

BOOK REVIEW

Handbook of Urban and Community Forestry in the Northeast. 2000. Edited by John E. Kuser. 434 pp. Published by Kluwer Academic Publishers. ISBN 0-306-46161-7. US\$185.00.

John Kuser, professor of forestry at Rutgers University, has compiled an easy-to-read and useful volume on urban forestry. The *Handbook of Urban and Community Forestry in the Northeast* consists of 26 chapters written by prominent researchers and practitioners. While the title portends a focus on the forestry in the northeast, 34 contributing authors from across the country provide a broad perspective on the central concepts of design and management. Rich literature citations direct readers to more detailed references. The shared insights of contributors will be useful and enlightening to urban planners and foresters everywhere.

Most chapters fall into one of two broad categories. Several are devoted to elements of planning and design. The balance details the establishment and maintenance of trees in urban settings. With respect to planning and design, the history of urban forestry is reviewed and a collection of chapters enumerates program planning and development. Included are contributions on the benefits and costs of urban forests, laws and ordinances that define roles and responsibilities of tree owners in the northeast, and outlines of a conceptual framework for understanding how planned communities develop from natural ecosystems. The uses of trees as elements in all aspects of urban design are reviewed.

Tree inventories are a critical component of urban forestry programs, and their value and implementation are presented. A sober and enlightened discussion of the budgetary dilemma facing community foresters is presented and accompanied with ideas for generating new funding initiatives, exploiting existing ones, and using volunteers to address these constraints.

The next series of chapters provides detail on the function of urban forest ecosystems. Included is an extraordinarily complete description of urban soils, their properties and problems, and ways to ameliorate them to favor the establishment and growth of plants. Accompanying chapters detail practical approaches for selecting trees, present lists of trees for urban forests in northeastern states, and provide guides for locating, evaluating, selecting, and purchasing high-quality plants. Production methods affecting

tree survival after planting and the preparation of bid specifications are the topics of the next chapter. Strategies for solving tree problems from plant selection to mulching are reviewed, and a fine chapter is devoted to pruning including pruning in nature and pruning for form, strength, health, safety, aesthetics, and production.

The contentious relationships among trees, utilities, and municipalities are reviewed. The basics of root biology and remedies for root conflicts are presented. When good trees go bad, the potential for personal injury and property damage increases. Industry experts provide a thorough discussion of hazard trees, their assessment, evaluation, and mitigation.

Managing arthropod pests and diseases of trees is a major concern of commercial and municipal arborists alike. A chapter describing IPM programs with nicely detailed vignettes of major insect and disease problems in the northeast complements earlier ones dealing with abiotic stress in the urban forest. A trilogy of chapters deals with the removal and recycling of trees and their parts. A practical game plan is presented for the design, construction, and operation of municipal composting facilities. The art and science of urban tree removals is comprehensively reviewed. Congruent with the recycling theme is a chapter devoted to developing a program for converting street tree removals to valuable sawlogs. Two other chapters describe the Tree City program in the United States. The landmarks of this remarkable program are reviewed, and a case study of one of the charter members, Paramus, New Jersey, is detailed.

The closing chapters unify the study of urban forestry with the broader issue of landscape ecology. Urban forests are critical reservoirs of biodiversity. How urban and suburban forests can be managed to optimize their positive functions, such as attracting wildlife while minimizing problems associated with wild animals in cities and suburbs provides interesting reading. The final chapter challenges us to recognize urban ecosystem sustainability as one of the central issues facing society in the 21st century. To mitigate changes, such as the rapid loss of high-quality water, soil, nutrients, and biological diversity, requires a broad view of community planning and resource management. Our goal must be to find ways to increase the sustainability of urban ecosystems by protecting and conserving vegetation and restoring to the greatest possible degree their natural ecological function.