

Canada 

EMPLOYMENT
ONTARIO

Ontario 

 FORESTS
ONTARIO

OFIA

TRAINING AND EDUCATION GAP ANALYSIS

Bridging the Gap Between Ontario's Youth
& the Provincial Forest Sector

GAP ANALYSIS REPORT | OCTOBER 2022

ENVIRONICS
RESEARCH





This Employment Ontario project is funded in part by the Government of Canada and the Government of Ontario.

The views expressed in this publication are the views of Environics Research and do not necessarily reflect those of the Province. The Government of Ontario and its agencies are in no way bound by any recommendations in this document.

TABLE OF CONTENTS

RESEARCH OBJECTIVE 04

PRIORITY TAKEAWAYS 06

STATE OF THE INDUSTRY 08

GAPS IN THE INDUSTRY 10

INDIGENOUS EDUCATION GAPS 17

APPENDIX: LINK TO DOWNLOAD FULL GAP ANALYSIS 20

Industries across Canada are seeing large portions of their workforce retire, and lack the ability to replace workers. Forestry is no exception – the sector is faced with labour shortages across a variety of roles, and these are expected to increase over the next 5 to 10 years.

This phase of the research focuses on reviewing the findings, and assessing the current forestry-related education and training available, to identify education, training and development gaps and/or capacity limitations, as well as identify interim pathways to recruit and train youth.

There is a range of educational programs, as well as training and support initiatives, available across Ontario to enable entry to the forest sector.

However, there are gaps that centre around inconsistency and lack of standardization of offerings across the province and institutions; unclear guidance and information on education pathways; and insufficient formalization of on-the-job training and experience pathways – particularly for lower qualification roles and among the Indigenous community.

PRIORITY TAKEAWAYS

- 1 For those looking to start a career in the forest industry, the education and training available is varied, and accessible across most of Ontario. But finding the relevant education paths to any individual job can be challenging.**
Information that is streamlined, easily accessible, clearly defined and updated regularly will help youth easily map out their journey.
- 2 Training and education for certain woodlands sector jobs are limited in the Greater Toronto Area and Southern Ontario.**
Having fewer options for training and education in certain geographical areas can limit the awareness and exposure that youth in those regions have to a career in forestry.
- 3 Currently, much of the training for jobs in mill operations is done on the job (vs. formal education), especially for jobs with lower qualifications.**
While there's a variety of education options across Ontario (most notably in Northern Ontario), some positions may be hard to recruit for, given youth's perceptions of hard, manual labour. Additionally, several jobs in mill operations require experience in other positions in mill operations, and will be challenging to recruit externally. Providing training pathways for those interested in moving will be important to fill those positions.
- 4 Several institutions offer education and training for Indigenous youth, with many focusing on GED and general employment skills.**
Several programs preparing youth for the workforce exist, with those focused on certificates and pathways to trades providing the widest range of employment opportunities in forestry. However, there are limited types of trade certificates available. Custom programs and partnerships with youth training organizations such as OYEP might be needed to help provide a broader range of training qualifications.

FOCUS AREAS

- 1 Lack of familiarity with the woodlands sector may lead to missed opportunities among youth who may not be familiar with the sector due to limited education and training available in certain areas. Consider improving available information related to a career path within the sector.**

Although specific college forestry programs may not exist in certain regions, there is still opportunity to increase awareness of the sector by providing information about the type of undergraduate courses available that could provide a clear path to forestry.

- 2 In mill operations, the sector should focus on Labourers in wood products, lumber, pulp and paper processing, and Machinery Operators, as the sector builds the education and career pipeline for the future.**

While initially requiring lower qualifications, several positions in the industry require cross experience in those areas. Availability of formal training could increase the recruitment pool.

- 3 Promoting awareness of forestry career options among students in Indigenous educational institutions will help recruitment efforts.**

Focusing on custom training with organizations such as OYEP will help fill the gaps in training areas that are not offered by Indigenous educational institutions.

