

## Book Reviews

**Urban Horticulture.** Tina Marie Waliczek and Jayne M. Zajicek, editors. CRC Press, Boca Raton, Fla. \$60.95. Hardback. 336 p. ISBN 978-1-4822-6099-1.

With contributions from experts, including the editors, in research and practice in urban environments from across the United States, *Urban Horticulture* addresses the importance of horticulture to the lives, health, and well-being of people in populated areas. It examines public and private communities and state and federal programs to promote urban horticulture and reviews research on school, community, public, and prison gardens. The book includes the history, importance, and benefits of selected topics in urban horticulture.

The book has ten chapters. The chapters emphasize the persons and communities that benefit from horticultural landscapes rather than focusing on traditional issues of plants in production and landscape horticulture. Each chapter has a list of review questions that are based on the text and a list of enrichment activities in which participants may engage. Each chapter has a list of references cited and suggested further reading.

The Introduction, Chapter 1, gives a brief history of the urbanization of the United States and notes the changes with time in populations of the inner cities, suburbs, and surrounding countryside. Sections define traditional and urban horticulture and introduce sociohorticulture, also called human issues in horticulture. Urban horticultural programs are described in paragraphs that are developed into the chapters that follow.

Children and Nature, Chapter 2, educates readers on the history of school gardens, the needs of children to be involved with gardens, benefits of gardens to youths, types of youth gardens, and resources needed to start activities with youths and gardens. Tables in the text give extensive listings of internet resources and public children's gardens in the United States. A few case studies of youth programs at botanic gardens and a school garden are in the text.

Gardens and Community, Chapter 3, is a lengthy presentation on community gardens. It covers the history of community gardens in Europe and in the United States. Benefits of community gardens beyond the produce obtained are discussed to include vacant land as a resource, food security, healthful benefits, positive effects of gardens on property values, and other social and economic impacts of gardens. The text gives approaches and guidelines for running and coordinating garden projects and provides tables and checklists to guide individuals in these endeavors. Ideas for funding of gardening projects are presented. A few case studies of successful community gardens in Texas and Wisconsin are presented.

Public Gardens and Human Well-Being, Chapter 4, defines public gardens and gives a brief history of the gardens. Names of public gardens according to type or function are listed. The roles and benefits of public gardens are outlined from their evolution from medicinal gardens to centers for education, plant conservation, and environmental stewardship. Two case studies are presented.

Horticultural Displays at Zoos and Amusement Parks, Chapter 5, describes the importance of plant displays in these settings. Landscape plantings are integral parts of zoos and amusement parks. In zoos, the plantings help to create feed and environments to promote natural behavior and well being for the animals. In the parks, horticultural displays provide beauty and transitions between areas and soften the lines between infrastructure. Several brief case studies are presented.

Prison Horticulture, Chapter 6, seems unrelated to urban horticulture but has been an element of detention facilities throughout their histories and has included forced labor on farms, development of educational programs, and inclusion of activities to improve the health of inmates through participation in horticultural programs. The chapter discusses the history of prison horticulture and describes some educational programs associated with prison horticulture. Case studies of three horticultural programs are described in detail.

Horticultural Therapy, Chapter 7, is treated as a profession in which horticulture is used to assist in healing, rehabilitation, and amelioration of people requiring treatment for a disease or disorder. The benefits of working with plants and various types of programs and activities for horticultural therapy are listed and discussed. Several case studies are presented.

Urban Greening, Chapter 8, addresses issues of the people living in urban areas of the Earth and there being very little land in the urban environments. Development of urban green spaces brings nature into large, concentrated populations of people. The chapter discusses the benefits of urban green space on lowering crimes, imparting mental and physical health, facilitating social interactions, and revitalization in urban areas. Case studies from Chicago, New York, Philadelphia, and other big cities in the United States and Canada are presented.

Local Food, Chapter 9, has little relationship to urban horticulture other than the fact that some urban dwellers buy locally grown food. Some text is devoted to the definition of locally grown food by federal and state laws, producers, retailers, and consumers. Exposure of urban populations to locally grown food is noted through existence of community supported agricultural farms, farmers' markets, food retailing, and institutional purchasing. Edible landscapes and community gardens relate directly to urban horticulture. The benefits of production of locally grown foods to society in general and to consumers, producers, retailers, and nongovernmental organizations in particular are presented. A case study in which the benefits and acceptance

and conflict of urban agriculture to city dwellers in Austin, Texas, is presented.

Chapter 10, Volunteerism, discusses the importance of volunteers in any organization and specifically to urban horticultural programs of public gardens, zoos, amusement parks, horticultural therapy, and prisons. Considerable text is devoted to planning of volunteer programs to include needs for volunteers, recruitment, structure, training, and management of the work force, and budgets. An appendix to this chapter gives a sample job description and a prospective profile of volunteers.

*Urban Horticulture* is a resource that details how interaction with plants enriches the lives of large, concentrated populations of people. It is useful to researchers, practitioners, teachers, and students, who are interested in the social aspects of horticulture rather than in the production aspects.

ALLEN V. BARKER  
University of Massachusetts  
Amherst

**Practical Permaculture.** Jessi Bloom & Dave Boehnlein. 2015. Timber Press, Portland, Oregon. 320 pp. Paperback. 296 color photos and illustrations. Illustrations by Paul Kearsley. ISBN-13: 9781604694437.

Jessi Bloom is a landscape designer, professional horticulturist, and certified arborist and is owner of a landscape design, construction, and maintenance company. Dave Boehnlein is a director at a permaculture homestead and has a landscape design company that advises worldwide clients on sustainability goals through integrated master planning.

