

Book Reviews

GARDEN PERENNIALS FOR THE COASTAL SOUTH. Barbara J. Sullivan. 2003. University of North Carolina Press, P.O. Box 2288, Chapel Hill, NC 27515-2288. 282 p. Cloth (ISBN 0-8078-2795-9), \$35.00; paper (ISBN 0-8078-5473-5), \$19.95.

This book is packed with great information for all southern gardeners, from the casual to the very dedicated. It is arranged in logical fashion, beginning with the vagrancies of the climate through the four seasons. Sullivan takes you on a exploration of southern gardens, starting with the simple structure of the winter garden and then moving through the riots of spring blooms, the heat of summer to the relief of the long delightful fall. She points out along the way the ironclad plants that never fail, while cautioning you against using plants that you should never attempt to grow in the coastal south.

The strongest feature of the book is the well-placed lists (or charts) of plants for specific uses, i.e., plants for dry, sunny beaches or plants for shady or partly shady gardens. In fact, the pages containing these 13 charts will undoubtedly become worn and frayed from excessive use by the many gardeners who have this book in their collection.

The next chapter provides gardeners with many woody companion plants to complement and add structure to a wide variety of perennial gardens. The text continues with a thorough chapter on perennial cultivation that presents considerable practical information, although I didn't agree with some of the author's recommendations, for example, using sand to amend clay soil.

The last major segment of the book consists of an alphabetical listing of the many plants Sullivan recommends for southern coastal gardens. This is a comprehensive list that describes each species and includes information on hardiness, design attributes, and culture. This treatment suffers from some nomenclature mistakes and obsolete spellings, very understandable considering that horticultural taxonomy has undergone copious changes in recent years. It appears that considerable effort was made to be accurate.

What truly sets this volume apart from other gardening tomes and brings this book into the 21st century is a two-page listing of Internet websites for additional information and plant sources. This engagingly written book is filled with many gardening solutions, nicely complemented with over 200 color photographs. It should be a great resource for the simple gardener to the landscape architect and general horticulturist. In addition, it will provide many enjoyable hours of reading.

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GREENHOUSE OPERATION AND MANAGEMENT, 6TH ED. PAUL V. NELSON. 200. Prentice Hall, Upper Saddle River, New Jersey, 07458. p. 692, over 250 Illustrations, some color plates. Hardcover \$110.00. ISBN 0-13-010577-5

Greenhouse Operation and Management by Paul V. Nelson is now published in the sixth edition. The text covers the essential tenets, skills, and relationships required to manage most modern greenhouses. Nelson's book is useful as an upper-level college course textbook, and as a long-term reference book for growers and greenhouse managers. With respect to the latter, the procedures and exercises are easily followed and apply to both daily and long-term management issues. The editorial improvements and illustration upgrades of this sixth edition are significant, with expanded chapters on the global industry, marketing, growth regulators, and many chapter-by-chapter adjustments, diagrams, and photos that nicely support the text. The new cover is attractive and the binder easily spotted on a bookshelf.

Nelson's text has traditionally been used at universities as one in a pair, the other being an excellent, crop-specific text titled *Introduction to Floriculture* by the late Roy A. Larson. The content of the greenhouse management text reflects Dr. Nelson's decades-long understanding of courses in this subject area. To evaluate *Greenhouse Operations and Management* properly, the average reader needs to realize that there are several configurations to teaching greenhouse management. Many universities offer a one-semester review course in floriculture crop production that includes some greenhouse management. This book is not, in my opinion, designed to support that format. Other institutions offer a two-semester package consisting of one intense semester of greenhouse management, and one rather more entertaining semester of greenhouse crop production. Nelson's publication fits neatly into the course plans of the dedicated management semester.

Within the text is an updated review of the floriculture industry that will likely be excellent for that first class lecture, or any commodity update for the next few years. Following chapters include the basics of greenhouse site analysis, construction, heating, cooling and an improved section on environmental control systems. From there, it delves into the physical and environmental mechanics of crop production, including excellent chapters on soil, watering, fertility, cropping systems, light, and temperature, as well as CO₂ application. The last third of the book reviews insect and disease control, plant growth regulation, post-production quality issues, and a useful marketing discussion.

Drawbacks to the text are few, although students using the text have varied opinions. Students who are very interested in the subject love the book. Some students, especially those whom have been raised on short PowerPoint lectures, and are taking the course as an unwelcome academic requirement, feel the book is long, a bit dry, and full of details that get in the way of the main points. As an instructor, I have found the level of detail to be necessary and welcome. Setting up a supporting Website that provides the PowerPoint lectures and summary notes can alleviate student criticism. I have also experienced that growers and students alike balk at the price tag of \$110.00, perhaps not realizing this truly is a reference book, not just a text to support a course.