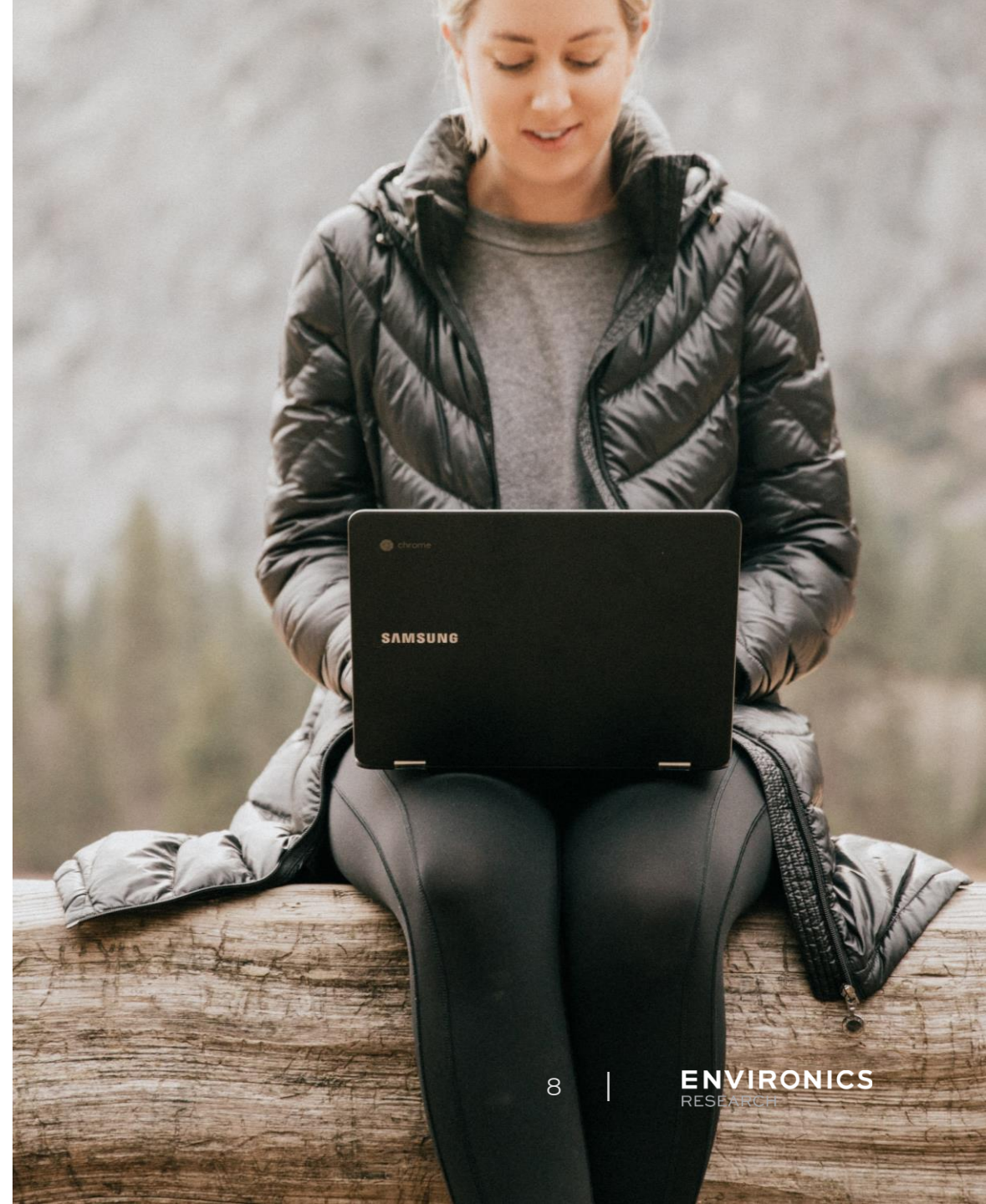
State of education

Career path information can be better streamlined

For those looking to start a career in the forest industry, the education and training available is varied, and accessible across most of Ontario. But finding the relevant education paths to any individual job can be challenging.

