Resource Leadership Program," says Yourchuk. "We had youth working, we had them actually learning and then applying their knowledge in the field."

Yourchuk says the Leadership Program was by the far the most successful aspect to evolve from the youth forums. Her sights are set on helping the NSTC secure steady funding to ensure that the eight-week program can run again – this time, with a teacher and high school accreditation attached. She is optimistic about the potential to attract additional support. In 2010 alone, YELF sponsors included the Grand River Conservation Authority, Guelph Lake Nature Centre, Ontario Ministry of the Environment, Ontario First Nations Technical Services Corporation, and Trent University's Environmental and Resource Studies program.

In the meantime, Yourchuk and the Council are taking measures to make YELF as effective as possible in reaching First Nations youth. For one thing, the NSTC plans to start targeting youth before they enter high school. "We're going to hold the Forum for grades 6 through 8, so the age group will be much lower," says Yourchuk. "That way, when they go into high school, we'll have already piqued their curiosity, and they can start following it up by taking the courses they require to move into the sciences or the environmental field."

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Project highlights

Aspects of forestry taught	Traditional ecological knowledge, industry practices
Methods used	Forum, training workshops, post-secondary preparation, career selection
Age(s)	14–18 (grades 9–12)
Activity duration	One week
Communities involved	Seven
Partners	Grand River Conservation Authority, Guelph Lake Nature Centre, Ontario Ministry of the Environment, Ontario First Nations Technical Services Corporation, Trent University's Environmental and Resource Studies program
Youth participants	28
Legacy	Participants have gone on to environmental careers and post-secondary education.



Junior Forest Ranger programs, Saskatchewan

Youth learn forestry skills in popular summer programs tailored to local needs

Junior Forest Ranger programs are springing up in First Nations communities across Canada. They are particularly popular in Saskatchewan, and several programs have been launched recently in the Atlantic region. The program gives youth the opportunity to gain new life skills and explore career opportunities in the natural resources field.

In Saskatchewan, the program started with a pilot project at the Sturgeon Lake First Nation in 2006. Since then, it has been hosted by the Hatchet Lake Denesuline, Beardy's and Okemasis, and Yellow Quill First Nations and by First Nation communities in Stanley Mission, Pelican Narrows, La Ronge and Prince Albert. The Eastern Sector, a group of First Nation communities that includes Cumberland House, Red Earth and Shoal Lake First Nations, has also hosted the program.

The Saskatchewan Junior Forest Ranger program helps young people develop career skills in forestry, fire management, health and safety,



Prince Albert Model Forest

and natural resource management. Participants learn leadership skills and gain respect for natural resources by doing useful conservation work.

The program is open to high school students in grades 10 through 12, generally youth between 16 and 18 years old. The junior rangers spend six weeks in their home communities or at training camps during the summer. They have the opportunity to earn certificates in a range of skills, including first aid / CPR, the Workplace Hazardous Materials Information System (WHMIS), the transportation of dangerous goods, Level 1 wildland firefighting training, all-terrain vehicle (ATV) safety, compass and Global Positioning System (GPS) use, map-reading, plant and wildlife identification, outdoor survival, firearm safety, and public speaking.

"Communities tailor the program to their own needs, picking the certificates they want their students to gain," explains Mika Carriere, Projects Officer at the Prince Albert Model Forest and Provincial Coordinator of the Saskatchewan Junior Forest Ranger program. "The content started off mainly as skills development training, but it evolves from year to year. Today, most communities give more attention to cultural awareness and traditional ecological knowledge."

The rangers earn certificates throughout the six-week program. Every two weeks, they are presented with challenges. "These challenges may involve visiting elders and collecting stories about traditional knowledge or history; collecting non-timber forest products, such as mushrooms and berries; or some other project that makes them think about the economic value of the forest," says Carriere. "The rangers present the results of the challenges at graduation."

Graduation is a grand affair. The Prince Albert Grand Council hosts the event for rangers from across the province. Family members, friends and community leaders attend the ceremony and view the activities. "Tons of family members come out," says Carriere. "We've had times when our gym was just packed. Family support at the graduation strengthens the program and shows that it's important to carry it on into the future."

The 2010 graduation event included a ranger relay in which teams of five competed against each other. The teams were asked to put their training to work by identifying objects, such as pelts, skulls or medicinal plants; by passing physical tests, such as rolling up a firefighting hose in record time; and by delivering an oral presentation about their programs. The 95 graduating rangers showed commitment and confidence at the graduation, and each of them received a certificate of completion.

"The communities strongly support the program," says Carriere. "Chiefs and councils promote it and work toward securing funding for it. They're also great at getting local people involved. They may find a local health clinic that can teach first aid, for example, or a local teacher who can teach firearm safety. When you have project leaders like that, who can create community connections and use local resources to train the next generation of natural resource professionals, it really strengthens the program and helps the community build a better future."

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Project highlights

Aspects of forestry taught	Fire management, health and safety, natural resource management, leadership skills, conservation, first aid / CPR, WHMIS, transportation of dangerous goods, Level 1 wildland firefighting training, ATV safety, compass and GPS use, map-reading, plant and wildlife identification, outdoor survival, firearm safety, traditional ecological knowledge, public speaking
Methods used	Community-based hands-on training, training camps
Age(s)	16–18
Activity duration	Six weeks
Communities involved	Sturgeon Lake, Hatchet Lake Denesuline, Beardy's and Okemasis, and Yellow Quill First Nations; communities in Stanley Mission, Pelican Narrows, La Ronge and Prince Albert; Cumberland House, Red Earth and Shoal Lake First Nations
Partners	Prince Albert Model Forest, Prince Albert Grand Council, Natural Resources Canada's Canadian Forest Service
Youth participants	Many (95 graduated in 2010)
Legacy	Certification in various skills



First Nations Natural Resources Youth Employment Program, Ontario

Employment training program prepares youth for a future in forestry

Since 2003, Confederation College's Confederation Natural Resources Centre has partnered with industry and government to run one of the most successful youth employment training programs in Canada. Every summer, Ontario First Nations students aged 16 to 19 are given the opportunity to participate in forestry activities, such as sustainable forest management practices, tree planting, firefighting training, brush saw and chainsaw operation, the Workplace Hazardous Materials Information System (WHMIS), the geographic information system (GIS) / Global Positioning System (GPS), and cone collection. After completing the program, participants receive certification cards that qualify them for future employment in the industry.

The First Nations Natural Resources Youth Employment Program (FNNRYEP) involves many major forestry companies, including AbitibiBowater Inc., Tembec, Outland Reforestation and Weyerhaeuser. Funding



Confederation Natural Resources Centre

is provided by Natural Resources Canada's Canadian Forest Service, the Ontario Ministry of Natural Resources and Aboriginal Affairs and Northern Development Canada, among other partners.

"We want to provide skills to encourage First Nations youth to proactively engage in their future career aspirations through a commitment to education, training and employment," says Brian Kurikka of Confederation College. "These youth need to be empowered to start building capacity in their communities. We accomplish this in a safe and structured work environment."

As Kurikka tells it, that environment is what facilitates some of the most positive changes among program participants. Because the youth are removed from outside influences, they are better able to focus on learning new skills and applying their knowledge in a productive manner.

Confederation College regularly receives testimonials about the program's success. One participant's father stated: "We were struggling with our son to stay in school. The FNNRYEP has inspired him to complete high school, and he is excited about post-secondary education. We cannot believe the turnaround in his attitude, and we credit the FNNRYEP for achieving this."

Such positive feedback is exactly why Kurikka wants to ensure that the program remains viable. After 11 years, FNNRYEP is generating a growing number of success stories throughout participating communities, with youth finding rewarding employment in a range of forestry and mining occupations.

The only obstacle to the program is a lack of long-term sustainable funding. In 2010, FNNRYEP was reduced from seven weeks to six, due to a funding shortfall. Thirty-two students took part in the program, but Kurikka is convinced that the number could have easily been 132, had there been sufficient financial support. He emphasizes the tremendous interest in FNNRYEP, not only from the youth but also from their communities.

