

# FOREST MANAGEMENT

## BACKGROUND

Alberta is commonly referred to as a “prairie” province, and while our grasslands are a signature of the province, it can easily be said that Alberta is a forest province. In fact more than half our province is covered by forests, totaling 38 million hectares. About 87% of Alberta’s forested area is “Crown land”, or land owned by the Alberta government. The federal government owns 9% in our national parks and 4% is privately owned. Since the government owns most of this land, you could say it’s really owned by the people of Alberta – like you!

## A FOREST OF VALUES

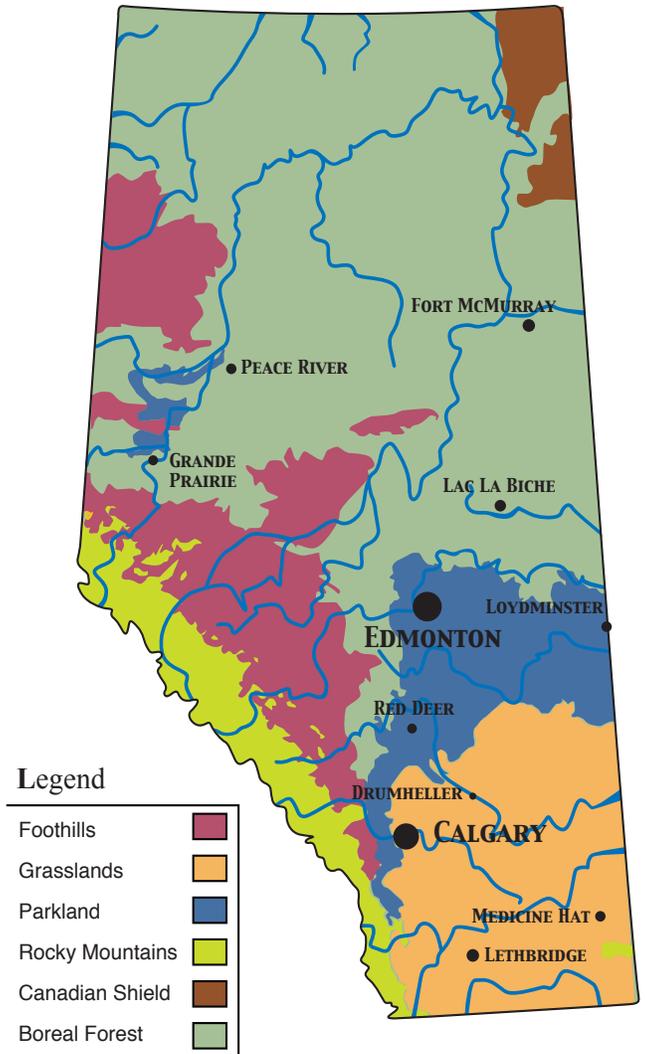
Think for a moment about the activities you most enjoy doing in the forest, things like camping, hiking, hunting, fishing, skiing, even tree climbing. Remember that on top of those activities, many people in Alberta depend on the forest to live. Whether it is a hiking guide, a trapper or a forest products company worker, many Albertans work in the forest. You can imagine that satisfying the wants and needs of so many people who want to use the forest for so many things cannot be an easy task. But it is an important job – one that involves many people working together. The following five stakeholders are a sample of those who play a role in forest management. You can probably think of others (*oil and gas, recreation, etc.*).

## IT'S ALL IN THE PLANNING!

### GOVERNMENT

We now know that the people of Alberta own Alberta’s forests. You also know from social studies that the Alberta government represents, and works for the people. The aim of the Alberta government’s forest management is to develop “a policy of sustainable forest management designed to provide ecological, economic, social and cultural opportunities for the benefit of present and future generations.” That’s a big job given the amount of forest and number of stakeholders in Alberta.

Alberta Agriculture and Forestry is the government department that manages development and sets policies and regulations for the forested regions of the province. This department also sets the forest annual allowable cut, which determines the volume of trees that can be cut in a given year in order to ensure a sustainable forest management, or ongoing forest. This government department is the one most responsible for considering all the different uses and users of the forest when making its important decisions.



## INDUSTRY

Alberta's forest products industry is the third-largest industry in our province – following energy and agriculture. It employs thousands of Albertans and provides a major contribution to our economy.

In order for the forest products industry to operate, it needs access to trees to process into lumber, pulp, paper and panelboard. To do this, the industry negotiates agreements with the Alberta government for the right to harvest and grow trees on Crown land. These agreements set the rules that must be followed - rules aimed at protecting and sustaining our forests. From the initial survey of the area, to the making of a product, forest companies are involved every step of the way.

## INDIGENOUS PEOPLES

First Nations, Métis and Inuit people have a strong relationship with the land and forest. Traditional and cultural practices like trapping, hunting, fishing and gathering of medicinal and nourishing plants are still practiced by many aboriginal peoples.

The role of Alberta's first peoples is very important in forest management. Alberta's forest industry and government meet with First Nations and Métis peoples to discuss concerns they might have with development on or near their traditional land. Trapping areas, historical burial grounds and other important issues are also discussed. Aboriginal peoples' unique knowledge of the forest ecosystem also plays a part in forest management. Some forest companies blend western scientific knowledge with indigenous wisdom to help manage not just the trees but the forest as a whole.

