



Book Review

Moore, D., and J.W. White. 2013. *The Illustrated Encyclopedia of Trees, second edition*. Princeton University Press, Princeton, New Jersey, U.S. 832 pp. ISBN 978-0-691-15823-5

It has been stated that one never gets “a second chance to make a first impression.” At over 800 printed pages, perhaps the first impression made on an individual who encounters the second edition of *The Illustrated Encyclopedia of Trees* is the sheer size of the publication. The next impression may be of the quality and number of the illustrations therein. Nearly all of the pages of this book feature detailed, hand-drawn, color depictions of leaves, bark, fruit, and flowers of hundreds of species of trees. The lead author (David Moore) is described as a “trained artist,” and in this publication, his illustrative accomplishments are a testament to that training. Although the printed feedback on the front cover (from *The Seattle Times*) exclaims that *Illustrated Encyclopedia* is “the very best book . . . for identifying trees,” the authors rather candidly describe this publication as, primarily, a “book for pleasure,” indicating that it is “far from a botanical text-book” in their Foreword (p. 7). The authors then detail that their intentions behind this book were simply to describe “a tree’s distinctive characteristics of form, growth, history, or points of general interest” (p. 8). They also imply that few technical terms are used, and that readers are encouraged to consult the Glossary near the end of the text for any needed clarification.

Following the Foreword, the authors commence the Introduction by contrasting the “rich and varied” native tree flora of North America to that of Europe, which they describe as being rather “small and reduced” (p. 9). They do, however, outline that while European forests tend to be dominated only by a few tree species, Europeans themselves have been actively carrying out expeditions to other regions of the globe for many centuries, returning home with a multitude of plant seeds from abroad. The authors also laud how the moist, maritime

climate of Britain and Ireland has facilitated the healthy growth and development of what are predominantly exotic tree species, more than in “any comparable area of the temperate world” (p. 9).

The authors go on to describe and define terms like species, subspecies, varieties, forms, and cultivars. The authors contend that because trees offer a quality of “permanence” (p. 11) to a location, due in part to their longevity and immobility, their selection and installation deserves great thought, planning, and consideration. They advocate that one method of selecting trees is to advance through the process of elimination; that is to say, first determining what isn’t suitable or desirable for a given spot. Because trees change over time, the authors suggest considering many of the design and practical components of a tree before its final selection. They urge thoughtful visualizing as to what the tree will look like many decades into the future, considering how it may change a viewscape or how it will cast shade, and urge locating and examining other larger, more mature specimens to aid in this understanding. In largely non-technical terms, the authors then detail the installation process itself, discussing the digging of the hole and the planting and staking of the specimen. They insist that newly planted specimens need not be fertilized, nor the planting-hole soil be amended.

Following this, the authors recount the fascinating practice of plant collecting. They discuss how collecting methods have changed through the ages, from pre-historic and Roman times, when plants were transported for their edible fruits, to the more formal naming, classification, and recording of taxa by Carol von Linne and the early expeditions of Englebert Kaempfer, John Tradescant, James Cunningham, Peter Collinson, John Bartram, Pierre d’Incarville, Captain Cook, William Roxburgh, and John Gould Veitch. Of these, special mention is given to two collectors: the “truly intrepid” (p. 15) Scottish explorer, David Douglas

(1799–1834), whose unfortunate demise occurred as a result of being gored by a bull while on expedition in Hawaii, and “the greatest collector of them all” (p. 15), Ernest H. Wilson, who successfully retrieved hundreds of plants from Asia, including paper-bark maple and the dove tree. The authors continue in the Introduction by detailing trees worthy of consideration for specific sites, varying soil types (e.g., clay, acidic, dry, poor soils), gardens, streets, and for their variety of ornamental characteristics (e.g., flowers, fall foliage, bark, fruit).