"Participants go back to their communities and talk about their experiences," says Kurikka. **"This program is important. If it wasn't in existence, there'd be a gap. We wouldn't be creating these future leaders of their communities or the future workforce for industry partners."**

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Project highlights

Aspects of forestry taught	Sustainable forest management practices, tree planting, firefighting training, brush saw and chainsaw operation, WHMIS, GIS/GPS, cone collection
Methods used	Certification, hands-on training
Age(s)	16–19
Activity duration	Six weeks
Communities involved	Several First Nations in Ontario
Partners	AbitibiBowater, Tembec, Outland Reforestation, Weyerhaeuser, Natural Resources Canada's Canadian Forest Service, the Ontario Ministry of Natural Resources, Aboriginal Affairs and Northern Development Canada, Confederation College and many more
Youth participants	30+ annually
Legacy	Certification cards that qualify participants for future employment in the industry are issued. The program has a 12-year history.





Chapter 4

Applied learning: Post-secondary students (ages 18+)



Red Crow Community College, Alberta

Cultural and environmental component enriches Youth Work Experience program for Kainai – Blood Tribe youth

The Kainai – Blood Tribe’s lands in south-central Alberta are geographically diverse, extending from Rocky Mountains’ forests through rolling grasslands to flat prairie. Understandably, the tribe’s traditional knowledge includes a wealth of information about ecological zones and cultural traditions, and elders are eager to pass that knowledge on to the younger generations.

About six years ago, Red Crow Community College and Blood Tribe Employment & Skills Training (BTEST), which serves the Kainai – Blood Tribe community, asked the elders to incorporate a cultural component into its environmental course. The college and the elders jumped at the chance and, with financial assistance from Natural Resources Canada’s Canadian Forest Service, created a Traditional Environment and Cultural Component as part of the college’s Youth Work Experience program. The program has been running since 2007; the last completed program ran in September and October 2010.



Red Crow Community College

Students in the non-credit course spend 40 hours visiting sites throughout the Blackfoot traditional territory. They are accompanied by elders, who share their traditional knowledge, and off-reserve people such as scientists and academics.

“The students learn how the land provided our people with food, shelter, fuel and medicine. They learn the Blackfoot names for plants, animals and places, and they learn how to build a temporary shelter and start a fire,” says Francis First Charger, who is responsible for developing the program. He is also the CEO of the Mikai’sto Foundation, which raises funds for the college.

“Students in the program learn that the elders have valuable traditional knowledge about the vast Blackfoot territory and that the Blackfoot knowledge is different from other tribes,” says First Charger. “The students have a chance to spend time with the elders, to gain respect and to learn about the Blackfoot cultural, traditional, spiritual and environmental knowledge. The course really boosts their self-esteem: They come out with a different attitude about life and the surroundings.”

In 2010, the program attracted about 20 students, men and women ranging in age from 18 to 30. Some were high school students, while others were attending, or had graduated from, college or university. First Charger says that many of the students he sees do not know what they want to do with their lives, and the course is positive for them. “They don’t just finish the course and drop it,” he says. “Some find out what they want in life, and go back to school to pursue it.”

The college issues a certificate to those who complete the course and encourages students to include the experience in their resumés. First Charger believes the course helps students get into other courses and find employment.

“A number of students have told me that employers view their cultural knowledge as an asset, and that the certificate was useful when they were job hunting,” he says.

“One of the best things about the program is that so many people from the community are involved,” First Charger continues. “Even the elders are lining up now and saying, ‘Here’s what I have to share with the students.’” The program has given the elders a chance to build up a trusting relationship with the students and with the college.

“It has also helped raise the profile of the school,” says First Charger. “We are now seen as a valuable resource: Other colleges ask us to make presentations, and we’re working with Athabasca University to develop a degree program that incorporates ideas that came out of the traditional land use course we offered.”

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Project highlights

Aspects of forestry taught	Traditional ecological knowledge, environmental sciences
Methods used	Work experience program; site visits; outdoor education with elders, scientists and/or academics; plant and species identification; survival skills
Age(s)	18–30
Activity duration	40 hours
Communities involved	Two
Partner	Natural Resources Canada’s Canadian Forest Service
Participants	Approx. 20 men and women
Legacy	Project running for seven years, certification



J. Michael Waldram Fellowship, National

Fellowship helps maintain legacy of Aboriginal people in forestry

The J. Michael Waldram Memorial Model Forest Fellowship was established in 2008 as a tribute to the founding general manager of the Manitoba Model Forest. Throughout his career, Mike Waldram was passionate about promoting sustainable forest management, particularly among Aboriginal youth. He saw their involvement as an integral component of the Model Forest program and of the future of natural resource management as a whole. When he passed away in 2006, his peers and co-workers created the fellowship to make sure that more Aboriginal youth would benefit from his legacy.

The Canadian Model Forest Network initiated the fellowship, and the Canadian Institute of Forestry / Institut forestier du Canada (CIF/IFC) administers it, with additional support from Natural Resources Canada's Forest Communities Program and the Canadian Forestry Association. Through the endowment, up to three Canadian Aboriginal youth a year who enrolled in post-secondary natural resource management programs have been awarded \$1,000 each to help with their studies.



Canadian Institute of Forestry

John Pineau, Executive Director of CIF/IFC, has been involved with the fellowship from the beginning. According to him, the fund plays a significant role in furthering the cause to which Waldram dedicated his life. "I think that more than anything else, we want to recognize eligible and deserving Aboriginal students in these important programs," says Pineau. **"Forestry is a complex, interdisciplinary activity. It's necessary to have these sorts of talented and knowledgeable young people coming into the sector to make it work, to make it better."**

One of those talented young people is 2008 recipient Tyson Williams from Wabigoon Lake Ojibway Nation in Ontario. When Williams met Pineau not long after graduating from Lakehead University's forestry degree program in spring 2010, he took the opportunity to thank Pineau for the fellowship and for the doors it opened for him, academically and professionally.

By all accounts, the program has been just as beneficial to the other recipients, and the fellowship founders plan to ensure that it remains an annual award. Together, they will continue raising funds and promoting the fellowship to increase its profile across Canada. The key is to secure ongoing support from industry stakeholders to attract and encourage Aboriginal youth interested in pursuing forestry careers.

Pineau is optimistic that stakeholders will continue to respond positively to the fellowship. As he explains, most good forestry operations understand the value of involving Aboriginal people and communities in the forestry sector.

"That traditional knowledge is very important," says Pineau. "It can't just be pure science that we use to manage forests. We have to have that traditional knowledge, traditional values and traditional understanding that Aboriginal people and their communities bring to the table."

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Project highlights

Aspects of forestry promoted	Sustainable forestry management, forestry-based post-secondary education, traditional ecological knowledge
Methods used	Endowment (\$1,000) for up to three Aboriginal youth per year who have enrolled in post-secondary natural resource management programs
Age(s)	Various
Submission deadline	March 31 (subject to change)
Communities involved	All Canadian Aboriginal communities can nominate and participate.
Partners	Canadian Model Forest Network, Canadian Institute of Forestry, Natural Resources Canada's Canadian Forest Service
Youth participants	Up to three recipients annually
Legacy	Many recipients have gone on to university/college and found work in their field. Annual endowment.

Nicola Valley Institute of Technology, British Columbia

Natural Resource Technology program offers hands-on training for Aboriginal youth

British Columbia's Nicola Valley Institute of Technology (NVIT) is British Columbia's only Aboriginal public post-secondary institute. The institute serves the interests and needs of Aboriginal students and communities. It has an Aboriginal Board of Governors, and most of the staff members are Aboriginal people. NVIT got its start in 1983 with 13 students taking classes in a basement of the community hall in Shulus, which is part of the Lower Nicola First Nation near Merritt. Today it has almost 1000 students at campuses in Merritt and Vancouver.

