

BOTANY

Plantes de milieux humides et de bord de mer du Québec et des Maritimes

By Martine Lapointe, Michel Leboeuf, and Arold Lavoie. 2014. Guides nature Quintin, 4770, rue Foster, Waterloo, QC, Canada, J0E 2N0. 455 pages, 34.95 CAD, Cloth.

This latest edition in the Michel Quintin nature guides is a visually pleasing publication having numerous colour photos of plants and of wetland habitats, crisp line drawings and illustrative graphics. It covers 302 species of flowering plants, ferns, horsetails, club-mosses as well as hepatics and mosses. The guide is stated as being aimed at nature lovers as well as specialists undertaking wetland and seashore plant inventories within Quebec and the Maritimes. However, it is

likely better considered as a good introductory guide to the flora and vegetation of these habitats for avid naturalists and students of ecology. Anyone engaged in a comprehensive documentation of the vegetation of wetland habitats would, by necessity, require a more detailed floristic reference work. This would certainly be the case to differentiate morphologically similar species in the more difficult groups such as the sedges, grasses, and rushes common in these habitats.

The initial section of the guide provides an excellent introduction to wetland types and their relationship to water levels and vegetation present through the use of illustrative graphics and photos. A very helpful feature of the guide is the listing of locations of representative examples of wetland habitats, along with colour photos, of specific marshes, swamps, bogs and various types of seashore habitats. The introduction to flowering plants provides an oversight of the diversity found in vegetative and floral structures through drawings that illustrate the range in leaf types and form and of inflorescence structure. These illustrated glossaries aid the non-specialist in understanding the technical descriptive terminology used in the guide. At the same time, it permits the author to provide more precise descriptions of plant form within the individual species treatments.

The species covered are grouped into seven categories readily identified by the colour coding on a portion of the unbound side and corner of the guide: trees and shrubs; terrestrial plants; aquatic plants; maritime plants (wet habitats, dry habitats); sedges and members of the sedge family, as well as grasses and rushes; ferns, horsetails, and clubmosses; hepatics and mosses. The identification of species is based initially on the placement of a plant in question into one of the seven categories. Subsequent identification to species is based in large part on a comparison of vegetative and floral structures exemplified in the colour photos and line drawings. For herbs and some shrubs with distinctive flowers or flower clusters, a colour gallery of flowers, grouped by colour, is provided for 155 species as an identification aid. Within difficult groups of flowering plants, such as the sedges, grasses, and rushes, an introductory set of colour graphics help differentiate these groups. Similarly for ferns and allies and the hepatics and mosses, graphics of their growth form and structures are provided.

Each individual species treatment includes several elements. The visual portion includes a colour photo with the main distinguishing features of the plant accompanied by a line drawing with details of appropriate vegetative and floral/fruitlet structures. Colour inserts of floral or vegetative details within the larger plant images of some species are not always helpful due to their small size. Additional visual aids are provided by symbols that provide further information on the biology or usefulness of the plant: whether the plants are obligate or facultative wetland species; light requirements; longevity (perennial, biennial, or annu-

al); use in re-vegetation of riparian banks, and whether the plants are invasive.

The main descriptive texts include the French common name in bold typeface followed by the scientific name, English common name and the family name. Organization of the species within each section is alphabetical by the French common name. Descriptive texts for each species cover such aspects as size and habit, branching/bark/leaves, flowers, fruits, habitat and distributional range. Sections on similar species or notes on such aspects as toxicity or uses are also provided. In the texts for ferns and allies and for hepatics and mosses, information on their distinctive reproductive structures is provided.

The characteristics of each wetland species of southern Quebec, treated in the guide, are summarized in a table organized alphabetically by scientific name following the species treatments. The table summarizes and codifies species on such aspects as whether they are obligate or facultative wetland species, and for those obligates, whether they are species always found rooted in water or whether they are true aquatics, partially or totally submerged. The species are further identified as to their growth form (e.g., tree, shrub, herb) or type of aquatic (emergent, submerged etc.), and spatial placement within the littoral zone. Each species is also assessed as to its level of threat and whether it is an invasive exotic or if useful for revegetation purposes. The table is perhaps most useful to students of wetland ecology, with the information on level of threat (threatened, vulnerable or possibly at risk of decline) being of more general interest to naturalists. A glossary of terminology, a bibliography, a list of useful internet sites, credits, and an index to species complete the guide.

The guide is a very pleasing and useful tome for gaining a basic understanding of the plants and vegetation of wetlands. Its appeal is based to a large extent on the high quality of the paper, illustrations, and photos, the informative graphics on wetland composition, the useful explanatory texts, and concise technical species treatments. It is a relatively hefty guide (about 0.8kg) for its modest size of 13 by 20 cm. Because of this, it might be best used as a reference tool at the roadside while exploring habitats referenced in the guide, rather than as a pocket field guide, carried along while slogging through a wetland.

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