Permaculture is a design approach to a way of living. Permaculture commonly is said to be a merger of two words "permanent" and "culture" or "agriculture". Permaculture is difficult to define and to understand. To some people, permanent is believed to involve perennial or self-perpetuating plants or animals. To other people, permanent means sustainable culture. With this book, the authors strive to make permaculture understandable for a wide range of readers. The text describes concepts and practices for establishing a permaculture landscape. The illustrations are many, are excellent, and are a strong point of the book.

*Practical Permaculture* is written in sections. The sections sometimes blend into one another so that it is difficult to tell where one section begins and ends and another one begins. Divisions in sections are referred to by the authors as chapters but are not identified clearly as such. The first section presents ethics of permaculture and the workings of nature. Two principal ethics are "Care of the Earth" and "Care of People". A few paragraphs discussing these ethics follow. It is agreed that people are part of the Earth and that Care of the Earth means Care of the

People and is the overriding ethic. Other ethics are listed. Subdivisions in this section address systems thinking (the arrangement of elements to do a job) and choosing and design of principles of permaculture and are discussed in several named paragraphs. A major division in this section is "Learning from Nature". Core ecological concepts are discussed here with regards to design of a permaculture system or landscape. Considerable input is on terminology with definitions of niche, bioregion, biodiversity, and monocultures and polycultures. Further discussions address the importance of climate and environmental and human surroundings in permaculture designs. A short division addresses physical properties of soils such as texture, horizons, compaction, and permeability.

The next section is about the Design Process for permaculture and involves many steps. This process is about assembling of components of concepts, materials, techniques, and strategies into a master plan. Gathering of information about the land and landscape is the first step in developing of the master plan. The second step involves care of the people—identifying clients and their preferences and writing statements of mission, vision, and goals. The third step is analysis and assessment of the site for the permaculture project. This step involves measuring and mapping of the area and assessing of slopes for grades, aspects, and elevations. The analysis also includes wind and air flows, fires, wildlife, sunlight, and drainage of the land. The fourth step is development of a conceptual design to determine locations of elements and generation of ideas for the design. The fifth step is to place the elements of the design into a schematic plan of a scale drawing showing buildings, roads and paths, bodies of water, and sites for crops and vegetation. The typical planning of the five zones of permaculture is presented also as a way of planning the design. In this structure, Zone 1 is the center of activity closest to the home and where daily activities occur. The intensities of activities decrease with an increase in zone number to Zone 5, a zone such as a forest that requires

little attention. Some additional zones are added for good measure. The division of the land into zones seemed to be a different process from the development of a master plan to fit the site. It is not stated how many zones are necessary to define or complete a permaculture landscape or how much land is required for a specific zone. It might be difficult to have an area of land that would incorporate all of the zones. The steps in the process of planning continue with the implementation of the plan and maintenance of the permaculture system.

Permaculture Systems covers designs for managing soil fertility, water, waste, food production, and other aspects of permaculture. Soil fertility is recognized as a base for a successful permaculture landscape. Discussions of soil fertility deal with assessing of the fertility with respect to acidity, plant nutrients, soil organisms, and contamination. A list of soil-building plants is provided. These plants are given roles of fixing nitrogen or accumulating certain plants nutrients to enrich soil fertility. Other fertility-enhancing practices such as fertilization, composting, use of biochar, mulching, and cover cropping are mentioned. Water is recognized as a limited resource. An extensive chapter describes how to capture water and to put it to use in a permaculture landscape. The section on Systems has a component on energy and deals with the importance of electricity as a form of energy and with alternatives that can be used to make it easy to do the intensive work required in a permaculture landscape. Food production is considered as the main focus of permaculture designs; so, a chapter in Systems is devoted to incorporating food production into the permaculture landscape. Food production considers the involvement of annual and perennial crops and techniques for urban agriculture with attention to companion and interplanting of crops and selection of crops for maximum impact at a site. Fruit and nut trees and forests are integrated into the design to complete a permaculture landscape. Dealing with pests is part of the food production chapter.

The authors say that if a permaculture landscape does not have livestock or provide for wildlife, it does not mimic nature. Mimicking nature is an essential property of a permaculture landscape. Matters of selecting livestock, stocking, providing for free range and forage, housing, fencing, and other matters of livestock production are discussed. It is noted that permaculture designs should accommodate wildlife by creating different habitats in the landscape. For example, rats may be controlled by creating a ratsnake habitat. A large area of land may be required for support of wildlife, and the wildlife may not be compatible with domestic crops and livestock.

Another major section of the text is Useful Plants for Permaculture Landscapes. Trees, shrubs and woody perennials, herbaceous perennials, and ground covers are among the plants selected. The plants are diverse or exotic and are for worldwide or regional use, but the basis for their inclusion in the list of useful plants was not documented. Sources for obtaining the plants were not given.

Invisible Structures is a section that includes elements that may not appear in a master plan. These structures are aspects of legal matters, management and decision making, finances, and social systems and are discussed in several named paragraphs. Perhaps, this section alerts readers that permaculture may be an expensive undertaking and requires extensive planning on site and in the background.

The main text of the book is followed with a list of resources and suggestions for reading as the authors note that the book is just a starting point for establishing a permaculture landscape.

This book is of interest to horticulturists who want to learn more about practices of permaculture and to understand permaculture landscapes.

ALLEN V. BARKER  
The Stockbridge School of Agriculture  
University of Massachusetts, Amherst