Under NVIT's Natural Resource Technology program, students study for two years to receive a Natural Resource Technology Diploma. The program attracts men and women between 18 and 55 years old. Between 15 and 20 students graduate from the program each year. In the past, students tended to be male, and many of them were older workers seeking to augment their



Nicola Valley Institute of Technology

training. Today the program attracts a younger demographic, with women accounting for almost a quarter of the students, according to Darrell Eustache, Department Head of Natural Resource Technology.

The program offers small class sizes and a balance between academic work and fieldwork. Students spend about 40 percent of their time in the field. "We take students to the Spius Creek Hatchery, which cooperates with us on an informal basis, so students have the opportunity to learn how to identify species in the classroom and then go into the hatchery and get hands-on experience in identifying and tagging the fish," says Eustache.

Major topics include forestry, fisheries, wildlife and other resource sectors, and the course provides training in environmental assessment and monitoring. "The program was updated in 2010 and is now more rounded," says Eustache. "We've beefed up the training in crossover skills that allow graduates to move from one sector to another. Graduates have the knowledge base to pursue many career paths in the environmental sector. They may become resource managers in their own communities or liaisons between communities and businesses. When graduates leave here, they're ready to work, and they have the skills to contribute to any project.

"About 90 percent of our graduates find employment in their field," Eustache adds. "The other 10 percent may go on to university or pursue careers in forestry companies, band offices and government ministries. Many also work for private consultants." The NVIT program is providing British Columbia's resources sector with much-needed natural resource technicians and technologists, while helping Aboriginal communities to build essential capacity.

About 15 percent of students are non-Aboriginal, and that creates "a phenomenal dynamic," says Eustache. "When one of our graduates is working for a First Nation band and goes into a government ministry and meets a former classmate, the result is a colleague-to-colleague understanding. These relationships benefit everybody."

Eustache is a member of the Simpcw First Nation, where one of his graduates is now the chief negotiator for all resource-related projects. "That's hugely important," Eustache says. "We don't have to hire outside the community. We have graduates who can communicate with professionals from government and industry and report back to band chiefs and councils. They're bringing a whole new language to the communities."

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Project highlights

Aspects of forestry taught	Forest industry, training in environmental assessment and monitoring
Methods used	Diploma program, academic work, fieldwork
Age(s)	18+
Activity duration	Two-year program
Communities involved	Several
Youth participants	15–20 students
Legacy	Graduates receive a diploma in Natural Resource Technology and are capable of becoming resource managers.





Chapter 5

Pre-employment/Employment (ages 18+)



Prince Albert Model Forest youth exchange, Saskatchewan

Exchange program empowers youth to expand their horizons

The International Model Forest Network (IMFN) promotes and shares sustainable forest management among communities around the world. A 2003 IMFN event brought Gene Kimbley, former Prince Albert Model Forest (PAMF) General Manager, in contact with Leif Jougda, a land-use expert with Sweden's National Board of Forestry. Kimbley encouraged Jougda to get involved in the model forest initiative. Jougda took the advice, and in 2004, the Vilhelmina Model Forest (VMF) became the first of its kind in Europe.

Thanks to the important role the PAMF played in the creation of the VMF, representatives from the two organizations decided to build on their involvement and create a lasting partnership. In 2007, they organized an Aboriginal youth exchange that would facilitate the sharing of knowledge between their cultures. The exchange began with six Sami youth aged 16 to 24 coming from the VMF to spend one week at the PAMF; later that year, six Métis and First Nation students



Prince Albert Model Forest

from the PAMF travelled to Sweden to experience life at the VMF. In both phases of the exchange, participants learned about the host culture's traditions, history and forestry practices.

The exchange is supported by partners in Canada and Sweden. Among them are Natural Resources Canada's Canadian Forest Service, the University of Saskatchewan, the Swedish Forest Agency, Vilhelmina Municipality and Swedish University of Agricultural Sciences.

Mika Carriere was one of the PAMF students who participated in the exchange. Today she works as the exchange's project officer and has high hopes for the ongoing initiative. "I think it will create a lot more opportunities for both Model Forests," she says. "It opens your eyes to the potential that a Model Forest can have in creating a sustainable forest community. The exchange has impacted a lot of people and brought so many ideas to the table."

In particular, both organizations have benefited from shared practices when it comes to wildlife. They found many similarities between the caribou research done in Saskatchewan and the reindeer research done in Sweden. By exchanging information between the two Model Forests, each organization has deepened and enriched its understanding of its native species.

Carriere points out that the project reaches farther than just the one week that each group of students spent on the exchange in 2007. Since then, many partnerships have evolved and strengthened through the continued communication between the PAMF and the VMF, within those organizations and beyond.

In opening its doors to Sweden, the PAMF has drawn interest from many Aboriginal groups in northern and central Saskatchewan. This collaboration and exchange of information, both regionally and internationally, has brought the collective knowledge base to a higher level.

"It's grown so much," Carriere says. "It's made me feel a lot more pride in knowing that our Model Forest can have such a positive impact in partnership building. Knowing that there are people in another country wanting to know more about your cultural traditions and practices makes me proud to be a Métis person and an employee with the Prince Albert Model Forest."

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Project highlights

Aspects of forestry taught	Cultural forestry practices, native species
Method used	Aboriginal youth exchange
Age(s)	16–24
Activity duration	One week
Communities involved	Several, including Métis and First Nation youth
Partners	Prince Albert Model Forest, Vilhelmina Model Forest, Natural Resources Canada's Canadian Forest Service, University of Saskatchewan, Swedish Forest Agency, Vilhelmina Municipality, Swedish University of Agricultural Sciences
Youth participants	Six Métis and First Nation youth, six Sami youth
Legacy	Many partnerships have been formed.

First Nations Youth Forestry Training Program, British Columbia

Training program develops future leaders in forestry

Quesnel-based Blue Collar Silviculture Ltd. has enjoyed a long-standing relationship with Nazko First Nation, joining forces on various forestry contracts and benefiting from its strong work ethic. When Blue Collar and Nazko realized there was a shortage of Nazko youth participating in their forestry contracts, the two organizations took action to ensure that their partnership would continue to flourish.

In 2009, Blue Collar implemented the First Nations Youth Forestry Training Program (FNYFTP). For seven weeks during the summer, 31 First Nations youth were introduced to life in the forestry industry. Participants were primarily from Nazko, although youth from the Alexandria, Esdilagh First Nation; Kluskus First Nation; and Lhtako Dene Nation (formerly Red Bluff First Nation) were also involved. They took part in various field experiences and training certification courses, including tree planting, all-terrain vehicle (ATV) operation, manual brushing, Occupational



Blue Collar Silviculture Ltd.

First Aid Level One, mistletoe pruning, small engine repair, and chainsaw bucking and thinning.

“It was a hybrid between a silviculture work project and a training program,” says Bob Dearden, Program Director at Blue Collar. “What motivated the development of the program most was the opportunity to create an environment whereby we could pass on some of our experiences and expertise to a group of kids that might not have had the chance otherwise.”

The program ran again in 2010, with additional participation from members of the Penticton and Adams Lake Indian Bands, and was just as successful the second time around. Brenda Gardiner, Nazko First Nation General Manager, is overwhelmed by the positive impact the initiative has had. **“To see the kids come back full of confidence, team spirit and pride after just seven weeks has been wonderful,”** says Gardiner. “For Blue Collar Silviculture to see the potential in the Nazko youth also helps in future employment possibilities for the kids – and educated, employed youth are the future for Nazko.”

