numbers 142 and 145, each map was deficient. Two specific examples are (1) reference 142, titled *Albatrellus* in Michigan, includes *A. caeruleoporus, A. confluens, A. cristatus* and *A. peckianus* but Michigan is not shaded on the maps for those species, and (2) shading on the map for *Sistotrema confluens* covers southern Quebec and Nova Scotia but reference 145 notes its presence in those provinces as well as in Michigan, North Carolina, New Hampshire, New York, Vermont and Wisconsin.

Two new species, *Auricularia americana* Parm. et I. Parm. ex Audet, Boulet et Sirard and *Polyporus longiporus* Audet, Boulet et Sirard, are proposed. Several species are reported for the first time in North America, for example, *Antrodiella pallasii, Postia alni, P. folliculocystidiata, P. ptychogaster, Phellinus cinereus* and *Polyporus tubaeformis.* Although two names, *Postia minisculoides* and *P. subpendula,* are proposed as new combinations, if their basionyms, i.e., the initial name given to the fungus and its place of publication, are not in the book the new combinations are not validly published. There is a picture (plate 15 D) labeled *Punctularia strigosozonata,* that shows a typical fruit body of the orange crust fungus, *Phlebia radiata.*

The book concludes with a glossary containing approximately 250 terms with their English equivalent and a definition that often includes a reference to a page where the term is used or illustrated, an index of French and English common names, an index of scientific names, and a bibliography of 450 entries.

The book is recommended to mycologists, forest pathologists, forest ecologists, and naturalists. It is a significant contribution to our knowledge of the wood-inhabiting fungi of eastern North America.

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Manual of Vascular Plants of Northeastern United States and Adjacent Canada: Second Edition

By Henry A. Gleason and Arthur Cronquist. 2004. The New York Botanical Garden Press, 200th Street and Kazimiroff Boulevard, Bronx, New York 10458-5126 USA. 993 pages. U.S.$69.00. Cloth.

The second edition of this most useful flora was first printed in 1991. Subsequent printings have taken place in 1993, 1996, 1998, 2000 and 2002. The seventh printing which has a slightly larger page (15 cm × 23 cm, rather than 14 cm × 21.5 cm) has a slightly larger typeface. The text pages have exactly the same page numbers as the earlier printings. Some corrections were made in the 1993 volume. In 1999 nineteen individuals contributed numerous corrections but these corrections could not be included in the 2000 and 2002 printings without having an electronic version. One was finally made for the 2004 printing.

This new volume has an interesting but almost hidden drawing of a Tulip-tree, *Liriodendron tulipifera,* on the front cover. The introductory pages start with a Table of Contents which includes a list of the families in taxonomic order with their page numbers. This is followed by a Foreword by Patricia K. Holmgren and Noel H. Holmgren and short bibliographies of Henry Allan Gleason and Arthur Cronquist by Noel H. Holmgren together with photographs of them. The Glossary which preceded the synoptic keys in the earlier printings now follows the main text. This is followed by the Index to Common Names and the Index to Scientific Names which in the earlier volumes were combined.

This new volume is a most welcome step ahead with the numerous changes and corrections, and The New York Botanical Garden Press is to be congratulated even though it is still called the Second Edition.

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The Wild Orchids of North America, North of Mexico

By P. Martin. 2003. University Press of Florida, 15 Northwest 15th Street, Gainesville, Florida. USA. $27.95 paper, U.S.$45.95 cloth.

This book is a special version of a check list. The orchids included are all the recorded species found above the U.S.–Mexican border north to the Arctic and Greenland. This covers 223 species plus 24 subspecies and varieties. Additionally, this takes in 103 growth and color forms, 24 hybrids, and introduced species. The species are arranged alphabetically by scientific name, so the first entry is the charming little Spotted Orchid *Amerorchis rotundifolia*. The author gives the genus, synonyms, misapplied names, typical common name, references and range. The author also adds any appropriate comments. For each species there is a 5 × 7 cm photograph of the flower and a line drawing, generally of the whole plant. In some cases the line drawing is of the flower only which is a duplication that does not add information.

In addition to the over 60 species that can be found in Canada, and the familiar genera (*Platanthera, Cyprepedium* etc.), there are several genera that I normally associate with the tropics (*Vanilla, Laelia, Epidendrum*). While many of these are escapees from cultivation, there are a number that are native species. Not surprisingly, most of these tropical epiphytes are to be found in Florida. Indeed, I was surprised to see

how many species of *Vanilla* (of vanilla ice-cream fame from *Vanilla planifolia*) that are native to Florida.