Many forest products companies also work with aboriginal communities to encourage career training, with the goal of attracting members of Alberta's aboriginal community to work with, in and for the forest.

## RESEARCH

Research is vital to help us make informed decisions about how we manage our forests. Using information from scientific studies alongside indigenous knowledge we gain a better understanding of how our forest ecosystems are growing and changing. There are lots of projects focused on the relationships between human uses of the forest and the land, air, water, wildlife, and climate.

## CONSERVATION AND PROTECTION

Forest conservation and protection are both important for sustainable forest management. Conservation refers to all the ways we are working to maintain the health of our forests including those that are used for harvesting. Forest protection is the creation of parks and areas that are legally protected for industrial use.

The forest sector and other stakeholders make conservation and protection a part of their forest management. There are also several non-profit organizations that are dedicated to conservation and protection of forests. By working together we can find the best solutions to forest management issues.



## CASE STUDY: CARIBOU

Woodland caribou are an important wildlife species in Alberta's forests. These members of the deer family are sometimes called the 'ghosts of the forest' as they are rarely seen by humans. They rely on slow-growing lichens for their food, therefore they prefer older forests for their habitat. Many scientists see caribou numbers as indicators of the effect of humans in natural ecosystems.

Caribou populations in Alberta appear to be declining in most regions. Predation is the main cause of most caribou deaths. A variety of factors can influence predation on caribou, or limit the growth of caribou populations. Building roads and openings in the forest can increase access for hunters, and make it easier for wolves and other natural predators to find their caribou prey. These same roads can also lead to vehicle collisions with caribou – harmful for both caribou and vehicles. Lastly, opening up areas of young forest (*such as after forest harvesting*) tends to attract deer and moose that like to eat the new growth. As predators are drawn to these areas, they are more likely to encounter caribou forced into smaller patches of old forest. Combined with the fact that the caribou have few offspring, many of these human impacts contribute to lower caribou numbers.

Since these animals have been described as indicators of forest habitat health, many users of the forest have decided that by considering caribou habitat in planning, many other benefits will also come to the forest and its inhabitants. What is good for caribou can benefit other species. For this reason and others, researchers, conservation groups, industry (forestry and oil and gas) and government are in the process of working on cooperating to protect caribou habitat.

Integrated landscape (*or land*) management (*ILM*) is forest planning that considers how the land will be used and resources managed. Environmental, social and economic sustainability, as well as wildlife, recreation, traditional uses and other activities are all factors that are considered during ILM. By communicating, cooperating, and planning together, ILM is meant to be a step forward in forest management.

For example, forest products companies, oil and gas developers and recreational users can share roads and bridges. This brings an economic benefit for the forestry and energy sectors when they share the cost of building a shared road. A reduced number of roads has an environmental benefit: it can keep more wildlife (*like caribou*) habitat intact, reduce road kill and make predation more difficult.

**Analogy:** Think of these forest management projects as a one-week trip with a large family. Everyone wants to see or do something a little different. There are many possible routes and many places you could stop. The best solution is a trip with the least amount of driving and stopping at places where more than one activity is done. With careful planning and some compromise, everyone can come away happy at the end of the trip. You still probably won't see any caribou, but that doesn't mean they're not there.



## GLOSSARY

**Annual Allowable Cut** – the amount of wood the government permits to be harvested in a particular year. In Alberta, this measurement is calculated to ensure an ongoing supply of wood. The amount of wood cut is less than or equal to the ability of the forest to grow more.

**Hectare (ha)** – a unit of measurement equaling 100 metres by 100 metres. ( $1 \text{ ha} = 100 \text{ m} \times 100 \text{ m}$ )

**Integrated Landscape (Land) Management** – an approach to forest management planning that considers the multiple uses and users of the forest and its inhabitants as a whole, rather than piece-by-piece.

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

**Predation** - the killing of one animal (prey) by another (predator).

**Regeneration/Reforestation** – the process of growing back new forests after the forest has been disturbed (*cut, burned, killed by insects or disease, etc.*).

**Stumpage** – fees paid by forest products companies to the provincial government for the right to use the trees.

**Sustainable forests** – (*also sustainability*) ensuring a healthy forest while also meeting the needs and wants of the current generation and future generations.

## DISCUSSION QUESTIONS

1. What is meant by the term “Crown land?” Why should that be important to you as an Albertan?
2. Imagine that you are responsible for designing a new road into a forest harvest area. How would you use integrated landscape management to help you make decisions on when, where and how to build your road?
3. Some people argue that the presence, or potential presence of threatened wildlife species like woodland caribou in a specific area means that no human activity should take place there. What are some of the arguments in favour and against this idea?

## WEBQUEST

**Alberta Caribou Committee**  
[www.albertacariboucommittee.ca](http://www.albertacariboucommittee.ca)

**Alberta Environmental Network**  
[www.aenweb.ca](http://www.aenweb.ca)

**Alberta Forest Products Association**  
[www.albertaforestproducts.ca](http://www.albertaforestproducts.ca)

**Alberta Government**  
[www.alberta.ca](http://www.alberta.ca)

**Alberta Tomorrow**  
[www.albertatomorrow.ca](http://www.albertatomorrow.ca)

**Foothills Model Forest**  
[www.fmf.ca](http://www.fmf.ca)