Dearden’s goal is to expand the program so First Nations youth from across the province can benefit from the exceptional experience that the first two groups of participants enjoyed. “This is a comprehensive introduction to the forest industry,” he says. **“Our hope is that the program will contribute to the capacity building and economic development of each of the communities involved. We expect that many of our graduates will become leaders in their respective communities, in part due to the skills and confidence they gain through participation in the program.”**

The FNYFTP has been made possible through a number of partnerships, including the First Nations Education Steering Committee; Aboriginal Affairs and Northern Development Canada; British Columbia’s Ministry of Community, Sport and Cultural Development; Northern Development Initiative Trust; Cariboo Chilcotin Aboriginal Training Employment Centre Society; and College of New Caledonia. With continued support from these and other partners, Blue Collar and Nazko First Nation intend to run the mutually beneficial program as long as possible.

“We feel our program is a great marriage of the resources of the silviculture industry and the void in employment and training opportunities for First Nations youth,” says Mark Courtney, owner of Blue Collar. “There are many other opportunities presented to Nazko and other First Nation communities that are not taken advantage of due to the lack of a qualified and reliable workforce. Targeting youth and giving them life and employment skill sets will be essential in the long-term economic development of First Nations communities.”

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Project highlights

Aspects of forestry taught	Tree planting, manual brushing, Occupational First Aid Level One, mistletoe pruning, small engine repair, chainsaw bucking and thinning, silvicultural training
Method used	Training certification courses
Age(s)	Various
Activity duration	Seven weeks during the summer
Communities involved	Six
Partners	First Nations Education Steering Committee; Aboriginal Affairs and Northern Development Canada; British Columbia Ministry of Community, Sport and Cultural Development; Northern Development Initiative Trust; Cariboo Chilcotin Aboriginal Training Employment Centre Society; College of New Caledonia; Nazko First Nation; Blue Collar Silviculture Ltd.
Youth participants	Approx. 30 annually
Legacy	Started in 2009



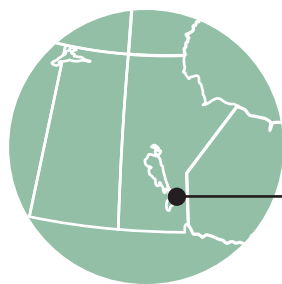
Log cabin building course, Manitoba

Log cabin building course gives youth transferable skills, self esteem

Cabin-building skills are a useful asset in communities like Black River First Nation, where hunting and trapping are common pursuits and a log cabin is often a necessity in hard-to-access forest areas. So it makes perfect sense for the local Life Skills Training Centre to offer a course that helps young people acquire these skills.

“Our intention was to expose young people to a trade that has traditional importance and to provide them with transferable skills that could help them find employment,” says Jack Johnson, Black River’s Program Manager, Special Projects and Alternative Education.

The course, which is supported by Natural Resources Canada’s Canadian Forest Service, provides 8 to 12 students with hands-on training over four to six weeks. The students learn to identify trees and cut and prepare logs, and they participate in building one or more cabins.



Black River First Nation

In 2009–2010, five students completed the first part of the course, learning to harvest and prepare the logs, and six more participated in the cabin-building segment. Johnson estimates that four people attended the course from beginning to end and now have all the skills required for building log cabins.

“With these skills they can find work anytime and anywhere,” he says. “They also have the basics now and can pursue careers in logging or forestry, in non-timber forest products, in carpentry and so on. **Some of the graduates took jobs with the local logging firm, and some bought their own equipment to start businesses.**”

Johnson believes that even participants who did not finish the course learned valuable lessons. “It got the participants out in the forest and working together in small groups. They learned that there are rules you have to follow in order to survive in this setting, and they learned how to work in teams.”

The community benefited too: The student-built cabin was moved into the woods to serve as a hunting lodge, and the sawmill that had been purchased for the course is used in new training programs. The Life Skills Training Centre is planning a log-milling course for the 2010–2011 season, and it is already swamped with applicants. “We have a budget to train three people, and we have 16 or 17 ready to sign up!” says Johnson.

The community is hoping to develop a market for the logs from its mill, but Johnson also hopes that it will look at developing eco-tourism and non-timber forestry. “We’re in an ideal place for eco-tourism – only about two hours north of Winnipeg – and there’s more promise than you might imagine in growing and harvesting berries and mushrooms, making maple syrup and natural dyes, and even in weaving baskets.”

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Project highlights

Aspects of forestry taught	Log cabin construction, tree identification, cutting and preparing logs
Method used	Construction course
Age(s)	18+
Activity duration	4–6 weeks
Communities involved	One
Partners	Black River First Nation, Life Skills Training Centre, Natural Resources Canada’s Canadian Forest Service
Youth participants	5–12
Legacy	Some graduates took jobs with the local logging firm, and some started their own forestry ventures. There is interest in the community in continuing the training course.

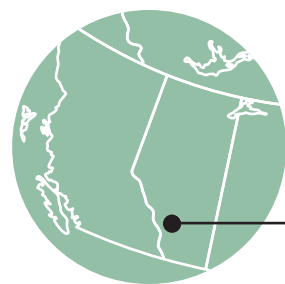
Building Environmental Aboriginal Human Resources, National

ECO Canada training programs build Aboriginal workforce for environmental sector

Community-based training is gaining ground as a great way to help First Nations people find rewarding employment close to the communities in which they live.

ECO Canada is a non-profit organization that helps train people for careers in the environmental sector. The organization, which is funded by the Government of Canada's Sector Council Program, works with industry partners to develop courses focused on in-demand environmental skills.

Through its BEAHR Training Programs (Building Environmental Aboriginal Human Resources), ECO Canada provides community-based training tailored to the needs of First Nations people. The courses are a mix of formal and informal training techniques and combine traditional Aboriginal knowledge with Western scientific concepts.



ECO Canada,
BEAHR

Chris Stewart, ECO Canada's Director of Marketing & Communications and Director of Business Development, says the organization was created in response to the urgent need for skilled people to work in the environmental sector, particularly in Canada's North.

"We've developed programs for specific jobs, such as site remediation and environmental monitoring, so that companies can find people to fill these positions or get help to train the people they need," he says. "In order to develop these workforces, we've also built a network of trainers from across Canada who go into First Nations communities and deliver the programs." ECO Canada works with companies, such as Shell Canada Limited in the oil and gas sector, and First Nations environmental departments or organizations, such as the Gwich'in Renewable Resources Board, that hire environmental monitors for the forestry sector.

The nine-week courses attract men and women aged 20 to 50. The first three weeks focus on skills defined by ECO Canada's National Occupational Standards; the following four weeks are devoted to regulatory or research specializations that reflect local circumstances. During the final two weeks, students work in the field.

"We usually customize the courses to reflect projects in the First Nation's territory," explains Carol Crowe, a trainer who delivers Environmental Monitoring and Environmental Coordinator courses. "We'll bring in government regulators and people from industry, so that students know exactly what to expect when they become monitors or coordinators."

Crowe worked for 17 years in the telecom industry and 7 years in the oil and gas industry before joining ECO Canada. She was born in the Algonquins of Pikwàkanagàn First Nation of Golden Lake, Ontario, and now lives in Prince Albert, Saskatchewan, a community she chose partly because her aunt was married to Grey Owl and lived with him in Prince Albert National Park.

Crowe has delivered six BEAHR Training Programs in Alberta and one in New Brunswick, and she is proud of the results. "We've had extremely high success rates," she says. "I ran two programs in Bigstone Cree Nation in Alberta, for example, and the community now has 4 environmental monitors in senior positions and 11 more doing field work."

Crowe is pleased that many of her students go on to pursue post-secondary degrees, but she is even more enthusiastic about seeing the way the courses transform students' lives. **"Because the courses incorporate traditional knowledge, students say they believe in the courses and graduates come out saying, 'This is more than a job – it's something I believe in. This is my role!'"**

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Project highlights

Aspects of forestry taught	Site remediation, environmental monitoring
Methods used	Community-based training, fieldwork, federal and industry regulations
Age(s)	20–50
Activity duration	Nine weeks
Communities involved	Several
Partners	ECO Canada, the Government of Canada's Sector Council Program, Building Environmental Aboriginal Human Resources (BEAHR)
Participants	Several
Legacy	Many students go on to pursue post-secondary degrees or forestry careers.

