

# The Lawn Reader

*The opening criticisms of the modern golf course disperse culpability from golfers to chemical companies and “proselytizing” scientists. This text intends to “liberate the modern superintendent from chemical dependence” without loss in turf quality or alteration of the game. To be sure, a noble goal, but more likely this book will deliver the author’s message “to have respect for the ecosystem that sustains our turf.”*



## Playing in the Dirt

### Ecological Golf Course Management

Paul D. Sachs and Richard T. Luff

2002 Sleeping Bear Press, Chelsea, MI, 197 pp  
ISBN 1-57504-154-5

“That doesn’t look like Ireland,” proclaimed my wife of 12 years as we watched a few holes of the American Express Championships at Mount Juliet Country Club in Ireland, “that course is too green.” How can a property that in one sense takes your breath away and another appear to be an aberration?

Paul Sachs and Richard Luff, authors of *Ecological Golf Course Management*, have the same question. In fact, they might question how any intensively managed course is able to provide championship conditions, ecologically. Not a revolutionary idea in today’s volatile environmental debate, but thankfully this book brings the discussion into the mainstream.

As any text proposing what some might call a paradigm shift, the authors begin by offering some shock value. A quick glance at the preface invokes Rachel Carson’s concern for pollution, with Jeff Frank of the Lyceum School of Environmental Horticulture in Westhampton, NY proclaiming “Rocks Think!” Further, the authors compare a bentgrass plant mowed at 0.125” to a maple tree with 95% of the limbs removed.

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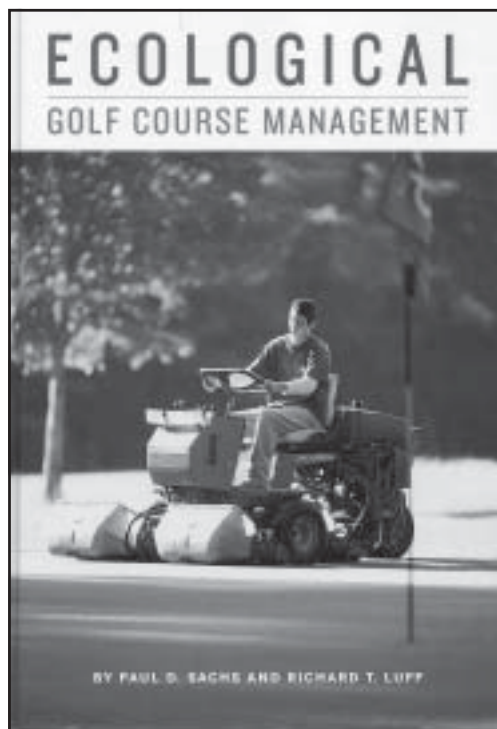
Paul Sachs is the founder and owner of North Country Organics, A Bradford, VT based manufacturer of natural fertilizers, soil amendments and environmentally compatible pest controls. Richard Luff is the former superintendent—and now general manager—of the Sagamore Hampton Golf Club in Northhampton, NH.

The opening chapters borrow much from Sachs’ previous text, *Edaphos: Dynamics of a Natural Soil System* (1999 Edaphic Press, Newbury, VT). Sach’s emphasis on the formation of soil and biological aspects of the soil make one believe the physical and chemical components of soil are less important and merely governed by biological principles. A novel idea that challenges a major thrust in golf course construction, i.e., sand-based rootzones.

The authors’ discussion of soils indirectly suggests that many modern courses might be “biologically challenged” with sand-based rootzones. Yet, there is much data to

support the notion that sand-based rootzones are seething foundries of biological activity. A more meaningful discussion of soils should have included the latest USGA-funded research that has elucidated more pertinent concepts than those based on production agriculture as cited throughout the text.

Approximately 50% of the text is related to soil management. There are numerous references to additions of organic matter via compost, producing compost, and the interaction among chemical and biological aspects of the soil. While there is little new information presented, the authors have brought the informa-



### **Turfgrass Soil Fertility and Chemical Problems: Assessment and Management**

R.N. Carrow, D.V. Waddington and P.E. Rieke  
2001 Sleeping Bear Press, Chelsea, MI, 400 pp  
ISBN 1-57504-153-7

**Ecological Golf Course Management will lend support to those devoted to stewardship of the land and open a new and interesting world of thinking to those wondering about ecology. It is by no means a thorough and rigorous review, but it is an excellent beginning.**

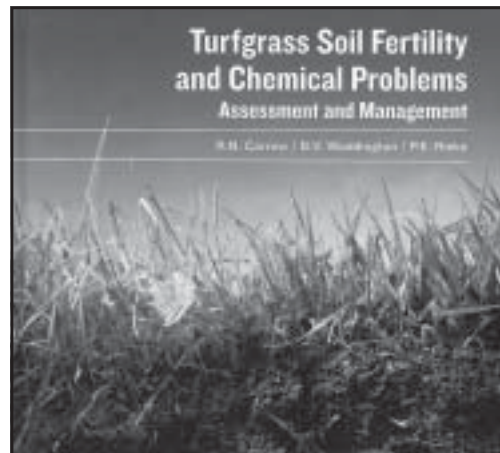
tion together in a unique fashion. For example, fertility issues are more thoroughly (and traditionally) reviewed in Carrow et al. *Turfgrass Soil Fertility and Chemical Problems: Assessment and Management* (2001, Sleeping Bear Press), the integration of the soil biology makes the Sachs and Luff book worth a read.