The Introduction to *The Illustrated Encyclopedia of Trees* closes with an explanation of the methodology behind the rating system the authors used to describe the “height,” “hardiness,” “choice,” and “wood” of the trees identified and discussed throughout the text. Tree *height* is designated in meters and assumes proper planting and compatible growing conditions (with growth expectations in 10 years, 20 years, and eventual maximum). *Hardiness* rating commences at -40° F/C, where a specimen surviving under these conditions is ascribed a 100% “resistance” rating. As specimens become less cold tolerant, they are ascribed a lower hardiness %. *Choice* relates to a tree’s “garden value,” or ornamental appeal, where 1 = Excellent, 2 = Good, 3 = Of lesser garden merit, and 4 = Not recommended. *Wood* quality is considered in five categories, where 1 = High quality and useful for furniture, 2 = Good and useful for structural building, 3 = Less valuable and useful in rough construction, 4 = Appropriate for particle board or pulp, and 5 = Inferior and useful as fuel.

The heart of the book is divided into two sections: coniferous trees (pp. 21–259) and deciduous trees (pp. 263–803), organized by family. The coniferous section commences with the Ginkgoaceae, and closes with the Pinaceae. Numerous (generally) evergreen species are depicted and described. Typically, a paragraph articulates the silvics, ecology, and natural history of a given species, followed by numbers in accordance with the aforementioned rating systems.

Ginkgo biloba, for example, is given a growth [height (m)] rating of 2-5-25, meaning that the tree can be expected to be 2 m in height after growing for 10 years, 5 m in height after 20 years, and reach an eventual height of up to 25 m. It receives a hardiness rating of 60%–70%, which according

to an accompanying chart (p. 18), indicates that it may withstand temperatures as low as -28°C (-18°F). The plant is ascribed a choice rating of 2 and 4, meaning that while its garden or ornamental value is “Good” (2), it may feature unpleasant characteristics (in this case, smelly fruit) that warrant it unsuitable (4) under certain circumstances. A wood rating is not indicated, as its commercial lumber use is apparently very limited.

Further, following the descriptions of coniferous tree species, a selection of coniferous cones are depicted (pp. 260–261).

The deciduous section of the text commences with the Salicaceae. As with the coniferous section, numerous (generally) broad-leaved species are described with a brief paragraph, characterizing the silvics, ecology, and natural history of a specific species. Again, numbers are ascribed in accordance with the rating system detailed in the Introduction.

As a second example, *Quercus coccinea* is given the same ranking treatment for its height (5-10-25) and hardiness (60%–70%). The plant was assigned a choice rating of 1, 2, 3, meaning its garden or ornamental value may be “Excellent” (1) “Good” (2), and though of “Lesser merit” (3) may yet offer other important values, like provide habitat for wildlife. Its wood-value rating of 2, 3, 5 is considered to be “Good” (2) with application as a structural timber, “Less valuable” (3) with application in rough construction, and “Inferior” (5), indicating that it has application as a fuelwood.

Following the descriptions of deciduous tree species, the text features a relatively brief glossary of terms (pp. 804–806). The book also features several pages of high-quality depictions of shoots and buds, and coniferous and deciduous leaves (pp. 806–815). The text itself closes with an index of botanical tree names (pp. 816–830).

To anyone who takes time to examine this literary resource, several items become apparent. Whether it is from the perspective of an artist (David Moore) or a natural scientist (John White), the authors of *The Illustrated Encyclopedia of Trees* are incredibly passionate about trees—both from their European-based point-of-view and from an international standpoint. The overall tone of the book is one of service, both to the plant kingdom and to those of us enticed enough to take an interest in it. The authors provide an email address,

soliciting input from readers as to how to make the text better, also adding, perhaps, to the self-effacing manner in which the text was composed.

Since trees are divided by botanical family, the layout of the book can leave potential readers leafing through several pages before finding a particular tree; fortunately, the Index may provide assistance with this effort, and frankly, if one has the time, leafing through this text exposes the reader to hand-drawn, colored depictions of trees that are truly of the highest quality. This book would make an excellent addition to the library of any amateur tree enthusiast or professional arborist who desires to read more about the trees of the world.

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