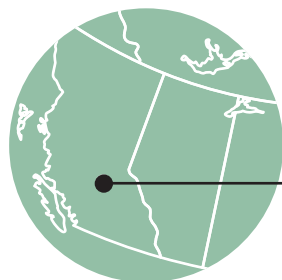


Cariboo Chilcotin Forestry and Mining Certificate Program, British Columbia

New certificate program increases youth employability

When it comes to finding employment opportunities, members of the Tl'etinqox-t'in Government Office (Anahim Band) know they can partner with the Cariboo Chilcotin Aboriginal Training Employment Centre Society (CCATEC). For over 18 years, the CCATEC board and staff have worked closely with the community to help provide the training they require to be successful in a range of professions.

One of CCATEC's initiatives is the Forestry and Mining Certificate Program. In the summer of 2010, 12 Anahim members – nine male and three female – took part in a 10-day training program that gave them the necessary certifications to work in the forestry and mining industries. In collaboration with Thompson Rivers University and Raven Rescue Ltd., CCATEC offered accreditations of emergency medical practitioner (EMP), swift-water technician, the Workplace Hazardous Materials Information System (WHMIS), the Global Positioning System (GPS), chainsaw safety and more.



Cariboo Chilcotin Aboriginal Training Employment Centre Society

"Our mandate is to provide quality training with recognized certificates, including safety training, for First Nations to maintain and seek employment," says Rhonda LaBelle, Executive Director of CCATEC. "We partner with various agencies to ensure that our clients have all the supports in place prior to entering the training program."

The Forestry and Mining Certificate Program has already secured employment for three of the youth participants. That, says LaBelle, is exactly the outcome she was hoping for. The program's short-term goal is to have all 12 trainees receive forestry and mining safety certificates. Its long-term goal is for the participants to find steady work. "With employment comes fewer social issues, less family violence," says LaBelle. "It promotes self-esteem, self-efficiency and pride. That's a real human need, so for us that's huge."

Anahim Band is located one hour away from Williams Lake in British Columbia. As a remote community, it is particularly vulnerable to the effects of today's depleted labour market. When jobs become available, Anahim members must be prepared to take them. **"Safety tickets are required by the forestry and mining sectors," says LaBelle. "If we don't have First Nations people properly qualified, they miss out on opportunities."**

As a result of the relationship CCATEC has developed with Anahim, community members never hesitate to make use of the centre's services. CCATEC is well aware of that fact and plans to continue to support forestry and mining certificate programs.

"The program gives at least 12 of the membership an opportunity for skills development and to look at employment, both seasonal and year-round," says LaBelle. "Once they're working, they bring money into the community. That's self-sufficiency, that's pride, and that is great success."

For more information, contact

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Cariboo Chilcotin Aboriginal Training
Employment Centre Society
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Williams Lake BC V2G 1Z5
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E-mail: administration@ccatec.com
Web site: www.ccatec.com

Project highlights

Aspects of forestry taught	Emergency medical practitioner, swift-water technician, WHMIS, GPS, chainsaw safety
Method used	Training program
Age(s)	18+
Activity duration	10 days
Communities involved	One
Partners	Tl'etinqox-t'in Government Office, Cariboo Chilcotin Aboriginal Training Employment Centre Society, Thompson Rivers University, Raven Rescue Ltd., Anahim Band
Participants	12
Legacy	Employment for at least three of the participants with certificates in mining and forestry



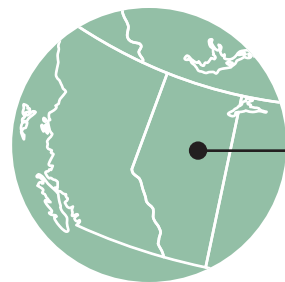
Log home building project, Alberta

Log home building project tapped into band's human and natural resources

The Bigstone Cree Nation has a housing shortage, and many young people are in need of employment skills. In 2006, the band decided to address both of these issues by launching a log home building course in the community.

The course provided life skills, employment preparation and career counselling to Bigstone youth who were not in school and who faced employment barriers. Natural Resources Canada's Canadian Forest Service and Aboriginal Affairs and Northern Development Canada's First Nations and Inuit Youth Work Experience Program provided financial support. The Bigstone Youth Development Centre, partially funded by an Aboriginal Human Resources Development Agreement, contributed administrative time.

The plan to build log homes for community members was soon modified: The manager of the band's consultation office suggested building a bigger, more complex structure that could serve the entire community. The result was a large cabin that was initially used by the community's trappers and later turned into a museum.



Bigstone Cree Nation

The program started with a small group of participants – young men who had some experience with chainsaws – who selected and felled the trees and prepared the logs. More trainees came on board when construction began, and during the summer months, some high school students also participated. Almost 30 young men and women, ranging in age from 15 to 30, participated in the building project from May 2006 until it was completed in November of that year.

“It was a stepping stone for a lot of young people,” says Donald Alook, Director of the Bigstone Youth Development Centre. “Eventually we had students as young as 15 who wanted to learn about log building and to try out construction work. They learned new skills, but they also learned to get up in the morning and get to work – it was good experience to prepare them for the workplace.”

Alook says that the project also sparked the students' interest in traditional practices. For instance, the building makes use of dovetail notching, a traditional style of joinery that helps keep the building corners locked together.

“By working on this building, the students came to recognize the achievements of skilled tradespeople in the past and to understand the value of learning traditional practices, such as dovetail notching, so these skills won't be lost,” says Alook.

Following its successful log home building course, the Bigstone Cree Nation has continued to provide training that relates to its forest assets. The community owns a forestry company and is teaching the youth new approaches to logging. In the summer of 2010, 16 young people attended a Type 1 wildland firefighting program.

For more information, contact

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Bigstone Youth Development Centre
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Wabasca AB T0G 2K0
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E-mail: Donald.alook@bigstone.ca



Project highlights	
Aspects of forestry taught	Life skills, employment preparation, career counselling, log home construction
Methods used	Hands-on, community-based training; log home building course
Age(s)	15–30
Activity duration	Approx. seven months
Communities involved	One
Partners	Natural Resources Canada's Canadian Forest Service, Aboriginal Affairs and Northern Development Canada's First Nations and Inuit Youth Work Experience Program, Bigstone Youth Development Centre, the Aboriginal Human Resources Development Agreement
Participants	30 (in 2006)
Legacy	In 2010, 16 youth attended a Type 1 wildland firefighting program.



Vegetation monitoring project, New Brunswick

Conservation project gives youth forest experience, advances First Nation's habitat recovery initiatives

During the summer of 2010, Aboriginal youth, including high school and post-secondary students from the Fort Folly First Nation and other First Nation communities in New Brunswick and Nova Scotia, gained valuable experience in conservation while working to fulfill the community's long-standing commitment to habitat recovery around Dorchester, New Brunswick.

For the past five years, Fort Folly has been working in partnership with Fundy National Park of Canada to construct an interpretive walking trail on the reserve and to conduct vegetation monitoring in the park. The First Nation has also been working with the Fundy Model Forest to inventory water crossings in the Big Salmon River watershed.

In 2010, with the help of Natural Resources Canada's Canadian Forest Service (CFS), Fort Folly was able to employ a team of five young men and women to complete important aspects



Fort Folly
First Nation

of these initiatives. "The conservation project provided employment and valuable work experience to young people from Fort Folly, Saint Mary's and Pictou Landing First Nations," says Tim Robinson, Manager of the Fort Folly Habitat Recovery Program. "It also allowed us to make significant progress on all three initiatives."

