# The Canadian Field-Naturalist

# **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 books covering topics of global relevance, including climate change, biodiversity, species extinction, habitat loss, evolution, and field research experiences.

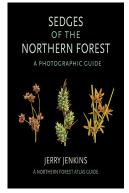
Currency Codes: CAD Canadian Dollars, USD United States Dollars, EUR Euros, AUD Australian Dollars, GBP British Pound.

#### BOTANY

## Sedges of the Northern Forest: A Photographic Guide

By Jerry Jenkins. 2019. Cornell University Press. 96 pages, 16.95 USD, Paper.

Another regional guide to identification of sedges (Cyperaceae) has been published, this time covering the species found in what has been referred to as the "Northern Forest". This book—and it's companion "Quick Guide", a boxed set of two fold-out charts—joins several other excellent treatments of sedges from various parts of North America that have been



published in recent years. The area covered by this book does not include much of the forest region Canadians generally would think of as "northern", which would be the boreal forest; rather, it covers mainly what we think of as the Great Lakes—St. Lawrence Forest Region in Ontario and Quebec, and the Acadian Forest Region in the Maritime Provinces (Rowe 1972).

As the title indicates, this book is a photographic guide. It is laid out in such a way that comparisons among similar species can be made easily. The use of a black background behind the images assists greatly in highlighting the important features, such as shape of the perigynium, venation on the perigynium surface, perigynium beak shape, size, and orientation, overall inflorescence and individual spike morphology, scale shape, colour, and size, and various other features that are critical for identification. The great majority of the species found in the region are included with photographs, but there are a few spe-

cies for which only brief mention is made in the text that supplements the photographs; most of the species without photographs are rare, range-edge species within the region covered.

The book begins with a brief introduction explaining its role and ways to use it. This is followed by an illustrated glossary, the illustrations being simplified caricatures or outlines of the features being described. Throughout the book, some simple symbols and abbreviations are used to assist in interpretation of structures, such as symbols for the sex of the individual flowers or spikelets, and the cross-sectional shape of the achenes. A helpful section on vegetative features, arrangement of spikelets within the larger inflorescence, achene shapes, perianth bristles, etc. is followed by a quick guide to the genera found in the flora, the latter again accompanied by stylized illustrations. Then, the detailed treatment of genera and the sections and species within them (in Carex, for example) follows. All genera, and in the case of Carex, sections within the genus, are treated alphabetically. Following this, a section called "Quick Guides to Carex" provides more details on morphology of spikelets, including arrangement of the sexes within them, perigynia, achenes, and, to a lesser extent, leaf and sheath features. Short paragraphs supplement the photographs in this section and provide additional hints on identification including, where applicable, habitat notes. More detail on each species is found later in the text, but this section provides a quick reference to help in narrowing down which group within *Carex* a specimen belongs.

Almost half of the book is dedicated to photographs of the most important features that aid in the

identification of individual species. Generally, the photographs focus on inflorescence, spikelet, flower, and achene features, but occasionally also include vegetative features. Key features are noted with the photographs (e.g., solitary spikelet, stems smooth, base of bract with lobes), and there are also paragraphs for each genus, section, or group of similar species highlighting distinctive features or providing brief notes on habitat preferences. The quality of the images generally is very good and the notes are helpful. In most cases, the photographs selected for inclusion convey a good representation of the characteristic appearance of the species. For difficult groups such as Carex section Ovales, a nice job has been done of grouping similar species together on the plates (e.g., species with perigynia >2 mm wide, species with perigynia covered by the scales). Another difficult group, the genus Eleocharis, has also been dealt with quite well, with good images and notes. One exception to the representation of species with typical photographs is the image of the upper part of the inflorescence of Carex molesta, which does not convey its typical appearance, at least to my eye. The spikelets usually are more closely aggregated into a cluster. Another exception is the inflorescence of Carex lenticularis, which normally shows a striking pattern of pale green perigynia among bicoloured black and green scales within the spikelets.

I did detect a number of typographical and formatting errors in the text, such as an incorrect symbol beside the inflorescence of *Carex exilis*, lack of italics here and there, the odd missing letter in a word, duplicated entries in the list of older names on p. 87, errors with the listing of Carex appalachica and Carex radiata in the list of older names, and so on, but in general the text and the plates are well put together. The author has included his own opinions on topics such as the flurry of nomenclatural changes that has occurred with Carex sectional names over the past few decades, the distinctness (or not) of certain species (e.g., Carex tincta), and similarities among unrelated species, all of which add some colour to the text. One such comment that has me scratching my head, though, is his perception that Carex capillaris is somewhat similar to Carex eburnea. Nevertheless, the great majority of the text contributes well to assisting the user to identify sedges.

Overall, this book is well conceived, and provides an excellent resource for field botanists who wish to get a better handle on the identification of species in this large and diverse family in the northeastern USA and southeastern Canada. Although the size is a bit cumbersome, I think that it could still be opened on a desk next to a specimen or adjacent to a dissecting scope and used effectively. I certainly recommend it field botanists and naturalists interested in improving their knowledge of this important family of flowering plants.

### Literature Cited

Rowe, E.C. 1972. Forest Regions of Canada. Canadian Forestry Service Publication No. 1300. Fisheries and Environment Canada, Canadian Forest Service, Ottawa, Ontario, Canada.

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