The only true weakness of this book is the very short and basic review of business management issues that desperately needs to be expanded or, given the size of the text, likely needs to be dropped to become the subject of a new book by the author. In our industry, the understanding of business management is a chronic student deficiency. This is especially noticeable at the university level where we tout the training of "management level candidates" which differentiates us from vo-tech schools. This is a point of frustration with business owners and students once they enter the business world.

There are, as expected, many other books that carry the title of greenhouse management. Most skirt the engineering, heating, cooling and fertilization calculations issues, and focus on greenhouse production mechanics or the crops. Only one other book exceeds Nelson's in its coverage of the important management subjects, but that text requires calculus, engineering and physics as prerequisites to its being read and understood, and not surprisingly, most students hate it with a visible passion. Books that have attempted to cover the subjects of fertility, heating and cooling calculations often cause faculty and students difficulty in the classroom setting. The problem lies in dealing with the level of detail and process necessary to complete these objectives across students with varying levels of understanding. A good example is the greenhouse heating calculation chapter in Nelson's book. We use the text because Nelson's chapter is the most accurate and accepted method out there, but we do add to the course a spreadsheet devised by Dr. Bailey and myself to support the process. The spreadsheets allow clear data input options, visible analysis organization, and rapid "what if" analysis. This format captures the student's interest once they have mastered the procedures the book using the spreadsheet. Perhaps, someday, this kind of software support can be added to the text.

In summary, for the greenhouse manager or the faculty member serious about providing management-level academic training, rather than vocational/technical skill training, Nelson's book is the best of the group. I recommend it for professional growers and true students of greenhouse management.

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WEEDS IN MY GARDEN: OBSERVATIONS ON SOME MISUNDERSTOOD PLANTS. Charles B. Heiser. 2003. Timber Press, The Haseltine Building, 133 S.W. Second Ave., Suite 450, Portland, OR 97204. 247 p. Color photos and line drawings. \$22.95. 0-88192-562-4

I grew up on a small farm in Indiana where one of the summer chores for my sister, brother, and me was weeding in the vegetable garden. I find weeding in my North Carolina garden an occasion for (almost) instant gratification, but my recollection of childhood weeding was that of pointless toil. I wondered if a book about Indiana weeds would conjure up unpleasant memories, but I found Charles Heiser's book to be interesting, enlightening, and a pleasure to read.

Based on Heiser's years of working in the Botany Experimental Field at Indiana University, Bloomington, the weeds in his garden are Hoosiers, but most of them are common in eastern North America, and some are known throughout the United States. As the Botany Experimental Field does not have a soggy area, weedy plants adapted to very wet conditions are not included in this book.

Arranged by family, each entry follows the style of John Gerard's *Herball, or: Generall Historie of Plantes* (1597). It begins with names, and explains the meaning and source of both the scientific and common name(s). The entry continues with time of blooming, place of origin, plant description, and the plant's virtues. Over 130 plants are described. There are 29 color plates. Most of the drawings are from Gerard's book; the original drawings were done by Marilyn Rudd. There is a list of references and an index.

This book is not intended as an identification guide. Rather, it is an opportunity for Heiser to pass along research about, folklore on, and the various medicinal and culinary uses of these plants. It also serves as a sort of a memoir. There are stories about Heiser's colleagues, students, family, and the Botany Experimental Field itself. Besides the regional appeal, this is a useful book for general horticultural libraries, collections on herbs and herbal medicines, and plant folklore. But the best part of the book is the wry tone of the writing. It may seem a bit odd, but I found myself laughing out loud while reading a book about weeds.

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TEXAS GARDENING THE NATURAL WAY: THE COMPLETE HANDBOOK. Howard Garrett. 2004. University of Texas Press, P.O. Box 7819, Austin, TX 78713-7819. 396 p., 833 color photos, 13 color illus., 6 maps, 3 line drawings. \$34.95 hardcover. ISBN 0-292-70542-5.

Texas Gardening the Natural Way is billed as the first complete, state-of-the-art organic gardening handbook for Texas. It is a book I can and will recommend to my landscape architectural clients. At 382 pages, it's comprehensive. Two-thirds of the book are devoted to plant descriptions. Its beautiful color photographs will be extremely helpful to gardeners whose knowledge of plant materials is limited. It offers a wide array of choices that are not commonly seen in Texas landscapes, including many native plants that have only recently become available in the nurseries. Its 11-page tree care section provides state-of-the-art information on planting and pruning.

It is no coincidence that the book is identical in size and design to *Neil Sperry's Complete Guide to Texas Gardening*, which has been the reference book for residential gardeners in the state for the past 25 years. A former horticulture specialist with the Texas Agricultural Extension Service, Sperry, like Garrett, hosts a popular radio program and has written extensively. I've talked to several organic gardeners who are ecstatic that Garrett has finally written a book to directly compete with Sperry's.