Fort Folly started work on its Mi'kmaq medicine trail in 2007 with funding from the New Brunswick Environmental Trust Fund and the CFS. The goal was to construct a walking trail that featured interpretive panels explaining the traditional and medicinal uses of local plants. Fundy National Park collaborated on developing the panels, which are also planned for use on a twin trail in the park. "During the summer of 2010, our team finished connecting sections of the walking trail, upgraded the trail base and finalized the content for the interpretive panels, in preparation for the grand opening in the summer of 2011," says field technician Edmond Redfield.

To fulfill the second part of the project, the team helped complete work scheduled for 2010 as part of a long-term vegetation monitoring initiative at Fundy National Park. Since the 1970s, the initiative has been producing inventories of plant growth on 48 permanent sample plots every five years. The information is used to assess the health of the park, the effectiveness of management practices and the consequences of environmental change. "Fort Folly youth who work on the vegetation monitoring initiative learn species identification and data-gathering techniques," says Robinson. "It's a great experience for band members who want to work with our habitat recovery initiative, which has established its own sample plots on the Fort Folly First Nation reserve to monitor the environment."

To meet its third goal for the summer, the team worked with the Fundy Model Forest to inventory water crossings in the Big Salmon River watershed. "The students had the chance to see the impact that roads can have on a watershed," says Robinson. "Their task was to identify road crossings that act as barriers to fish migration." Such barriers can prevent species that are endangered or at risk from reaching habitat upstream. These species include the inner Bay of Fundy Atlantic salmon and the American eel.

Participants in the summer project learned to use a variety of technical equipment, worked with species at risk and had the opportunity to explore career paths. **"They acquired experience and learned skills that enhanced their resumés," says Robinson. "If some of the project participants decide to pursue conservation careers, I think employers will be happy to recruit them."**

For more information, contact

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E-mail: timrffhr@nb.aibn.com
Web site: www.ffhr.ca



Project highlights

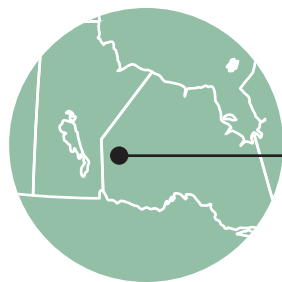
Aspects of forestry taught	Conservation, habitat recovery, species identification, vegetation monitoring, technical equipment use
Method used	Hands-on training
Activity duration	Summer 2010
Communities involved	Several First Nations in New Brunswick and Nova Scotia
Partners	Fort Folly First Nation, Fundy National Park of Canada, Fundy Model Forest, Natural Resources Canada's Canadian Forest Service, Fort Folly Habitat Recovery Program, New Brunswick Environmental Trust Fund
Youth participants	Five
Legacy	Three years of training

Mechanical cut-to-length harvester computer simulator, Ontario

Simulator highlights career opportunities in forest under Aboriginal stewardship

The Whitefeather Forest looms large in the Canadian landscape. It not only covers 1.3 million hectares in northwestern Ontario but may also help transform the forestry industry in the country. Pikangikum First Nation is acquiring the commercial rights to manage forestry within this forest in its traditional territory. Meanwhile, it is preparing to replace the “tree-farming” culture, which dominates the rest of the forestry industry, with customary forest stewardship partnered with western science in a way that reflects traditional Aboriginal knowledge and practices.

Pikangikum elders guiding the Whitefeather Forest Initiative note how non-Aboriginal people talk about plantations and seed orchards, cut blocks and disk trenching (i.e. plowing the ground) and believe that these practices maximize sustainable yields. The elders argue that plantation forests are not healthy. Too many trees grow up crooked and have too much taper



Pikangikum First Nation

and too many limbs. Young plantation forests are susceptible to wind blows, giving the timber poor fibre quality and too many large knots.

Scientists and governments are supporting the approach made by Pikangikum elders. Ontario has approved Whitefeather’s land use strategy, which incorporates a light-footprint harvesting approach. This approach will use cut-to-length harvesting and indigenous fire to support stand renewal (the use of customary fire had been banned). In cut-to-length harvesting, treetops and limbs are left on site and can be used to fuel controlled burns that help to restore dense growth.

Trained cut-to-length harvesters will be in demand when commercial harvesting in the forest begins in 2012. Pikangikum is working with Confederation College in Thunder Bay to introduce young people to training and job opportunities in this field. In 2008–2009, with financial support from Natural Resources Canada’s Canadian Forest Service, Pikangikum hosted a career fair featuring a computer simulator that gave youth the chance to operate a mechanical cut-to-length harvester in a virtual forest.

The simulator resembles a gaming console or a flight simulator: the forest work site appears onscreen and the user controls the harvester and performs basic tasks in the virtual environment. The levers and controls are identical to those found on a real mechanical harvester and have the same touch and sensitivity.

“This is the kind of harvester that the elders would like to see in the forest,” says Brian Kurikka, Manager of Confederation Natural Resources Centre. “It has a low impact and is sensitive to forest conditions.” Kurikka brought the college’s simulator to the career fair and was

gratified by the excitement it generated. Many high school students (and quite a few adults) enjoyed sliding into the driver’s seat and getting a feel for what it would be like to operate a harvester.

The simulator may be fun, but it is not really a game – Confederation uses it to pre-train aspiring woodlands operators. It is ideal for teaching students harvesting techniques, felling patterns and how to operate the harvester’s controls without looking at them before they get on the machines. It is also a hit at career fairs. **“The simulator attracted a lot of young people who were interested in work opportunities in the forest,” says Kurikka. “As a result, eight community members are currently enrolled in the Forest Ecosystem Management Technician program delivered by Confederation College.”** The diploma program is delivered in Pikangikum, and Kurikka attributes its 80 percent student retention rate to consistent elder involvement, which provides a cultural aspect to the curriculum.

For more information, contact

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Project highlights

Aspects of forestry taught	Simulated mechanical cut-to-length harvesting, harvesting techniques, felling patterns
Methods used	Computer simulator, career fair
Age(s)	14+
Activity duration	Two days
Communities involved	One
Partners	Pikangikum First Nation, Confederation College, Natural Resources Canada’s Canadian Forest Service
Youth participants	Several
Legacy	Eight students are enrolled in the in the Forest Ecosystem Management Technician program offered by Confederation College in the community.

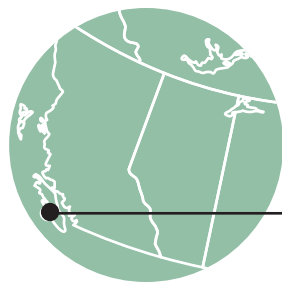


Streamside forest restoration project, British Columbia

Streamside forest restoration project trains Clayoquot youth for conservation economy

When Vancouver Island's Lost Shoe Creek area was logged in the 1960s, the creek was used as a waste dump and became clogged with debris that prevented fish from moving upstream – for the next half century. In 2008, the Central Westcoast Forest Society (CWFS), in partnership with Parks Canada, began a forest stream and riparian streamside ecosystem restoration project aimed at restoring the creek and the surrounding forest.

The CWFS is working with the Ahousaht, Hesquiaht, Tla-o-qui-aht, Yu?lu?il?ath (formerly called Ucluelet) and Toquaht First Nations, as well as other community partners. The CWFS designed the Lost Shoe Creek project to engage youth from the First Nations communities, teaching them about ecosystems while helping them to develop job skills.



Central Westcoast Forest Society

The project is part of a broader, long-term watershed reclamation program that the non-profit CWFS began shortly after it was formed in the early 1990s. Since then, the CWFS has restored almost 120 kilometres of salmon habitat and almost 50 hectares of riparian forest.

"Our projects are aimed at rehabilitating the habitat of logged areas to help restore the productive capacity of the forest and aquatic ecosystems," says CWFS Executive Director Jessica Hutchinson. "We're trying to re-establish the old-growth characteristics of the forest. We're also trying to create sustainable, livable communities. The projects provide local employment and offer training in the natural sciences as well as in traditional knowledge and values."

