

BOOK REVIEW 2002 – #2

Watson, Gary W. and E. B. Himelick. *Principles and Practice of Planting Trees and Shrubs*. 1997. xii + 199 pages; tables; black and white photographs; line drawings; literature cited (per chapter); appendices. International Society of Arboriculture (ISA), Savoy, Illinois. Soft Cover. ISBN: 1-881956-18-0. Price: \$ 40.00. Available from ISA-Champaign Office, P.O. Box 3129, Champaign, Illinois 61826-3129

Flowering (angiosperms) and non-flowering (gymnosperms) trees and shrubs are magnificent products of evolution that have effectively adapted, over millions of years, to changing environments. They have genetically diversified into a large number of species that selectively became components of numerous ecosystems where they often characterize a kind of biome (deciduous hardwood forest, tropical rain forest, chaparral, taiga, etc.). Furthermore, many species have a capacity to endure harsh environmental changes resulting from natural causes and those imposed by human activities. Hence, these amazing organisms of immense esthetic, ecologic, economic, and perhaps sociologic value demand our respect and care everywhere. But they require special attention when planted in human altered environments such as cities, villages, corporate and institutional campuses, utility and highway rights-of-way and residential areas.

When trees and shrubs are suitable for planting in human altered environments a considerable amount of information is needed with respect to soil and aerial features of planting sites, selection of species, nursery preparations of the specimens, transportation and planting methods, and care after planting. Fortunately, Watson and Himelick have skillfully brought together these informational needs, and much more, into a single volume that is clearly and concisely written from knowledge based on published research and professional experiences. Also, the text is supplemented throughout with useful tables and meaningful illustrations.

The book's ten chapters are organized according to subject matter among five sections. This format is a noteworthy feature of the book. As each section is directed towards a particular concept that is introduced with an overview statement concerning related questions or problems, and approaches to their solutions. In addition, each chapter has its own overview statement as well.

Section I: "Matching Plants to Planting Sites" covers soil factors (Chapter 1) and the selection of species (Chapter 2). Species lists in the tables of Chapter 2 include Latin and common names. Section II: "Preparing to Plant" deals with the design and preparation of planting holes, pits and large planters (Chapter 3); times to plant (Chapter 4); and what to look for in selecting quality specimens (Chapter 5). Section III: "The Planting Process" starts at the growing field with aspects of digging, handling and storage of specimens (Chapter 6); and preparing the planting hole, backfilling, pruning and other related items (Chapter 7). Section IV: "Establishment" covers one of the most important aspects of tree and shrub planting success, that is the rapid development of the root system. Here the authors provide basic and practical information on the process of new root growth and methods for improving the process (Chapter 8). Also, the section includes a discussion on the concept of post-planting stress and its duration (Chapter 9). Section V: "Care After Planting" treats watering, fertilization, mulching, trunk protection, pruning and pest

control (Chapter 10). The appendices provide additional information on “Common Problems of Recently Planted Trees”, “Definitions” of nine terms used for nursery stock, “Watering Trees and General Tree Care” and a “Guide for Developing Planting Specifications.” An index is lacking, but most items of interest can be found readily by scanning the subheadings under the chapter titles in the table of contents and subsequently bold-faced in the text.

Even after having taught botany courses for over thirty years, I enjoyed reading Principles and Practice of Planting Trees and Shrubs, learned a great deal and appreciated seeing practical applications of basic knowledge from plant anatomy, plant physiology and plant ecology. The authors achieved their objective of providing a book with basic and practical information that will help landscape professionals and non-professionals to successfully plant trees and shrubs. Besides being a must for arborists, landscape contractors and other related professionals, this book is needed by grounds persons and others who are responsible for selecting, planting and maintaining trees and shrubs on private and public properties. In addition, homeowners planning projects using trees and shrubs would do well to obtain this book.

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Note: For matters concerning book reviews please contact James R. Rastorfer, Book Review Editor