

Early Days

Forest Origins

The glacial ice that covered much of Alberta began to melt between 10,000 and 12,000 years ago, sculpting the uplands and lowlands, the fertile meadows and rocky outcrops that sustain the native plants and animals of today.

As the ice disappeared, plants such as sedges and willows returned, followed by trees. The predominant tree species, then and today, were coniferous spruce, pine, fir and tamarack, in company with deciduous poplar, aspen and white birch. As the plants returned so did the animals, and human beings were not far behind. Along with trees and people came wildfires. It was under all these dynamic influences of soils, climate, fire and people that the forests of Alberta were established. Today they represent some of the most diverse landscapes in the world.

The first people of the forest were aboriginal hunters and gatherers, living on and with the land. There is evidence that they also managed their environment through the use of fire to clear certain forest areas for ease of travel and to encourage the plants and animals on which they depended for life.

The first Europeans, arriving after the mid-1700s, were mostly interested in furs for the

European market. Missionaries and settlers followed the traders, and all were frequently challenged by extensive wildfires that threatened their homes, livestock, timber and water supplies. Concerns about this threat eventually led to the formation of an organized forest service in Alberta.

Forest Use

Most of Alberta's forests are located on Crown (public) lands, meaning governments have the major responsibility for forest management. This designation evolved from early colonial regulations requiring that timber be preserved and kept as a strategic reserve for use by Britain's military shipbuilding industry. In 1826 this Crown reservation of timber was modified to allow public sale of timber that was deemed "not fit and proper" for Britain's Royal Navy. These new regulations for the sale of timber contained four clauses, which set lasting precedents. The clauses included continued Crown ownership of forested land, leasing of harvesting rights, selling timber by auction or tender, and allocation of cutting permits that were renewable if certain conditions were met.

The government of the United Provinces of

Upper and Lower Canada enacted *An Act for the Sale and Betterment of Timber upon Public Lands* in 1849. This legislation incorporated the principles of 1826, and formed a model for later forest laws within the provinces and on Dominion lands. Most significantly, it continued the arrangement under which timber-harvesting rights were leased while the forestland remained in public ownership. This fundamental concept remains in force on Alberta's provincially-owned Crown land to the present day (2005).

The land now called Alberta was



Aboriginal family north of Hinton, 1913
Dominion Forestry Branch, AFHPC

partly contained within Rupert's Land, the area granted in 1670 to the Governor and Company of Adventurers of England Trading into Hudson Bay, or what became known as the Hudson's Bay Company. After Confederation in 1867, Canada's first Prime Minister, Sir John A. Macdonald, negotiated the purchase of Rupert's Land to help realize his vision of a Canada stretching from sea to sea. By 1870 he had succeeded in this. Britain granted its other northern lands on the continent and Canada became owner of the North West Territories. Macdonald created a Department of the Interior to manage this huge area, parts of which would become the Provinces of Manitoba, Saskatchewan and Alberta. At that time the founding provinces in central Canada had been granted control of their forested lands and resources. However, Macdonald had been concerned about timber supplies and forest fires. He thought it would be a "very good thing," as he explained to his friend Sandfield Macdonald,¹ that since the Dominion government had no direct interest in the subject, and since forests were a provincial responsibility in central Canada, that Ontario and Quebec should set up a joint commission to examine: 1) the best means of cutting the timber after some regulated plan, as in Norway and on the Baltic, 2) replanting so as to keep up the supply as in Germany and Norway, and 3) the best means of protecting the woods from fires. His concerns were later reflected in policies for prairie forests as well.

In the region that would become Alberta, the strongest initial demand for wood had been for firewood. Construction logs and fence posts were next, with coniferous white spruce and lodgepole pine being the species most often used for these purposes. Demand for boards was limited, and they were mostly sawn by hand in

sawpits or frames. A good two-man team could saw up to 25 planks a day. Gradually a few small, mechanized sawmills began to supply lumber for local needs. Oblate missionaries at the Lac La Biche Mission built Alberta's first powered sawmill, a converted gristmill driven by water. The waterwheel was rebuilt to a diameter of 15 feet and the mill began sawing in 1871, producing over 250 planks per day when the

water was flowing and the homemade belts stayed on.