The CWFS hires crews of between 8 and 15 people to work in the forests for two or more months each year. Half to three quarters of the crews are usually members of the First Nations involved, and often there are participants from all five nations. Crew members range from 16 to 60 years of age. **"The young guys are filled with energy and enthusiasm," says Hutchinson. "The older ones, some of whom have been in the logging industry their whole lives, have knowledge and experience to offer."**

While most of the participants are men, Hutchinson is happy to report that women are also involved. One young woman who worked on the creek during the summer after she graduated from high school in 2008 went on to enrol in a biology program at Vancouver Island University.

In addition to working on the Lost Shoe Creek project, the CWFS has worked with the Clayoquot Forest Communities Program on a similar project in Hot Springs Cove. It has also partnered on other projects with Iisaak Forest Resources Ltd., the Pacific Rim National Park Reserve of Canada, the Clayoquot Biosphere Trust, Ecotrust Canada, TD Friends of the Environment Foundation, Community Development Trust's Job Opportunities Program, International Forest Products Ltd. and the Tofino Streamkeepers Society.

One of the society's goals is to educate local people to help protect and preserve freshwater habitat, and it hopes to expand its links with local schools and youth over the coming years. **"We've been meeting with teachers to find ways to supplement biology and science programs for youth and to get younger kids out into the forest,"** says Hutchinson. "It's been a pleasure working with the First Nations on their traditional territories and incorporating their traditional knowledge into our work. We'd like to use our projects to encourage youth to become interested in the environment and in natural resource management careers."

For more information, contact

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Web site: www.clayoquot.org



Project highlights

Aspects of forestry taught	Ecosystems, job skills, natural sciences, traditional ecological knowledge
Methods used	Hands-on training, outdoor education
Age(s)	16–60
Activity duration	Two or more months per year
Communities involved	Five
Partners	Central Westcoast Forest Society, Parks Canada
Participants	8–15
Legacy	Some high school students later enrolled in post-secondary education in natural resources. Almost 120 kilometres of salmon habitat and almost 50 hectares of riparian forest were restored. The Hot Springs Cove region later initiated a similar project.

Ryan Sutherland, Manitoba

Interest in non-timber forest products opens career opportunities for youth

Ryan Sutherland took an interest in forest plants out of necessity but soon parlayed his growing expertise into a promising career opportunity.

Sutherland is a member of Manitoba's Pine Creek First Nation. To earn money for college while still in high school in The Pas, he started gathering and selling non-timber forest products to the Northern Forest Diversification Centre in the town.

When he could not find employment after graduating, he continued to make ends meet by harvesting and selling botanicals, such as Labrador tea, sweetgrass, cranberry bark and Seneca root. Curious about the plants, Sutherland consulted with elders about how the plants had been traditionally grown, harvested and used. That knowledge led him to focus his studies on natural resource and agricultural issues when he entered Brandon University to study business and economics.

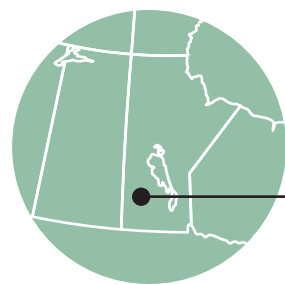
Sutherland earned his Bachelor of Business Administration degree in 2009 and is now working as a freelance consultant, advising First

Nations communities on sustainable development projects. "We're talking about developing a sustainable agriculture industry that manages and harvests native plants and animals to serve local markets," he says. "Non-timber products could provide many staple foods for our communities. We'd also like to bring back traditional medicines and make them available.

"The challenge is that current market prices are not high enough to pay for the traditional practices that can sustain these resources," Sutherland adds. "We'd also like to develop a strategy to ensure that the communities' needs are met before surpluses are sold to national and international markets."

In addition to developing sustainable economic strategies, Sutherland has been working with the West Region Tribal Council (WRTC) on a number of initiatives. One such initiative is the development of an Aboriginal Junior Forest Ranger program for community youth.

Sutherland worked with the WRTC to deliver a workshop, sponsored by Aboriginal Affairs and Northern Development Canada's Lands Environmental Action Fund (LEAF), to help WRTC First Nations develop waste management plans to prevent further contamination. He also helped develop a non-timber products workshop for youth. "The workshop allows youth to experience the jobs and tasks related to careers that require technical training or post-secondary education," he says. "Our hope is that this will inspire them to pursue career paths that work with the environment."



West Region
Tribal Council

Sutherland plans include advancing his own career by taking additional courses at Brandon University to prepare for a master's program in rural development.

For more information, contact

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Web site: wrtc.net/

Project highlights

Aspects of forestry learned/self-taught	Non-timber forest products, botanical harvesting, traditional ecological knowledge, medicinal plant use
Methods used	Self-teaching, discussions with elders, university degree
Communities involved	One
Legacy	Sutherland hopes to go back to Brandon University to prepare for a master's program in rural development.





Natural Resource Canada's Canadian Forest Service: Regional Aboriginal forestry programming coordinators

National

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Canadian Forest Service
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Fax: 613-992-5390

British Columbia

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Alberta, Saskatchewan, Manitoba and Northwest Territories

Northern Forestry Centre
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Ontario

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Quebec

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Atlantic Canada

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E-mail: John.Henderson@NRCan-RNCan.gc.ca

List of Canadian forestry education/training courses

British Columbia				
Institution	Department	Contact	Education level	Program, Accreditation
University of British Columbia	Faculty of Forestry	Faculty of Forestry Forest Sciences Centre 2424 Main Mall Vancouver BC V6T 1Z4 Tel.: 604-822-2727 Fax: 604-822-8645 E-mail: for.recep@ubc.ca www.forestry.ubc.ca	Undergraduate	Bachelor of Science in Forestry, Forest Sciences, B.Sc.F. (FS)
				Bachelor of Science in Natural Resources Conservation, B.Sc. (NRC)
				Bachelor of Science in Wood Products Processing, B.Sc. (WPP)
				Bachelor of Science in Forestry, Forest Operations, B.Sc.F. (FO)
				Bachelor of Science in Forestry, Forest Resources Management, B.Sc.F. (FRM)
			Graduate	Master of Science in Forestry, M.Sc.F.
				Master of Applied Science in Forestry M.A.Sc. (Forestry)
				Doctor of Philosophy in Forestry, Ph.D. (Forestry)
				Master of Sustainable Forest Management, M.S.F.M.
University of Northern British Columbia	Ecosystem Science and Management Program, College of Science and Management	Prince George Campus University of Northern British Columbia 3333 University Way Prince George BC V2N 4Z9 Tel.: 250-960-6664 Fax: 250-960-5539 www.unbc.ca/forestry/	Undergraduate	Bachelor of Science in Natural Resources Management – Forestry Ecology and Management, B.Sc. (NRM)
			Graduate	Master of Natural Resources and Environmental Studies, MNRES
				Master of Science, Natural Resources and Environmental Studies, M.Sc. (NRES)
				Master of Arts in Natural Resources and Environmental Studies, M.A. (NRES)
Nicola Valley Institute of Technology	Environmental Resources Technology	Merritt Campus 4155 Belshaw Street Merritt BC V1K 1R1 Tel.: 1-877-682-3300 www.nvit.ca/environmentalresourcetechnology.htm	Post-secondary	Environmental Resources Technician Certificate
			Environmental Resources Technologist Diploma	
British Columbia Institute of Technology	School of Construction and the Environment	Burnaby Campus 3700 Willingdon Avenue Burnaby BC V5G 3H2 Tel.: 604-434-1610 Fax: 604-430-1331 www.bcit.ca/study/programs/7270diplt	Post-secondary	Sustainable Resource Management (Forest Management) Diploma of Technology
				Sustainable Resource Management (Environmental and Community Planning) Diploma of Technology
				Wood Products Manufacturing Technology Associate Certificate
				Industrial Wood Processing and Management Diploma of Technology
				Industrial Wood Processing and Management Certificate of Technology
				Wood Product Sales and Distribution Certificate
College of New Caledonia		Prince George campus College of New Caledonia 3330 – 22nd Avenue Prince George BC V2N 1P8 Tel.: 1-800-371-8111 cnc.bc.ca	Post-secondary	Natural Resources and Environmental Technology (NRET) Diploma

British Columbia (Cont.)

