

FOREST CAREERS

BACKGROUND

When people talk about working in Alberta's forests, they could mean almost anything from operating heavy equipment to doing research or working with wildlife.

About 40,000 Albertans work in the forest sector, bringing home about \$1.6 billion per year in household incomes. There are more than 50 towns and cities around the province that have forestry as their primary industry. That means that if you work in the forest you can live just about anywhere in Alberta, from major cities to small towns.

The forest products industry isn't the only career path for those interested in working in and for our forests. Alberta's beautiful forested landscape is home to a very busy, very popular tourism industry, with almost 2 million people using our forests every year for camping, hiking, hunting and fishing. Don't forget, Alberta also has forest-related careers in oil and gas, mining and even in our cities and towns

CURRENT ISSUES

Over the next few years the forest sector will see some key challenges and opportunities. The forest products industry is a growing, innovative, and technology-based industry. The old days of the "lumberjack" are long gone as complex computer systems, satellites and drones, and other cool new technology are used in forestry. The forest industry attracts a variety of skilled workers. There are many opportunities for everyone whether you like the outdoors or prefer an office setting, whether you'd like to work with others or alone. The opportunities are many and the salaries are competitive.

Environmental work is an important aspect of the forest industry. Many jobs involve managing resources, maintaining parks, delivering public education or determining the environmental impact of forest development.



There are however, a number of challenges facing the industry:

1. Alberta's baby boomers are beginning to retire and the projected workforce gap that they will leave behind is in the thousands. This however leaves room for plenty of younger skilled workers to enter the workforce.
2. Forest sector careers are often located in rural areas. Trends show that increasing numbers of young people prefer to work in cities rather than smaller towns and villages.
3. The aboriginal community in Alberta is under represented in forest careers.
4. Economic concerns come from trade battles that continue with the United States. .
5. Mountain pine beetle - this tiny, hungry insect has destroyed enormous areas of Alberta's pine forest and continue to move eastward across Canada.
6. Forestry is often perceived as a low-tech, low skill sector - the "lumberjack" thing again!

There is a wide range of opportunities to work in Alberta's forests. Among the various careers, you'll find the following:

- **Forester** – Plans and administers programs for managing forest areas and is generally employed by the government and forest products companies.
- **Forest Technologist** – Works under the supervision of a forester, but can work independently supervising oil and gas activities, harvesting, reforestation and data collection.
- **Forest Technician** – Works under the supervision of foresters to survey specific forest areas, inspect trees for disease, and use photographs and global positioning systems (GPS) to collect data.
- **Logging/Forestry Equipment Operator** – Runs the machinery used to harvest trees.
- **Mill worker** – Involved in the safe operation of equipment to produce quality lumber, pulp and panelboard (plywood, oriented strandboard) products.



Although traditional forestry careers with companies and the government are common, there are other opportunities for careers connected to the forest, such as:

- **Biologist** – Studies the potential and actual impacts of forest development on plant and wildlife species.
- **Park warden or ranger** – Works in Canada's national parks or Alberta's provincial parks.
- **Park planner** – Studies the social, political, economic and physical impact of parks.
- **Researcher** – Develops new research about forest ecosystems and contributes to development of forest policies, practices, equipment & products.
- **Instructor/professor** – Teaches at colleges or universities, conducts research.
- **Conservation officer** – Manages resources, services and public education for the government.

If you want to make a difference in Alberta's forests, why not consider a forest related career?

EDUCATION

You have heard it before: Stay in school! Almost all careers in the forest require some kind of education after high school. Forest related programs range from technical diplomas to university degrees. Becoming a forester or forestry technician requires post secondary training, while heavy equipment operators require an operators licence and specific safety training.

ALBERTA FOREST EDUCATION AND TRAINING SCHOOLS

- University of Alberta (Edmonton)
- University of Calgary
- Northern Alberta Institute of Technology (Edmonton)
- Lethbridge College
- Red Deer College
- Grande Prairie Regional College
- Northern Lakes College (Slave Lake)
- Keyano College (Fort McMurray)
- Portage College (Lac La Biche)
- Lakeland College (Vermillion)
- Plus many online & distance learning programs

Google any of these for more information.

CASE STUDY: FOCUS ON FORESTERS

A forester is a person who is involved in the “art and science” of managing forests. Foresters are often employed by the Alberta government, the forest industry, mining or oil and gas companies. You might even find a forester working for your city or town.

Basic characteristics and skills of foresters include:

- Post secondary education
- Interest in science, nature and concern for the environment
- Ability to work alone and as part of a team
- Good organization and communication skills
- Ability to direct the work of assistants and work on several projects at once
- Ability to make important decisions using science along with an understanding of the many forest values people have

The most important job of a forester is to ensure that forests will be healthy and continue to be around for future generations. To accomplish this, foresters are expected to do these things (among others):

1. Long range forest planning for recreation, grazing, tree harvesting, mining and oil and gas uses.
2. Assess the effect of fire, insects, disease or pollution on the forest.
3. Oversee the building of roads and bridges.
4. Ensure reforestation of the forest after harvesting.
5. Advise government and industry on forest management issues.
6. Develop and deliver public information, education and awareness programs.



Foresters may start their careers working outdoors, either by themselves or with small crews, often in remote and rugged terrain. The work can be physically demanding and happens rain or shine. Foresters also work indoors doing research, developing reports, planning and computer modeling.

GLOSSARY

Panelboard – a wood product usually used in home building to make walls, floors and roofs. Common examples include plywood and oriented strandboard (OSB).

Reforestation – the practice of re-growing trees in an area that has been impacted by humans (through tree harvesting, road building, oil and gas exploration, etc.), by insect outbreak or by wildfire. Usually involves hand-planting of new seedlings.

DISCUSSION QUESTIONS

1. Why do you think fewer people are choosing to live in rural (small-town) Alberta? How might this affect careers in the forest?
2. What were your views about people who work in the forest before reading this article? Would you choose a forest related career?
3. Foresters involved in the “art and science” of managing Alberta’s forests. What do you think is meant by the “art”?

WEBQUEST

Canadian Forests – A listing of current jobs available across Canada in the forest.

www.canadian-forests.com/job.html

Canadian Institute of Forestry

<http://cif-ifc.org>

College of Professional Foresters of Alberta

www.professionalforesters.ab.ca

NAIT - Forest Technology

http://www.nait.ca/program_home_76697.htm

The Greenest Workforce

<https://thegreenestworkforce.ca/index.php/en/home/>

University of Alberta – Department of Renewable Resources

<https://www.ualberta.ca/renewable-resources>