The wide variety of jobs in forestry, and the numerous education and training paths available to enter the field, can make it challenging to access the most relevant information to determine the right career path. To ensure youth feel like they have a solid understanding of what they need to land a job in forestry, the position requirements, and specific courses or programs that can be taken at post-secondary institutions, should be easily accessible on various forest industry-related websites.

There is an abundance of information for career path planning; however, the information is not always streamlined, easily accessible, clearly defined or updated regularly, making it difficult for youth researching a career path to easily map out their journey.



State of education

Formal training is harder to find for jobs with lower qualification requirements

Education for jobs in forestry is generally available across Ontario, especially for jobs requiring university/college degrees. Formal training for jobs with lower qualification requirements (certificates, diplomas) can be harder to find, and many times rely on on-the-job training.

Education/training options for both the woodlands and mill operations sectors vary, and depend on the specific role. Most jobs that are currently, or will become, increasingly challenging to recruit have minimum to medium entry requirements accompanied by significant on-the-job training. For some, college certificate or diploma programs can provide additional training.

Higher-level positions, or those with very specific technical training requirements, generally need a college or university program focused on forestry, engineering, business or supply chain, among others. These programs provide students with the knowledge and practical skills needed to start a career in forest management.



Gaps in education

Jobs in woodlands

Minimum gaps

Medium gaps

Larger gaps

The woodlands sector has a few positions that require specific training or education (for example, a program in Forestry Technician is usually required for working as a Professional Forester, Silviculturist or as a Woodlands Manager). College programs focused on forestry are less available in Southern Ontario and the Greater Toronto Area, which could result in missed opportunities for those who are interested in starting a career in forestry.

Job Position	Gaps
Logging Truck Driver	Availability of driving training courses and the additional CDL endorsements are readily available across the province. Minimal gaps identified for entry into this position.
Heavy Equipment Operator	College training courses – specifically for this position are limited to Central Ontario. Despite minimal college programs offered, there are various private institutions that also provide training in heavy equipment. Ensuring the type of licence or specific training required for a position will help potential candidates acquire the skills they need to be successful in the position.
Heavy Equipment Mechanic/Technician	There are various training programs provided across Northern and Central Ontario. Gaps identified are in the college programs available in Southern and Eastern Ontario . To enter this field, candidates will need to have experience either through an apprenticeship program or work experience. As such, those who may have less access to a college program that provides this training may have a harder time getting the required skills to enter the job.

Gaps in education

Jobs in woodlands (cont.)

Minimum gaps

Medium gaps

Larger gaps

Job Position	Gaps
Forestry/Logging Labourer	As minimal education is required to enter this position, there are few gaps identified for training/education. Ensure the required safety training is clearly stated when posting job advertisements, and that potential candidates have a clear understanding of where to access these training opportunities.
Harvesting Labourer	Minimal training/education required for this position – as such, on-the-job training is important for new hires entering this field. Detailed information regarding job duties should be clearly outlined for this position.
Supervisor, Logging & Forestry	Training/education gaps in the availability of Forest Technician college programs in Southern Ontario - the program that is usually required for this job position. Unless on-the-job experience in the forestry sector has been acquired through other positions, entering this position may be difficult without the training/knowledge gained through a college program.
Forestry Professional (i.e., Registered Professional Forester, Urban forester)	Training/education limited in Southern Ontario. Although 'traditional' forestry jobs related to logging, millwork, etc. may not be as prevalent in Southern Ontario, other forestry-related jobs in urban forestry, arboriculture, etc. are still relevant in this region. Limited training and accreditation options in certain regions may make it harder for those looking to become a forestry professional.

Gaps in education

Jobs in woodlands (cont.)