Institution	Department	Contact	Education level	Program, Accreditation
Vancouver Island University	Forestry Department	Forestry Department Vancouver Island University 900 Fifth Street Nanaimo BC V9R 5S5 Tel.: 250-753-3245 Fax: 250-740-6482 www.viu.ca/forestry/	Post-secondary	Forest Resources Technology Diploma
				Post-Diploma Bridging Program to obtaining a Bachelor of Science in Forestry (B.Sc.F.)
Selkirk College	Forestry Technology	Castlegar Campus 301 Frank Beinder Way Castlegar BC V1N 4L3 Tel.: 250-365-7292 Fax: 250-365-6568 selkirk.ca/programs/rr/academicprograms/foresttechnology/	Post-secondary	Forest Technology Diploma

Alberta

Institution	Department	Contact	Education level	Program, Accreditation
University of Alberta	Alberta School of Forest Science & Management; Faculty of Agricultural, Life and Environmental Sciences	Alberta School of Forest Science & Management University of Alberta 751 General Services Building Edmonton AB T6G 2H1 Tel.: 780-492-4413 Fax: 780-492-4323 www.rr.ualberta.ca	Undergraduate	Bachelor of Science in Forestry, B.Sc.F.
				Bachelor of Science in Forest Business Management, B.Sc. (FBM)
			Graduate	Master of Forestry, M.F.
				Joint Master of Business Administration / Master of Forestry, M.B.A./M.F.
				Master of Science in Forest Biology and Management, M.Sc.
Doctor of Philosophy in Forest Biology and Management, Ph.D.				
Portage College	Forestry and Natural Resources	Forestry Centre Lac La Biche Campus Box 417 9531 – 94 Avenue Lac La Biche AB T0A 2C0 Tel.: 780-623-4573 www.portagecollege.ca/Programs/Forest_Technician_.htm	Post-secondary	Forest Technician Certificate
Northern Alberta Institute of Technology (NAIT)		Forest Technology NAIT 11762 – 106 Street NW Edmonton AB T5G 2R1 Tel.: 780-471-8646 www.nait.ca/76700.htm	Post-secondary	Forest Technology Diploma

Ontario

Institution	Department	Contact	Education level	Program, Accreditation
University of Toronto	Faculty of Forestry	Faculty of Forestry University of Toronto 33 Willcocks Street Toronto ON M5S 3B3 Tel.: 416-978-5751 Fax: 416-978-3834 www.forestry.utoronto.ca/contacts.htm	Undergraduate	Bachelor of Science, Forest Conservation, B.Sc. (FC)
				Bachelor of Arts, Forest Conservation, B.A. (FC)
				Bachelor of Science, Forest Biomaterials Science, B.Sc. (FBS)
			Graduate	Master of Science in Forestry, M.Sc.F.
				Master of Forest Conservation, MFC
Doctor of Philosophy, Ph.D.				

Ontario (Cont.)

Institution	Department	Contact	Education level	Program, Accreditation
Lakehead University	Faculty of Natural Resources Management	Faculty of Natural Resources Management Lakehead University 955 Oliver Road Thunder Bay ON P7B 5E1 Tel.: 807-343-8507 Fax: 807-343-8116 nrm.lakeheadu.ca/	Undergraduate	Honours Bachelor of Science in Forestry , H.B.Sc.F. Honours Bachelor of Environmental Management, H.B.E.M.
			Graduate	Master of Science in Forestry, M.Sc.F.
				Doctor of Philosophy in Forest Sciences, Ph.D.
			Algonquin College of Applied Arts and Technology	Algonquin College in the Ottawa Valley (Pembroke)
Confederation College	Natural Resources Programs	Natural Resources Programs PO Box 398 1450 Nakina Drive Thunder Bay ON P7C 4W1 Tel.: 807-475-6203 www.confederationc.on.ca/node/551	Post-secondary	Forest Ecosystem Management Technician (Co-op) Ontario College Diploma
Fleming College	School of Environmental and Natural Resource Sciences	Frost Campus PO Box 8000 200 Albert Street South Lindsay ON K9V 5E6 Tel.: 705-324-9144, Ext. 3337 www.flemingcollege.ca/programs/forestry-technician	Post-secondary	Forestry Technician Diploma

Quebec

Institution	Department	Contact	Education level	Program, Accreditation
Université Laval	Département des sciences du bois et de la forêt; Faculté de foresterie, de géographie et de géomatique	Pavillon Abitibi-Price, Bureau 2133 Université Laval 2405, rue de la Terrasse Quebec QC G1V 0A6 Tel.: 418-656-2131, Ext. 11352 Fax: 418-656-5262 www.sbf.ulaval.ca/index.php?id=7	Undergraduate	Baccalauréat en environnements naturels et aménagés, BAC
				Baccalauréat en aménagement et environnement forestiers, BAC
				Baccalauréat coopératif en génie du bois, BAC
				Baccalauréat coopératif en opérations forestières, BAC
			Graduate	Maîtrise en agroforesterie, M.Sc. (M-AGF)
				Maîtrise en agroforesterie avec mémoire (M.Sc.) (MM-AGF)
				Maîtrise en sciences du bois avec mémoire (M.Sc.) (MM-SBO)
				Maîtrise en sciences forestières avec essai (M.Sc.) (M-SCF)
				Maîtrise en sciences forestières avec mémoire (M.Sc.) (MM-SCF)
				Doctorat en sciences du bois (Ph.D.) (D-SBO)
Doctorat en sciences forestières (Ph.D.) (D-SCF)				

New Brunswick

Institution	Department	Contact	Education level	Program, Accreditation
University of New Brunswick	Faculty of Forestry and Environmental Management	Faculty of Forestry and Environmental Management University of New Brunswick PO Box 4400 28 Dineen Drive Fredericton NB E3B 5A3 Tel.: 506-453-4501 Fax: 506-453-3538 www.unb.ca/fredericton/forestry/	Undergraduate	Bachelor of Science in Environment and Natural Resources, B.Sc.ENR
				Bachelor of Science in Forestry, B.Sc.F.
				Bachelor of Science in Forest Engineering, B.Sc.FE
			Graduate	Master of Forestry, M.F.
				Master of Science in Forestry, M.Sc.F.
				Master of Forest Engineering, MFE
				Master of Science in Forest Engineering, M.Sc.FE
				Master of Environmental Management, MEM
Master of Business Administration in Forest Products Marketing, M.B.A. – Forest Products				
Doctor of Philosophy, Ph.D.				
Université de Moncton	Faculté de foresterie	Université de Moncton - Campus d'Edmundston Faculté de foresterie 165, boulevard Hébert Edmundston NB E3V 2S8 Tel.: 506-737-5239 Fax: 506-737-5373 www.umoncton.ca/umce-foresterie/	Undergraduate	Baccalauréat en sciences forestières, BScF
			Graduate	Maîtrise ès sciences forestières, MScF
Maritime College of Forest Technology	Forestry Technology Program	Maritime College of Forest Technology 1350 Regent Street Fredericton NB E3C 2G6 Tel.: 506-458-0653 Fax: 506-458-0652 mctf.ca/en/explore/program/	Post-secondary	Forestry Technology Diploma

Newfoundland and Labrador

Institution	Department	Contact	Education level	Program, Accreditation
College of the North Atlantic	School of Tourism and Natural Resources	College of the North Atlantic Corner Brook Campus PO Box 822 Corner Brook NL A2H 6H6 Tel.: 1-888-982-2268 www.cna.nl.ca/schools/tnr/	Post-secondary	Forest Resources Technician Diploma