

Land and Forest Economics

G. Cornelis van Kooten and Henk Folmer. 2004. Northampton, MA: Edward Elgar. ISBN: 1-84376-881, \$160.00 (cl).

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Over the last twenty years, the academic field of agricultural economics has embraced the economic analysis of the environment and natural resources to the point of modifying academic department names (e.g. Agricultural and Resource Economics), programs, and both undergraduate and graduate majors to reflect this new emphasis. Traditional agricultural economists increasingly find themselves either adapting their research and teaching programs to this rapidly emerging field or finding their expertise in agricultural price analysis and farm management in declining demand as the U.S. agricultural sector industrializes (Blank 1998).

The van Kooten and Folmer textbook represents a successful contribution of two “morphed” agricultural economists, at least in the case of van Kooten, as they direct their considerable theoretical and applied economics skills towards the analysis of environmental and natural resource management issues. From my perspective, *Land and Forest Economics* could serve as an appropriate textbook for an advanced undergraduate class in environmental and natural resource economics or in a first-year M.S. level course. I am not aware of a comparable text for this market niche, other than the textbook by Kolstad (2000). Resembling a compilation of class lectures in book form, van Kooten and Folmer lead the reader on a *tour de force* of economic history, theory, literature, and applications related to man’s stewardship of God’s creation.

Chapter 1 (Introduction) opens the textbook with a surprisingly timid rationale for the study of environmental and natural resource economics. The concepts of social capital and trust are discussed casually and the justification for utilizing the “helping hand” of government regulation throughout the book receives inadequate attention and inadequate competition from competing approaches (e.g. free market environmentalism). The authors clearly assume that the reader already has a strong professional and possibly emotional commitment to these issues and requires very little in the way of motivation to move on to Chapter 2.

Boldly, the authors introduce the concepts of ordinary and compensated demand curves in the first few pages of Chapter 2 (The Theory of Welfare Measurement). The analytical tools of consumer and producer surplus, compensating and equivalent variations, public goods and aggregation, and

social welfare functions and compensation tests are presented rigorously in well-written prose, appropriate algebra, and understandable graphical models. Chapter 3 (Resource Rents and Rent Capture) begins with an excellent history of economic rent, and then moves quickly to a discussion of rent capture in agriculture and forestry. In these two chapters, the authors present many of the core analytical tools utilized in the remaining sections of the book.

Chapters 4–7 are an outstanding summary of environmental economics and form the key section of the textbook. In their discussion of nonmarket valuation tools (e.g. travel cost, contingent valuation), van Kooten and Folmer effectively integrate theory, literature, and applications, quickly bringing the reader to the point of understanding and possibly to the point of utilizing these tools in research. Although my knowledge of the textbooks in this field is not exhaustive, I fail to recall a comparable detailed treatment of these nonmarket valuation concepts and tools in other best-selling textbooks (e.g. Tietenberg 2003). An excellent discussion of externality theory and instruments for managing externalities are covered in Chapter 5 while Chapter 6 provides the student with a good introduction to social cost-benefit analysis (CBA). The case study of the evaluation of British Columbia's forest practices code walks the student through the implementation of a cost-benefit analysis and represents the key instructional highlight of the volume, in my opinion. This section concludes (Chapter 7) with a rare analysis of the tension between neoclassical and ecological economics, a balanced discussion of alternative perspectives on population growth, and important insights into the debate on measuring resource scarcity.

The authors devote the remainder of the textbook to applications, drawing upon their extensive applied research and that of other economists. In each chapter, devoted either to land or forest management issues, van Kooten and Folmer make a conscious attempt to capture the controversies associated with the policy in question. Their treatment of zoning (Chapter 8), multiple use of public land (Chapter 10) and rotation ages of forests (Chapter 11) represent valuable and detailed introductions to these important policy questions. The other application chapters present useful overviews and analytical direction to other issues (e.g. agricultural land use, climate change) but do not contain the analytical rigor of the three discussions noted above.

The integration of economic theory, history, literature (mostly pre-2000), and controversy sets *Land and Forest Economics* apart from other books of this genre. Van Kooten and Folmer bring the reader “up to speed” on many current environmental and natural resource management issues, primarily in the United States and Canada. Their give-and-take discussion

of policy debates deepens the reader's understanding of the usefulness and sophistication of economic analysis while pointing out the limitations of economics in resolving public policy issues associated with God's creation. For example, in the aforementioned CBA evaluation of British Columbia's Forest Practices Code, the authors openly discuss the uncertainties of estimating costs and benefits, particularly non-market values. Van Kooten and Folmer conclude that policy makers went forward with a dynamically inefficient policy because of their concerns about sustainability (i.e. welfare of future generations) and politics (i.e. appeasing environmental interests). The authors conclude that CBA fails to capture the magnitude of these important values in public policy debates. A second example is the useful discussion of zoning and tradeable development rights (TDR) in the management of private lands. TDRs, although theoretically attractive for efficient land management, fail to confront the public's concerns associated with "appeals and variances and the perception, whether based in fact or not, that the system or plan can be tampered with if one is sufficiently rich or well connected." (p. 270). For these non-economic reasons, according to van Kooten and Folmer, the implementation of TDRs may not occur in the foreseeable future.

As an instructor of an undergraduate environmental management class, my ideal text would combine the strengths of *Land and Forest Economics* with a chapter on public choice economics and a section on the economics of environmental conflict resolution. Environmental and natural resource management issues center on interdependencies, between man and the natural world, and between men. Traditionally, neoclassical economics has captured only a portion of these interdependencies through externality theory. However, a complete understanding of the day-to-day reality of the public policy process requires that students go beyond what can be measured to the less precise but no less important process of public choice and policy negotiation (see Susskind, Levy, and Thomas-Larmer 2000).

References

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- Susskind, Lawrence, Paul F. Levy, and Jennifer Thomas-Larmer.** 2000. *Negotiating Environmental Agreements*. Washington, D.C.: Island Press.
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