

**Canadians  
and the  
Natural  
Environment  
to the  
Twenty-First  
Century**

**NEIL S. FORKEY**

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## CANADIANS AND THE NATURAL ENVIRONMENT TO THE TWENTY-FIRST CENTURY

Canadians' relationship with the natural world has been informed by two major impulses: the need to exploit natural resources and the desire to protect them. In *Canadians and the Natural Environment to the Twenty-First Century*, Neil Forkey explores these two opposing impulses and fills in the middle ground to reveal a complex and evolving narrative of the interplay between humans and the natural world in Canada. He provides the historical foundation necessary to understand contemporary environmental issues in Canada.

Forkey's engaging survey addresses significant events and perspectives from across the country over the past four hundred years: the early conception of Canada as a storehouse of natural resources and a site for scientific exploration; resource exploitation and conservation in the nineteenth and twentieth centuries and their socio-economic implications; Romanticism and the preservation of nature in the Victorian era; the era of environmentalism that began after World War II; and Aboriginal points of view. *Canadians and the Natural Environment to the Twenty-First Century* provides an accessible synthesis of Canadian environmental history that takes into account the important temporal, demographic, social, economic, political, and cultural forces that affect the natural environment.

(Themes in Canadian History)

NEIL S. FORKEY is a visiting assistant professor in the Department of Canadian Studies at St. Lawrence University.

# THEMES IN CANADIAN HISTORY

Editors: Craig Heron and Colin Coates

*To my family. For Roseline, this project began in Paris, summer 2004, what a wonderful memory. This is for you for more reasons than I can ever count. Pierre-Laurent, I hope you will always be fascinated by the tall trees of Parc Laurier. And, Éléonore, don't ever stop gazing and wondering at the stars.*

*To my father, John F. Forkey, from whom I learned so much.*

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# Contents

ACKNOWLEDGMENTS ix

Introduction 3

1 The Classification of Canada's Environments  
(1600s to Early 1900s) 5

2 Natural Resources, Economic Growth, and the  
Need for Conservation (1800s and 1900s) 33

3 Romanticism and the Preservation of Nature  
(1800s and 1900s) 68

4 Environmentalism (1950s to 2000s) 84

5 Aboriginal Canadians and Natural Resources:  
An Overview 107

Conclusion 124

SELECTED BIBLIOGRAPHY 127

INDEX 151



CANADIANS AND THE NATURAL ENVIRONMENT  
TO THE TWENTY-FIRST CENTURY



# Introduction

What does it mean to read Canadian history through its environment? Examining the natural landscape or created cityscape as a historical source makes visible the human impression, or imprint. We notice the actions and ideas that shaped, refashioned, or made sense of a given place. We also gain insight into what past peoples valued, what they preferred as living space, and what they accessed as sources of sustenance.

At the surface level, Canadians' experience with the natural world has been informed by two major impulses. The first is the need to exploit natural resources, while the second is the desire to protect them. Admittedly, this is a rather blunt way to begin the text, but it will prove useful. If we take these two opposing impulses as our starting point, we can effectively fill in the middle ground with more subtle and nuanced investigations to reveal a complex story. Temporal, demographic, social, economic, political, and cultural forces have coalesced to create the contemporary microenvironments that make up Canada. The cast of characters that orchestrated these changes is vast: hunters, fishers, farmers, woods workers, miners, naturalists, foresters, businesspeople, bureaucrats, household consumers, novelists, university students, automobile drivers, and so on. Canadians from all regions and walks of life have been actors in tandem with the natural world. The story told here involves us all, since we each have some interaction with our natural surroundings.

#### 4 Canadians and the Natural Environment

Environmental history places humans and nature together in the same historical space. Although it might be tempting to think of human and environmental histories as two separate and exclusive domains, such compartmentalization hardly reflects the reality. It is impossible to fathom these two narratives as discrete given the influence of nature, resources, wilderness symbolism, and the like on people in Canadian history. There is a strong case to be made for the idea that humans and nature are mutually entwined in one related narrative of Canada's past. The objective of this book is to make that case.

