

Review: Forest Economics
By Daowei Zhang and Peter H. Pearse

Reviewed by Daniel S. Helman
Pasadena, California, USA

Zhang, Daowei and Pearse, Peter H. *Forest Economics*. Vancouver, BC: UBC Press, 2012. 412 pp. ISBN: 9780774821537, paperback. US \$49.95; also available in hardcover.

Forests are universally attractive, drawing on the imaginations and expectations of people from all walks of life. The economic principles which determine their conditions also determine how forests are managed, whether stands of trees are harvested or left as forest cover, whether land is purchased, and by whom, for silviculture, and what rights and responsibilities are bought and sold. Zhang and Pearse's *Forest Economics* presents a clear and robust look at the subject of economics as applied to forests, and provides the reader with terminology and an introduction to all of the relevant concepts for further learning.

Anyone who wishes to be introduced to the economic evaluation of forests would find their time well-spent by reading this book. The style and focus of the text are appropriate for college or high school (though some basic calculus is used), and the book would be well-placed in the business and environment sections of public and academic libraries. The subjects treated are broad enough that a professor or teacher could use it as a supplement or primary text.

There are thirteen chapters covering introductory microeconomics, forest economics, managed forestry, forest policy, international trade, climate change and other topics. Each chapter comes with a brief problem set at the end, and a list of suggestions for further reading. Missing from the text are inline citations or indications of which reference is the source for specific information, though the style is readable, and the included tables and figures are not at all burdensome. There is humor in some of the examples as well (e.g. a treatment of the opportunity cost of attending college).

Concepts covered by *Forest Economics* are detailed, and inclusive: marginal substitutability, externalities, forestry decision-making software, derived demand, recreational capacity, the Faustmann formula, government incentives programs, liability rules, tax neutrality and equity, foreign direct investment, ecosystem services, least-cost-plus-loss decision making, and many, many others. Equations are well-annotated. Historical examples are drawn to a large extent from cases in the US and Canada, but include others from Russia, Brazil, China, the UK, New Zealand, Portugal, the Scandinavian countries, Germany, Ghana, and other developing countries. Numerical examples are clear and well-chosen. The coverage of the subject is very strong.

This is not so with environmental issues. For example, the authors maintain that scientists have not reached a consensus on there being anthropogenic causes of climate change (pp. 365, 377, 378). Valuation of unmarketed goods and services are well-detailed, but ethical valuation is cast as distinct from economic valuation (pp. 164, 241), thereby handicapping analysis as an either/or proposition. Sometimes a weak

understanding of nature is shown, e.g., in ascribing constant individual success rates in hunting and fishing in a hypothetical case (p. 338). Notwithstanding, the treatment of the subject is unparalleled for its depth in an introductory volume, and is accessible enough to hold the interest of students, academics, foresters, government professionals and laypeople without any loss of return on time invested.

Daniel S. Helman, danielhelmanteaching@gmail.com, is a geoscientist, the author of "Catching lightning for alternative energy" (*Renewable Energy*, 2011); "Public Geology at Griffith Park in Los Angeles: A Sample Teachers' Guide" (*Electronic Green Journal*, 2012). He is the founder, executive director and a research scientist with the Winkle Institute (<http://winklescience.weebly.com>), a 501(c)(3) nonprofit organization that promotes independent science, and sometimes works as a fine artist and teacher when free from his duties as a doctoral student in sustainability education at Prescott College, Prescott, AZ 86301.

Electronic Green Journal, Issue 38, Spring 2015, ISSN: 1076-7975