

Book Reviews

Book Review Editor's Note: *The Canadian Field-Naturalist* is a peer-reviewed scientific journal publishing papers on ecology, behaviour, taxonomy, conservation, and other topics relevant to Canadian natural history. In line with this mandate, we review books with a Canadian connection, including those on any species (native or non-native) that inhabits Canada, as well as books covering topics of global relevance, including climate change, biodiversity, species extinction, habitat loss, evolution, and field research experiences.

Currency Codes – CAD Canadian Dollars, USD US Dollars, EUR Euros, AUD Australian Dollars, GBP British Pound.

BOTANY

Curieuses histoires de plantes du Canada. Tome 1: 1000-1670, Tome 2: 1670-1760, Tome 3: 1760-1867

By Alain Asselin, Jacques Cayouette, and Jacques Mathieu. 2014, 2015, 2017. Septentrion. 288, 328, 312 pages, 44.95, 49.95, 49.95 CAD, Paper.

When early explorers from Europe came to Canada they found not only a new land, but also a new flora comprised of many plants they had never seen or heard of before. During these early explorations plants were sent back to Europe so that botanists could study them or grow them for food or medicine. For these first modern botanists it meant making many new discoveries. Some more adventurous botanists even made the trip across the ocean in the hope of finding new species. The native people who inhabited the land centuries before taught the newcomers about many useful plants, and even saved their lives by showing them how to use a mysterious plant potion they called *Annedda* to cure them from scurvy. However, early botanists wanted to describe and name the new plants according to the botanical knowledge of their scientific culture. The difference between traditional and scientific plant knowledge as well as the science of botany, which was still at its infancy, sets the scene for many fascinating stories.

Curieuses histoires de plantes du Canada is a series of books describing interesting botanical and historical facts of Canadian plants. Many botanical discoveries were made during important historic events that defined Canada. These events are recounted in these books with emphasis on plants or plant particularities that were discovered contemporaneously. The three recently published volumes are divided according to important milestones in Canadian history. The first volume contains stories spanning the time frame from the first Viking explorations to around the beginning of the Hudson Bay Company. Volume two takes place during the French rule period, while the third volume takes place during the British rule period until the time of confederation. Each volume is divided into multiple short stories presented in chronological order. Each story provides the reader with the necessary historical context at the time of these botanical discoveries and

describes what was known about the plants at that time. The stories also highlight specific points about the people and circumstances leading to the discoveries.

It is interesting to see how botanical knowledge evolved through time. Of frequent interest to readers may be the historical medicinal values and other beneficial properties of plants. One example is Bloodroot (*Sanguinaria canadensis*) which was once used as toothpaste and mouthwash. It was proven that Bloodroot does not have any effects against dental plaque or gingivitis but there may be antimicrobial and antitumor properties that have yet to be discovered. Another interesting story explains an easy recipe which was used to test for food adulterants in flour. By placing a small quantity of flour in a glass of water and adding sulphuric acid, it was possible to evaluate for impurities. If the flour was pure, the sulphuric acid would consume all of it. Adulterants would have been clearly visible after 10 minutes because they would not have been consumed. In addition, materials such as lime would cause the mixture to fizz. Some other stories relate interesting anecdotes behind plant names. Some stories convey information on the persons who named the plants and others on who they were named after. One example is the story about Sir Joseph Banks, a famous English naturalist with connections to the Canadian railway system. As a matter of fact, *Pinus banksiana* was named in honour of his legacy and it happens to be one of the most commonly used timber in the production of railway ties in Canada. These books contain many more stories, all sharing with the reader curious and intriguing facts about plants.

This book series is both pleasant and interesting to read. It is beautifully edited and includes many appealing botanical and historical drawings of great aesthetic and scientific value. Numerous text boxes provide more detail on various aspects present in the stories. Exten-

sive botanical and historical research documents each story and references are provided either at the end of every story or even at the end of each text box. Recent scientific literature references are also used to provide a contrast with the knowledge of our ancestors, or in some cases to confirm their beliefs and findings. Because nomenclature has changed a lot through time, the authors use modern nomenclature to identify the organisms in the books; the plants are referred to with their original names and verified with those now accepted in VASCAN (data.canadensys.net). Looking back in time, some plants were initially thought to be something completely different from what is known today. However, we must also admit that how information on plants is now captured has evolved greatly, though sometimes at the expense of ancestral knowledge about the plants with whom we coexist. The stories narrated in these books help revive countless facts that are generally overlooked in botanical textbooks.

I recommend reading the books if you are interested in plants and you enjoy history. Furthermore, it is an essential read for anyone wishing to learn more about the cultural aspects of Canadian plants. Because all the books contain short stories, it is easy to take breaks be-

tween stories and continue later. As well, I think that readers who don't read French books can cope with the challenge of reading these books. The effort of understanding the text is worth it. One can also learn many things just by flipping through the books, reading the titles, and looking at the illustrations. These books have synthesized centuries of historical knowledge relevant to plant sciences from a vast array of sources, and it is ultimately worth reading them in detail. The three currently published volumes constitute a very good reference on early botanical science. The books are easily searchable, whether one is looking for information on a particular plant, on medicinal properties, on a specific locality, or on a botanist, via a very detailed index. For anyone doing research on Canadian plants or wishing to learn more about them, these books provide subtle details that allow one to enrich their existing knowledge of these plants. I am looking forward to the next book(s) in the series to learn how contemporary botanists have contributed to botanical science and what twists the authors will take to make the more recent plant stories interesting to read.

ALEXANDRE BLAIN
Gatineau, QC, Canada