Minimum gaps
Medium gaps
Larger gaps

Job Position	Gaps
Forestry Technician	College programs for Forestry Technician are largely missing in Southern Ontario and the GTA . Consider these areas as possible pathways to attract urban youth with interest in forestry (since they represent the largest proportion of the population). Other forestry-related programs available in the area are undergraduate and graduate degrees.
Woodlands Assembler	Minimal training/education gaps identified for this position. As this job largely requires on-the-job training and work experience with the company, ensuring that job postings for these positions provide clear and detailed information on the required skills, job duties and career advancement opportunities will help potential candidates get in.
Woodlands Manager	There are gaps in the forestry programs available (university and college) in Southwestern Ontario . While the forest industry is less prevalent in the Southern region, there's potential interest among youth to work in a career focused on forestry. Ensure that forestry-related programs are still promoted in these areas, to increase knowledge and awareness of a career path in the industry.
Silviculturist/ Reforestation Labourer	College programs focused on forestry (i.e., Forest Technician program) are missing in Southern Ontario and the GTA . Increased exposure to these types of specialized college programs can drive interest in a career in forestry. For those interested in a career in forestry, but who live in areas where there are limited options for the required technical training and education, barriers to entry will be in part due to geographical location.
Geomatic Technician	Availability of geomatics/GIS programs across all regions.

Gaps in education

Jobs in mill operations

Minimum gaps

Medium gaps

Larger gaps

Currently, much of the training for jobs in mill operations is done on the job. For jobs requiring lower qualifications, there is some training available via college certificates and diplomas, especially in the Northern region. However, several jobs require experience in other positions in mill operations, and will be challenging to recruit externally. Providing training pathways for those interested in moving will be important to fill those positions.

Job Position	Gaps
Labourer in wood products, lumber, pulp and paper processing	Some education available across Ontario, with more options for training in the Northern region. As minimal education is required to enter this position, there are few gaps identified for training/education. However, many positions in the industry require experience as a labourer in wood products, lumber, and pulp and paper processing. This position is a potential bottleneck and should be prioritized for recruitment efforts.
Supervisor, Forest Products Processing	Limited formal education required, but this position is only available for those with experience in the area. Ensure certifications required are available to those looking to grow in their career.
Lumber Grader	As minimal education is required to enter this position, there are few gaps identified for training/education. Ensure certifications required are easy to find, and access for those in positions allows a pathway to Lumber Grader.
Log Trader	Various training programs provided across Ontario. Ensuring the position is advertised in relevant institutions can help recruitment efforts.

Gaps in education

Jobs in mill operations (cont.)

Minimum gaps
Medium gaps
Larger gaps

Job Position	Gaps
Wood Processing Machine Operator	Limited formal training options in Ontario (and none in the GTA, and Eastern and Southern Ontario). Currently, on-the-job training may be the only option for most new workers.
Sawmill Machine Operator	Limited formal training options in Ontario (and none in the GTA, and Eastern and Southern Ontario). Currently, on-the-job training may be the only option for most new workers.
Logging Machinery Operator	College training courses for Heavy Equipment Operator are not available across Ontario , but various training programs for Heavy Equipment Technician are provided across Northern and Central Ontario. Consider regions where this type of training may be popular, to include shorter/easier certificates if there is a need for more operator training. Since several positions require logging experience, training should be available to those already in the industry.
Machining Tool Operator	Some education available across Ontario, with more options for training in the Northern and Central regions. As minimal education is required to enter this position, there are few gaps identified for training/education.
Material Handler	As minimal education is required to enter this position, there are no gaps identified for training/education.
Quality Control	Type of post-secondary degree or diploma depends on the position. For those with experience in the field, there are few quality control graduate certificates available (and none in the Northern region).

Gaps in education

Jobs in mill operations (cont.)

Minimum gaps

Medium gaps

Larger gaps

Job Position	Gaps
Manufacturing Technician	Various training programs provided across Ontario. Ensuring the position is advertised in relevant institutions can help recruitment efforts.
Manufacturing Manager	While there is a variety of education pathways into the career, supervisory experience in manufacturing is the point at which there is potential for a bottleneck.
Maintenance Planner	Various training programs provided across Ontario. Ensuring the position is advertised in relevant institutions can help recruitment efforts.
Maintenance Manager	While there is a variety of education pathways into the career, supervisory experience in planning, operations or maintenance is the point at which there is potential for a bottleneck.
Operation Manager	Various training programs provided across Ontario. Ensuring the position is advertised in relevant institutions can help recruitment efforts.

