

Q. *Agricultural and natural resource economics*

FREEMAN III (A. MYRICK). *The Measurement of Environmental and Resource Values: Theory and Methods*. Washington, DC: Resources for the Future, 1993. Pp. xviii + 516. US \$65.00 hardback, US \$24.95 paperback. ISBN 0 915707 68 3, 0 915707 69 1.

This is properly regarded as an updated and expanded version of Freeman's *The Benefits of Environmental Improvement* (1979). Those familiar with that text will recognise the format, and some passages and diagrams (e.g., chapter 3), but also much new material. One important difference is the exclusion of 'practice' with the emphasis here firmly on theory. As Freeman states (p. xvii), this is not a 'how-to' manual. So, those looking for econometric, empirical work or case studies will have to go elsewhere. Instead, the reader is presented with an extremely careful and well written explanation of the neoclassical theory of environmental valuation, coverage of the main methods (contingent valuation 33 pages, travel cost 40 pages, hedonics 75 pages, and production function approaches 40 pages), and chapters on discounting, uncertainty, health, and

non-use values. Contingent valuation is treated more seriously this time, but the coverage is relatively meagre and heavily dependent upon Mitchell and Carson. The integration of material is a bit bewildering and chapter titles unintelligible to the uninitiated; of the methods only hedonics appears in a chapter title (apparently following a typology from Mitchell and Carson). The first book was an undoubted success in the field, but 15 years later the requirements have changed as the field has become more interdisciplinary, which is where readers will find the new book weakest. On the scale from resource economics to ecological-economics, Freeman's treatment of all subjects is firmly in the neoclassical utilitarian resource school. The conception of value is never questioned, and the same footnote (p. 41) as in 1979 explains away the need to consider interdisciplinary views on value. References to 'true' values appear without explanation. Philosophical questions are ignored, or given cursory attention, even when ethical issues seem to stare the discussion in the face (e.g. discounting). The recognition that some values cannot be measured (p. 485) has no apparent implications. Thus, this book will serve as a primary reference on the theory of neoclassical environmental valuation, with Freeman's views being correctly held in high regard, but be well aware of its limitations.

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