I found the emphasis in the preface on maintaining healthy plants inconsistent with the information devoted to "Pests" and "Cultural Practices". The Pest chapter occupies a full one third of the text, while culture slightly more than 10%. Clearly there is much overlap between the chapters and solving many pest problems involves cultural management. However the most important service of this text is its highlighting of how little we know and how much we need to learn to be less dependent on chemical pesticides.

The closing chapter on taking responsibility relays the poignant story of the late Peter Luff, coauthor Richard Luff's father. In describing Peter Luff's "Natural Method Maintenance," a devotion to stewardship of the land is revealed. I meet fewer superintendents each year as enamored with stewardship. While Tim Hiers, Dan Dinelli and Pete Leuzinger come to mind, I know there are many others. This book will lend support to their thinking and open a new interesting world of thinking to those wondering about ecology. It is by no means a thorough and rigorous review, but it is an excellent beginning.

When three eminent scientists of their generation come together to review the scientific literature on any subject, the task is daunting and the result profound. *Turfgrass Soil Fertility and Chemical Problems: Assessment and Management* delivered on the latter, the former is easily minimized by the modest professors.

Although many specialized texts have become available in the last few years discussing pest problems, stress issues and general golf course management, this is the first text to focus exclusively on soil fertility for turfgrass management. Nutrient management research has waned considerably over the last two decades and is slowly receiving renewed attention as it pertains to environmental issues.



The authors outline an approach used in organizing the text that espouses an emphasis on problem identification and solving. The introductory section is an excellent review of the soil-plant continuum as it relates to nutrient use. The plant nutrition chapter does not have the depth of information as many of the other more soil-based chapters include, but the list of references offers readers options to learn more. Interestingly, I felt that these opening chapters could have included more situational approaches to convey the message.

The Soil Chemical Properties and Problems section is the largest and most comprehensive section of the text. This is must reading for any

*continued on page 12*

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*This long awaited review of turfgrass nutrient management is well suited for any turfgrass manager interested in gaining expertise that will lead to enhanced nutrient management programs. Also, with the variety of products and practices proclaiming to be a panacea, this text will offer a no-nonsense, research-based approach.*


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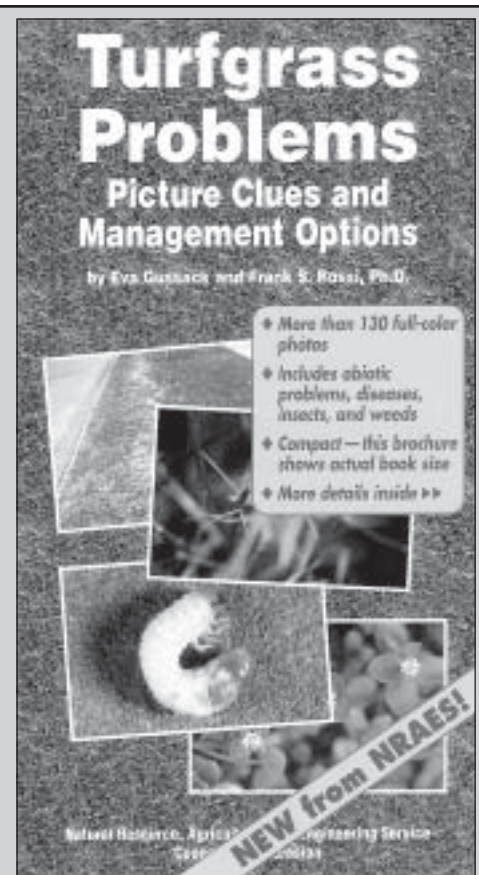
golf superintendent and the authors have provided a well-written treatise of major nutrient management issues. The lead author's interest in salt-affected soils is evident in two major chapters in this section. To his credit, this is an area of increasing importance as marginal water sources become the norm, not the exception, in many parts of the world. However, these chapters are extremely technical and not recommended for people with little knowledge of soil chemistry.

The final section on Fertilizers and Fertilization begins with the traditional review of nutrient sources that I found useful as reference, but not much different than most turfgrass management texts. The following chapters, however, on selecting fertilizers and developing a fertilizer program are worth the price of the book. The authors provide a succinct and practical approach for developing a nutrient management program. The discussion of environmental protection was brief but inclusive.

I was surprised that after reading the text, knowing the authors guiding principles of practicum learning, how few examples of this approach were obvious. The only section that offered an indication of this approach was Developing a Fertilizer Program. Examples of "spoon feeding" and "grow-in" could have been carried through the entire text as means of demonstrating points of fertilizer solubility, availability and fate of nutrients.

This long awaited review of turfgrass nutrient management is well suited for any turfgrass manager interested in gaining expertise that will lead to enhanced nutrient management programs. Also, with the variety of products and practices proclaiming to be a panacea, this text will offer a no-nonsense, research-based approach. 

Frank S. Rossi



Note: photo does **not** show book at actual size.

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