Gaps in education

Jobs in other areas of forestry

Minimum gaps

Medium gaps

Larger gaps

In sciences and engineering, Environmental Supervisor was identified as one of the areas that may become harder to recruit for. While there are education options across Ontario, ensuring that students in these programs know about jobs available in forestry will be important for recruitment efforts. Traditional/Indigenous Knowledge Holders bring a wealth of lived experience and knowledge passed on by knowledge keepers. Building relationships with community leaders will be important to working together in the future.

Job Position		Gaps
Sciences & engineering	Environmental Supervisor	Various training programs provided across Ontario. Ensuring the position is advertised in relevant institutions can help recruitment efforts.
Other positions	Traditional/Indigenous Knowledge Holder	Fostering relationships with Indigenous communities will help create long-lasting partnerships.

Indigenous education gaps

Training in trades offered by most institutions

Several programs preparing youth for the workforce exist, with those focused on certificates and pathways to trades providing the widest range of employment opportunities in forestry.

Most Indigenous educational institutions tend to offer programs that have a direct positive impact on Indigenous communities (social services, midwives, education, health services, etc.), or programs that are focused on generally preparing youth for the workforce.

Some institutions offer certificates or pathways to trades, which can provide a source of trades-educated workers to a range of positions in the forest industry. Programs are offered by the Kenjgewin Teg Institution, the Ogwehoweh Skills and Trades Training Centre, the Six Nations Polytechnic, The Ogwehoweh Skills and Trades Training Centre (OSTTC), the Iohahi:io Akwesasne Education & Training Institute, The Seven Generations Education Institute, and The Wenjack Education Institute.

The Iohahi:io Akwesasne Education & Training Institute also offers a STEAM employment path, as well as a Building Essential Skills Training Pathway, which could provide trained youth to a variety of positions in forestry.



Indigenous education gaps

Training also available for general employment skills

Training is also available to develop skills for office workers and business professionals.

Overall, all Indigenous educational institutions offer GED and general employment skills to prepare youth for the workforce (including technology fundamentals, driving lessons, office work, project management, etc.). Others also have business-related education, such as Oshki-Wenjack (The Wenjack Education Institute).

Several institutions also offer custom training programs and could be important partners to the forest industry in finding and training new workers. The Seven Generations Education Institute, for example, offers customizable training programs, training allowances, wage subsidies and employment resources that help support trainees.



Indigenous education gaps

Partnership opportunities with OYEP and government

There are opportunities to work with other Indigenous and non-Indigenous-focused institutions, as well as provincial and federal governments, to increase training availability among Indigenous youth.

The Ontario Youth Employment program (OYEP) is a national network of land-based education, training and work opportunities for high school aged Indigenous youth. The program was mentioned by several Indigenous stakeholders as an excellent training institution partner to increase skilled trades training among Indigenous youth.

An example of opportunities with government organizations include the Government of Canada-funded summer internship programs, which create opportunities for both Indigenous and non-Indigenous youth to develop skills in partnership with business (<https://www.youth-jeunesse.service.canada.ca/en/programs>).



APPENDIX

For reference, the link to download the full gap analysis is available in Excel format below:

https://survey.environics.ca/MS_PN_11215_Forest_Ontario/11215_Bridging_the_Gap_Education_Gap_Analysis_Final.xlsx

CONTACT US



Susan Seto

Senior Vice President
Market Strategy, Environics Research
Susan.Seto@environics.ca



Thais Saito

Director
Market Strategy, Environics Research
Thais.Saito@environics.ca



Natalia Palacio

Senior Research Associate
Market Strategy, Environics Research
Natalia.Palacio@environics.ca

Thank you.

ENVIRONICS
RESEARCH