This modest-sized text covers over four hundred years of Canadian history. Necessity dictates that there be a compression of data and a distillation of material. The emphasis here is on clearly presenting the main ideas, illustrated by strong examples, in the most efficient and economical manner. The first chapter examines initial encounters with the place that became Canada, up to the early twentieth century. This entry into the subject matter provides an overview of the early conception of Canada as a storehouse of aquatic, forest, and agricultural staples, as well as a site for natural history study and scientific exploration. The second chapter takes up both the exploitation and conservation of resources. In so doing, the various socio-economic realities of such attempts are explored. Romanticism and the preservation of nature are the focus of chapter three. Chapter four probes the more recent history following the Second World War. This so-called era of environmentalism is an unfinished story. In so many instances, we search for ways to accord the natural world some sort of sustainable future, while simultaneously pursuing fossil fuel use that contributes to climate change. Aboriginal points of view are found in nearly every chapter, but receive specific consideration in chapter five. While a comprehensive analysis of current environmental debates is beyond the scope of this work, readers will find a narrative that places the natural world squarely in the broader Canadian story.

## The Classification of Canada's Environments (1600s to Early 1900s)

Since Aboriginal and European peoples' first encounters with this land, natural resources have been essential to Canada's unfolding story. Fish, furs, timber, agricultural produce, minerals, and hydroelectric bounty continued to propel Canada's economy until at least the middle of the twentieth century. Between the seventeenth and twentieth centuries, Canada first became consolidated as a French possession, later came into the hands of the British, and finally became an independent nation whose own federal and provincial governments encouraged the exploitation of the environment for economic gains. Throughout this period, Western science probed the utility of staples extraction in the northern half of the North American continent. The classification and naming of geological, meteorological, and biological aspects of this new land was paramount to the economic endeavours at hand, and this scientific inquiry is an essential starting point here. Concurrent with the exploitative impulse, natural historians of the past also discovered the finer details of these unfamiliar ecosystems and gave inspiration to those who later worked to celebrate and protect the living world.

### **First Encounters with the Land**

Natural resources are what initially attracted humans to the place that became known as Canada. The Aboriginal

## 6 Canadians and the Natural Environment

peoples, after all, were migrants; they came from Siberia across an ice bridge that once spanned the Bering Strait. They searched for large mammals and were either unable to return to their place of origin, or found sustenance in the environment they encountered. They became, in Alfred W. Crosby's phrase, the 'geographic avant-garde'; that is, they learned to master their natural surroundings and turn challenges to their advantage (18).

Much later, Europeans arrived as part of the 'technological avant-garde' (ibid.). From the Middle East north to Europe, they were more urban based, had domesticated animals, and had developed a mathematical understanding of the world that was expressed in a scientific curiosity. Their economic drive fed their desire for exploration. Their mapping of the solar system and advancement in sailing vessels enabled them to reach the New World. The course of human history led Europeans and Aboriginal peoples to encounter one another in a sustained manner around the sixteenth century.

Consider the path followed by the earliest inhabitants, whether Aboriginal or European. To them, Canada must have seemed a place of limitless bounty. Aboriginals hunted game of all sorts – they rushed bison off cliffs, burned forests to better hunt deer, and speared and seined fish. Where possible, they practiced horticulture, and sometimes agriculture. Trade networks flourished as well; Huron cornmeal, for example, was exchanged for Ojibwa fur pelts. Shelters and weapons were crafted from animal hides and bones as well as wood and rocks. Medicinal remedies were also found in nature, as many as five hundred of which are still in use today. Early French missionaries were impressed by the local knowledge of the Aboriginals when it came to questions of health and longevity. The Recollect missionary Chrestien Le Clercq declared the inhabitants of the Gaspé to be

nature physicians, apothecaries, and doctors, by virtue of the knowledge and experience they have of certain herbs, which they

use successfully to cure ills that seem to us incurable . . . [they] generally enjoy perfect health right up to a fine old age, for they are not subject to several of the maladies which afflict us in France . . . (Le Clercq 296)

Aboriginals adapted various ecosystems to fit their needs; they manipulated the natural world in order to subsist and constructed complex trading nexuses. European newcomers, in turn, altered the land to fit their own ways of living. The land was colonized unevenly from east to west, at different times and with varying degrees of impact. Examining the first two centuries of European or Euro-Canadian entry into each region, however, often yields a similar story; environmental change was sporadic and localized.