The author uses the term "waif" to denote random individual occurrence. An example of a waif is *Laelia rubescens*, first seen in Florida in 1999. This abundant and attractive Central American species is a popular garden plant and a likely escapee. The accompanying photograph shows a white blossom. All the wild *L. rubescens* I have seen were pale lavender.

The species coverage and their current status are both accurate and up-to-date. This book contains the split between the Spotted Orchid, *Cyprepedium guttatum* (Alaska and NWT), and the Yellow Spotted Orchid, *C. yatabeanum* (Kodiak Island). It includes the Newfoundland orchis (*Platanthera albida*) of Newfoundland and Greenland. The book does not contain any habitat information, nor anything of the plants' biology. Generally, nothing is given on abundance and the distributions are very generic (e.g., Manitoba east to Newfoundland south to Texas and Georgia). It would be exciting to see an expanded version of this book containing descriptive text on habitat and biology, accompanied by useable range maps. This would create an encyclopedia of North American orchids. In the meantime, this book is a very handy reference and will make a good field guide.

The book's size precludes it fitting a pocket, but it will slip easily into your back pack. As well as the usual glossary and bibliography, the author includes a well-organized key. This, combined with the clear format, makes it a no-nonsense, practical guide for botanists, naturalists and orchid enthusiasts.

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Trees of the Carolinian Forest: A Guide to Species, Their Ecology and Uses

By Gerry Waldron. Boston Mills Press, 132 Main Street, Erin, Ontario N0B 1T0 Canada. 274 pages. $24.95.

The Carolinian zone of southern Ontario is home to more than 1600 plant species. It is also the most densely populated area of the country. As a consequence, Canada's most biologically diverse forests are also among the habitats most threatened by development. Anyone with an interest in the appreciation and conservation of this natural heritage will do well to read Gerry Waldron's *Trees of the Carolinian forest*. Mr. Waldron has succeeded in producing a beautiful book that is at once a pleasure to read and quite informative. The subtitle, "A guide to species, their ecology and uses" is somewhat misleading – this is much more than a field guide. Waldron draws on a variety of historical and scientific sources to set the scene: what is the Carolinian zone? how is it related to other ecological regions? and how have successive human cultures altered this region? With the ecological context established, Waldron treats each of 73 tree species not as individuals but as members of a community.

The book starts with an ecological history of the Carolinian zone, from glaciation through settlement by indigenous and European humans up to the present. While far from an presenting an exhaustive review of post-glacial colonisation, Waldron includes enough detail to distinguish his treatment from the usual clichéd summary that appears in books of similar scope. We learn of the massive hemlock dieback 5000 years back, and that beech was averaging 20 kilometres per century as it crept north. This is a fascinating subject, and it's a shame that Waldron includes no references to his sources here. While in-text citations would be overly pedantic, including a few key references such as Pielou (1991) would be worthwhile.

Waldron uses quotations from the journals of early settlers and survey crews to illustrate both the appearance of the "virgin" forest and the attitudes of Europeans to their new homeland. Once again, he piqued my curiosity, but in this case there are perhaps no readily accessible published sources he could refer the reader to for further information.

A short discussion of the definition of the term "Carolinian" follows. Waldron covers the topic in five pages – a clearly presented summary of an important concept. This is typical of the book as a whole. The author quite capably distills complex ideas into simple language, without sacrificing accuracy in the process.

With the context established, Waldron devotes some forty pages to a discussion of biodiversity, ecological communities, and our role in their protection, and especially, their restoration. He obviously brings a lot of experience to bear on the subject. Most books on restoration focus on technical details – how, where, and when to plant a tree, etc. Refreshingly, Waldron starts by examining why (and why not) to plant trees as part of a restoration. In a region where restoration of endangered prairie habitat often begins with the removal of trees planted as part of misguided naturalization programs, this is an important discussion. That said, he acknowledges the difficulty in pursuing a "do-nothing" approach, and offers suggestions for accelerating natural successional processes. These are presented as ideas to consider, not as ready-made prescriptions for restoration success.

And so it is that on page 112 of this tree guide that the actual species treatments begin. Each species is allotted two pages. This includes the usual description of their habitat and appearance, with insights into their use in restoration and urban plantings. Unfortunately, Waldron has chosen to arrange the species alphabetically by common name. This may simplify things for the beginner, but it has the unfortunate consequence of separating walnut (*Juglans nigra*) from butternut (*Juglans cinerea*) and poplar from aspen (both *Popu-*