The Dominion Lands Act of 1872 enabled the federal government to sell timber cutting rights through Timber Berths and a variety of permits. It also provided authority to exclude timberlands from sale and settlement. This authority was later used to establish the first Forest Reserves. The

Act also required timber operators to prevent the ignition and spread of fires.

Wildfire Problems

Despite the good intentions of forestry staff and enforcement of regulations by the North West Mounted Police, fire problems continued to grow. Even in 1883, when Prime Minister Macdonald appointed J.H. Morgan as a one-man commission to "examine into and make a Preliminary report on the subject of the protection of the forests of the Dominion," fire was a major concern. In his sweeping report of 1885, Morgan's remarks included the following:

"Enough has been shown to make it evident that it is the duty of our Government to adopt measures, immediately, to arrest further destruction of our remaining forests (except under some very improved system of supervision), and to replant, where practicable, the high lands which were formerly covered with forest trees, and also to devise or adopt some



Pit-sawing lumber, Fort Smith, NWT, 1900
Provincial Archives of Alberta

plan or system of forest plantations for the great stepped [prairie] region of the North-West.

“In any system that may be adopted by Canada, special care should be given to see that provision is made for the fullest enforcement of the laws. The Government of the Dominion should, without loss of time, appoint a Forest



Ghost River fire, c. 1915, Bow River Forest
Dominion Forestry Branch, AFHPC

Commission, to co-operate with a similar Commission from every Province in the Dominion, to deal with this all-important question of the protection of our old forests and the production of new forests.”²

These general aims underpinned Canadian forest management policies for more than a century afterwards. Morgan also commented on four other items which remained key issues for the next 70 years: not knowing the extent and nature of forest resources, the undesirable consequences of uncontrolled cutting and fires, the need to organize a system of forest management, and the importance of forestry schools to train qualified staff.

Prairie fires continued to be a persistent and growing problem. The Department of the Interior first discussed the need for firebreaks, seasonal fire guardians and organized volunteer fire brigades in its Annual Report in 1886. That same year, the Council of the North West Territories passed an ordinance establishing fire districts and appointing fire guardians. The North West Mounted Police were spread very thinly throughout the country,

making it difficult for them to effectively enforce the fire ordinances. They also reported that local Justices of the Peace were usually reluctant to prosecute fire violators. For whatever reasons, settlers seemed to have a fatalistic approach to prairie fires, confounding efforts by the department to encourage ploughing of firebreaks.

This growing problem set the stage for formation of a forestry agency within the federal government. Advocates promoted the need to protect forests on Dominion lands. Other goals included setting up Forest Reserves to protect water supply, managing the forests to ensure a supply of wood for settlers, and planting trees on the prairies to provide timber and localized climate benefits.

The Dominion Forestry Branch

On July 24, 1899, the Wilfrid Laurier government in Ottawa passed an Order in Council to create the post of Chief Inspector of Timber and Forestry in the



Early fire control posters

Dominion Forestry Branch, AFHPC

Department of the Interior. This was the start of what would become Canada's largest organized forest service for the next 31 years - the Dominion Forestry Branch (DFB). It was responsible for forests in Canada's interior western region that later became Alberta, Saskatchewan, Manitoba, Yukon and the Northwest Territories.

On August 15, 1899 Elihu Stewart was appointed Canada's first Dominion Forester in Ottawa. During his first year as Chief Inspector he made two trips west through Manitoba, present-day Saskatchewan and Alberta and parts of British Columbia, five months in all to see more of the western forests first-hand.

After his journey, Stewart stated that there would be two great divisions to the work of his branch, both of which deserved careful attention: the protection and management of the present forested areas, and the encouragement of tree planting on the prairies. At the same time, the sale of timber was important for revenue. Timber sales and revenue were handled by the federal Timber and Grazing Branch, while the DFB was responsible for inspections, forest protection and forestland management. The appointment



Elihu Stewart, first Dominion Forester
Dominion Forestry Branch, AFHPC



York boat, Saulteaux Landing, Lesser Slave Forest Reserve, 1911
Dominion Forestry Branch, AFHPC



of the first two rangers in what was to become the Province of Alberta took place in 1899. Ranger D.G. McPhail worked under the supervision of C.L. Gouin, who was in charge of the Calgary Timber Agency. The other ranger, John A.C.