Such was the case in New France. The lack of an overwhelming French presence before the Royal Charter of New France in 1663 (in 1608 there were only twenty-eight settlers in the colony, but by the time of the Conquest of 1760, when parts of New France were handed over to Britain, there were approximately seventy thousand) meant that these colonies still retained a pre-contact environment in many locations. As the number of French settlers increased, however, familiar European species were transplanted to North America; a phenomenon that Crosby refers to as the transfer of 'portmanteau biota' (89). Migrants from France brought European plants (e.g., wheat, rye, barley, oats, millet, buckwheat, peas, flax, hemp, cabbages, asparagus, and watermelons) and animals (horses, cows, pigs, chickens, and rats) to the new land, sinking European roots deeper into Canadian soils. It is estimated that by 1672 all the plants and animals of importance to life in the old country were present in the colony. The seigneurial system of property division, another Old World imprint (reminiscent of feudalism), parcelled out rectangular plots of land along the banks of the St Lawrence River to landlords chosen by France's king. Once the land was bounded, some forests were quickly denuded; by the 1720s a few riverine communities lamented that the forest was gone, to the detriment

of users who now needed to find wood much further back from the water.

A small French population inhabited Acadia. In 1650, there were three hundred Acadians, but their numbers had risen to between fourteen thousand and eighteen thousand on the eve of their expulsion in 1755, during the Seven Years' War. Diking the marshlands is an obvious example of the ecological change they brought. In order to grow wheat while still inhabiting the aquatically rich coastline, Acadians took to creating dikes. They reclaimed land from the sea by constructing log embankments that kept the twice-daily tides from coming inland. Drainage ditches contained wooden sluices (*aboiteaux*), which were fitted with clapper valves and allowed water to drain from farmland back to the ocean, but then shut tight to prevent sea water from passing inland. An observer in 1708, N. Dièreville, was thoroughly impressed:

The ebb and flow of the Sea cannot be easily stopped, but the Acadians succeed in doing so . . . [a]n undertaking of this nature, which can only be carried on at certain Seasons when the Tides do not rise so high, costs a great deal, [and] takes many days, but the abundant crop that is harvested in the second year, after the soil has been washed by Rain water compensates for all the expense. (Clark 161)

This European-introduced technology allowed Acadian farmers, already short on labour, to put down a crop but avoid wholesale forest clearing. Similar techniques were used along the lower St Lawrence River (at Kamouraska) into the twentieth century.

By comparison, the lands west of the Ottawa River were virtual wilderness until the beginning of the nineteenth century. United Empire Loyalists sided with Britain during the American Revolution. When the English lost the war, upwards of forty thousand Loyalist migrants made British North America their new home: Nova Scotia received approximately thirty thousand, what is today Quebec took



in another two thousand, and seventy-five hundred went to what would come to be called Upper Canada (and later Ontario). Hundreds more 'late loyalists' arrived during the 1790s, but sparse populations and dense forests continued to make for slow progress when it came to environmental change. By the mid-nineteenth century, after subsequent bursts of migration from the British Isles, this situation changed; within a generation Upper Canadians had become veritable 'ecological revolutionaries,' reshaping the land with their numbers and the new species of crops they introduced (Wood xvii). Wheat, corn, oats, potatoes, and hay became principal crops, while holdings of livestock evinced a farmer's rising income. Potash became the first cash crop as forests were thinned; it was created by burning wood, then constantly pouring boiling water over the ashes which turned them into liquid lye. Lye was an alkali used to make soap, glass, and bleach, among other things. Sawmills dotted riverbanks – there were over fifteen hundred by 1848, triple the amount found only eight years earlier. In the 1840s timber exploitation served as the second major pillar of the economy, resulting in the loss of one-third of the mature woodland south of the Canadian Shield. (During the next thirty years, nearly three-quarters would disappear, and on the eve of World War I, 90 per cent would be gone.)

As late as 1763, what would become the interior portion of the continent (the Prairies) was considered *terra incognita*. This large expanse was known as Rupert's Land and was possessed by the Hudson's Bay Company (HBC). The fur trade linked this region both by sea to London and overland to Montreal, where the North West Company (NWC) also competed for western furs. Following Confederation in 1867, Rupert's Land was transferred to the Dominion of Canada; the HBC received \$1.5 million and continued to operate, though in a more circumscribed way. Ontarians took their ideas of husbandry and agricultural improvement with them as they moved onto the Prairies after 1870. In Manitoba, for example, legislators took a cue from their