# **Examples of Forestry Jobs**



There is a great variety of jobs available to forest professionals. Check out the descriptions below to see if any interest you.

#### **Enforcement Officer**

Enforcement Officers enforce federal and provincial/territorial regulations governing the protection of wildlife, fisheries and natural resources. They conduct conservation programs and raise public awareness of conservation regulations.

Work mostly involves outdoor activities in varying weather conditions. Duties are performed both in teams and independently. Enforcement officers can work for either federal or provincial/territorial agencies governing environmental legislation or Federal and provincial/territorial parks.

## Fish & Wildlife Technologist

Fish and Wildlife Technologists are responsible for the field work and research involved with ensuring that forests are properly managed from an environmental and wildlife perspective. This career involves a combination of outdoors and lab setting tasks. Potential employers include environmental and ecological consulting firms, resource industry firms, universities, non-governmental organizations and provincial/territorial and federal governments.

## Forest Modeling Specialist

Forest modeling specialists lead the application and development of quantitative modeling and analysis techniques in support of forest programs, work with spatial forest estate models for forest management planning, and research, develop, and transfer advanced forest resource analysis techniques. Potential employers would include forestry, energy, and consulting firms, federal, provincial/territorial, regional, and civic governments, educational institutions, national or regional aboriginal organizations, individual First Nations and computer software firms.

## Forestry Engineer

Forestry Engineers work in partnership with Foresters and other Natural Resource Managers to design, implement and manage day-to-day operations associated with tree harvesting, pulp and paper production sawmilling and forest roads and bridge building, for example. Work involves a mix of outdoor and indoor activities, from industrial plants and construction sites to laboratory and office settings. Forestry Engineers can be employed by a wide array or organizations such as forestry companies, environmental groups, local, provincial and federal governments, forestry and environmental consultants, etc.

## **GIS Specialist**

GIS Specialists use computer-based Geographical Information Systems (GIS) to assemble information in maps and databases, for use in forest management. They do this by analyzing data gathered by remote sensing and ground inventory on landscapes, soils, vegetation, and much more. GIS Specialists have opportunities in several types of organizations. A few examples of where GIS Specialists can work would include federal, provincial and local government departments, surveying and computer mapping companies, environmental and forestry consulting firms, commercial map publishers and GIS / geometrics' firms, colleges and universities.

## **Harvesting Supervisor**

Harvesting Supervisors co-ordinate the placement of logging crews in forests and ensure that those crews meet the production, quality, environmental and safety standards set by the forest owners. Potential employers include forestry, energy, and consulting firms, federal, provincial/territorial, regional, and civic governments, educational institutions, national or regional aboriginal organizations and individual First Nations.

## **Heavy Machinery Mechanic**

Heavy Machinery Mechanics perform routine maintenance checks on diesel engines, transmission components, and brake systems to ensure safety and longevity of the equipment. From feedback they receive from the operators, they use high tech equipment and their problems solving abilities to get the machine back up and running as quickly as possible. They perform service and repair on various kinds of equipment such as bulldozers, loaders, excavators, backhoes, graders, and other types of heavy equipment.

Some of the potential employers for Heavy Machinery Mechanics include forestry, mining, and construction companies, equipment dealers and garages, railways or local, provincial and municipal government departments.

## **Heavy Machinery Operator**

Heavy Machine Operators are responsible for the establishment, development, and harvesting of forests. This includes site preparation for tree planting, thinning of established juvenile tree stands and harvesting of trees by conventional and mechanical means.

This occupation usually requires considerable physical strength, stamina and agility, a relatively high degree of eye-hand co-ordination, visual acuity of distance and depth perception, and a full field of vision. Exposure to temperature extremes, dampness, noise, vibration, dust, insects and other hazards require the use of safety equipment and clothing. Previous industry experience would be an asset. These professionals can work for forestry companies, contractors, woodlot owners associations and other groups engaged in forest operations, harvesting, management and preservation activities.

## **Management Forester**

Management Foresters are responsible for planning the establishment, care, and harvesting of forests in a sustainable manner. They produce operational short- and long-term forest plans that conform to federal and provincial legislation and regulations. Most work is performed in an office setting, with some requirement to work outdoors in varying weather conditions. Some duties require physical work and exposure to hazardous conditions (e.g., forest fire control activities). Management Foresters can work for forestry, energy, and consulting firms, Federal, provincial/territorial, regional, and civic government department, educational institutions, as independent consultants or for First Nations organizations.

## Millwright

Millwrights work in industrial settings performing metal working, basic welding and cutting, metal fabrication, machine shop practices, inspection, maintenance and repair of industrial equipment. The nature of this occupation requires the physical strength and agility necessary for work on heavy industrial equipment. Some of the potential employers for Millwrights can include construction sector, power generating stations, pulp and paper mills, sawmills and shipyards.

## **Non Timber Forest Products Specialist**

Non Timber Forest Products Specialists help businesses, governments and communities protect and benefit from elements in the forests beyond trees. Working with other forestry professionals, they identify opportunities for resource harvesting and protection. Potential employers would include forestry, energy, and consulting firms, federal, provincial/territorial, regional, and civic governments, educational institutions, national or regional aboriginal organizations and individual First Nations.

## **Park Interpreter**

Park Interpreters develop and deliver educational programs to visitors of parks, zoos, and conservation areas. They teach visitors about environmental conservation and protection, and about the unique characteristics of these areas.

Work involves a mix of outdoor and indoor activities. Outdoor tasks are carried out in varying natural settings and weather conditions. Office work, such as communication and program development, usually takes place in schools and learning centers. Work is mostly performed in a collaborative, team-based environment. Park Interpreters can work for Federal, provincial/territorial, and municipal parks, museums, nature centres, conservation areas, and historic sites, non-profit organizations operating and managing public education programs, such as zoos and aquariums and visitor information centers operated by the private sector.

## Skilled Logger

Skilled loggers are responsible for harvesting forests and building forest roads by conventional and mechanical means. This occupation usually requires considerable physical strength, stamina and agility, a relatively high degree of eye-hand co-ordination, visual acuity of distance and depth perception, and a full field of vision. Exposure to temperature extremes, wet weather, noise, vibration, dust, insects and other hazards require the use of safety equipment and clothing. Previous industry experience would be an asset. Skilled loggers can work for woodlot owners, forestry contractors and associations and other employers engaged in forest operations, harvesting, management and conservation activities.

#### **Urban Forester**

Urban Foresters conduct research, develop plans and administer and direct programs related to the management and harvesting of forest resources in populated areas. They plan and direct forest surveys and related studies, prepare reports and recommendations, and establish short-and long-term plans for management of forest lands and forest resources. Urban foresters are employed by municipalities, forestry companies, provincial and federal governments consulting companies, educational institutions and other industries.

## Wildlife Biologist

Wildlife Biologists conduct studies on wildlife and habitat in order to develop conservation and resource management plans. They provide consultation to companies conducting environmentally sensitive projects and raise public awareness about wildlife conservation.

Work involves a mix of outdoor and indoor activities. Fieldwork may involve working independently in remote locations. Indoor tasks are performed in laboratory and administrative settings. Potential employers for Wildlife Biologists can include environmental and ecological consulting firms, resource industry firms, colleges and universities, non-governmental organizations and provincial/territorial and federal governments as external consultants.