Cameron, was responsible to Thomas Anderson, head of the agency at Edmonton.

Increasing populations and resultant political activities in what is now Alberta led to a request by the NWT Council for provincial status. The council advocated one new province, to be called Assiniboia, with control of its natural

resources. However, in 1905 Parliament instead established the provinces of Saskatchewan and Alberta, while retaining federal control of natural resources.

With natural resources in federal control, an interesting 25-year period of

duality of governance began in which forestry, wildlife and public lands activities were handled by the federal government. As a result, the DFB continued to develop its operations in Alberta. For the most part, this worked well, but some disputes between the two levels of government arose when responsibilities collided. For example, DFB staff complained at one point that brush disposal on provincial roads created fire hazards and provincial

cooperation to improve the situation was lacking. Dominion staff also commented that settlers in forested areas berated them for not fighting fires in those areas, while in fact the province – whose fire wardens began wearing a special uniform in the spring of 1911 - had responsibility for settlement areas and would not appoint DFB staff as fire guardians. The situation changed in 1921 when Alberta amended the *Forest and Prairie Fire Protection Act* to give DFB staff and fire rangers *ex officio* authority to enforce provincial legislation.

Forest Reserves

The Forest Reserve system was the most prominent DFB program prior to 1930. Even before the DFB was created in 1899, the federal government had started to set aside five areas in Alberta as possible Forest Reserves. These reserves, identified by federal departmental order, were Cooking Lake, Foothills, Kootenay Forest Park, Louise Lake Park, and Sand Park.

In those early years the forested areas of the North West Territories, including the future province of Alberta, were vast and government resources were very limited. Stewart decided to focus his efforts on a system of Forest Reserves covering the most important areas. His early surveys laid the groundwork for the first *Forest Reserves Act* of 1906. Most of the areas that were previously excluded from settlement by departmental order were now confirmed in legislation as Forest Reserves, and many new ones were also declared. The total area reserved in Alberta in 1906 was 6.2 million acres, including Cypress Hills and Cooking Lake, and the entire southern



Construction near completion on new gateway into the Bow River Forest, c. 1915
Dominion Forestry Branch, AFHPC

East Slopes. This was a good start but there were many other candidate areas to examine, so forest surveys were extended. These covered a wide band including the northern foothills and the boreal forests from Lac La Biche west through Lesser Slave Lake and Whitecourt to the British Columbia boundary, and north through Grande Prairie and Peace River. These forest surveys were conducted through 1915 and led by notable foresters such as J.A. Doucet, P.Z. Caverhill, G.H.

DOMINION FOREST RESERVES IN ALBERTA – 1915

Forest Reserve	Forest	Area Approx. mi ²	Headquarters	Total Area mi ² / million acres
Rocky Mountains Forest Reserve				
	Crowsnest Forest	1,544	Blairmore	
	Bow River Forest	3,089	Calgary	
	Clearwater Forest	4,247	Rocky Mtn House	
	Brazeau Forest	4,633	Coalspur	
	Athabasca Forest	3,861	Hinton	
Cooking Lake Forest Reserve				
			Edmonton	27/0.017
Cypress Hills Forest Reserve				
			Calgary	156/0.100
Lesser Slave Forest Reserve				
			Slave Lake	5,023/3.215
Total Area of Forest Reserves				22,735/14.550

Areas above interpolated from *Annual Reports of the Director of Forestry, Department of the Interior, Ottawa, for the fiscal years ending 31 March 1913 and 1914.*

The Athabasca Forest, in the foothills region around Hinton/Edson, was sometimes, but not consistently, spelled Athabaska.



ALBERTA

Forest Reserves, Proposed Forest Reserves & National Parks c.1929

- DOMINION FOREST RESERVE
- PROPOSED FOREST RESERVE
- ROCKY MOUNTAINS FOREST RESERVE
- NATIONAL PARK

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