In his introduction, Howard Garrett says, "Unfortunately, there are still many who not only don't believe in organic methods, they have worked hard to try to talk people out of even giving it a try. I call these people or-

ganiphobes. They actually come from two camps, those who actively oppose the organic approach and want it to fail and those who unwittingly go along with toxic chemical recommendations of others." As an environmentally concerned professional who believes that neither extreme has all the answers, I object.

On the subject of lace bugs (in my 1991 edition), Sperry says, "Spray at first signs of mottling with Diazinon, Dursban, Malathion, Orthene, Sevin." Garrett says, NATURAL CONTROL: Provide proper irrigation and other care to maintain plant health. Encourage beneficial insects and microbial activity. ORGANIC CONTROL: Horticultural oil, citrus oil, and molasses. Neem and biological products containing beneficial fungi. Gardenville Fire Auntie Fuego formula." Frankly, I'm not satisfied with either guru's recommendation.

I have gardened successfully in Texas for 30 years without ever using any of the five highly toxic products Sperry recommended. I advise my clients that a certain amount of insect damage is normal and to use a pesticide only as a last resort (after trying the appropriate nontoxic control method), and then to be absolutely certain that the product they choose is specific to the problem, applied according to directions and used to control that problem only, not applied elsewhere in the garden.

I hardly agree with Garrett's "Natural Control" advice on lace bugs, which applies to every plant in the garden. But his "Organic Control" sentence troubles me because it is so nonspecific. It hardly encourages a would-be organic gardener to be given six options, none of which are fully explained in the book. There is no index reference to either Neem or "Fire Auntie Fuego," by the way. Is the gardener supposed to go buy all six products and see if one of them works? Does he/she want to prevent the eggs from hatching or try to kill the critter after it is already sucking the sap out of the azalea foliage? At what time of the year is one product more effective than the other?

The other disappointment to me as a landscape architect is that the book's cover promises: "How to design, plant and maintain gardens and lawns in Texas." Only five pages cover design issues. Because I know that Garrett has worked with two of the top landscape architectural firms in Dallas, I'm surprised that he seems to be suggesting a "trial and error" approach to design.

Moreover, I am disappointed that the shrub section contains little information that explains design applications. For example, his entry on Indian Hawthorn (*Rhaphiolepis indica*), which is one of the most widely used evergreens in the eastern third of the state, does not mention that the landscape uses for this species vary from groundcover to small tree, depending upon the cultivar selected. This is a place where Garrett's book could have far surpassed Sperry's.

The book is not as well edited as it should have been, but it will be helpful to nonprofessionals. Its message that gardening naturally is possible even in the harsh Texas environment is important. I hope it will resonate with the people who have heretofore hired lawn services to dump quantities of chemical fertilizer on their lawns five times a year and spray pesticides on a whether-it-needs-it-or-not basis.

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ARBORICULTURE: INTEGRATED MANAGEMENT OF LANDSCAPE TREES, SHRUBS, AND VINES. Richard W. Harris, James R. Clark, and Nelda Matheny. 2004 Prentice Hall, Inc., Upper Saddle River, New Jersey, 07458. 592 p. Softcover, \$72.95. ISBN 0-13-088882-6.

Much of this book is based on current research findings and arboricultural experiences from industry experts; their numerous examples are some of the many strengths of this book. The all-inclusive and comprehensive topics should be of interest to readers from all walks of the arboriculture industry, from tree workers, who may have less formal educational backgrounds, to college and university instructors and students of arboriculture. Although the fourth edition is organized in a similar fashion to earlier editions, several changes and additions within each chapter strongly support the release of this new edition. The authors have rewritten or reworked most chapters, including new and often referenced approaches to examining problems, offer copious tables and figures that supplement the text very well, and begin each chapter with a preview and end each chapter with a list of references for further reading. There is also a comprehensive glossary and several appendices containing applicatory information. The information and the way it is presented make this a sound reference tool for use in all areas of the arboriculture industry. It is especially suited for college or university arboriculture courses, or as a useful reference tool for instructors looking for varied ways to explain many of the cardinal concepts of tree care. I commend the authors in doing a superlative job of delivering straightforward information free of scientific jargon throughout the text, particularly in Chapter 2: Plant Structure and Function. The non-intimidating format and comprehensive review will serve equally well readers unfamiliar with woody plants as well as those needing a refresher, before delving into chapters on plant selection, pruning, or diagnosing plant problems, to name just a few. Information on how the tree care worker can modify and manage soils, as well as improve the biological activity of soil, is clearly presented. The chapter on water management explains how to determine plant water requirements to supply enough water for plant growth and maintenance with conservation in mind. Diagnosing plant problems is one area that anyone working with woody plants can not seem to learn enough about, and the final chapters deliver not only sound information but also include many excellent pictures displaying various problems, making them handy for reference.

The manner in which this book portrays tree care establishes the fact that the style in which trees are cared for and maintained in our world today must be based on both the science of trees and the environment in which they grow. It serves to remind all of us in the tree care industry that we are indeed professionals striving to improve the environment today and for future generations.

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