

**READINGS IN THE FIELD
OF
NATURAL RESOURCE & ENVIRONMENTAL ECONOMICS**

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June 22, 1999

PREFACE

This is the latest version of a document periodically produced since the early 1980's. It combines an outline of the field of natural resource and environmental economics with a bibliography of 945 references. In the past, this reading list has been used in a variety of ways: as a guide to the literature for graduate students in departments of economics which do not offer a Ph.D.-level survey course of the field; as a resource for Ph.D. students who wish to develop a directed readings course in the field; and as an aid to students at the masters and undergraduate levels who wish to explore selected areas in greater depth.

For their help in assembling this new version of "Readings in the Field of Natural Resource & Environment Economics," we thank the following individuals: Amy Ando, Scott Barrett, Peter Berck, Richard Bishop, Nancy Bockstael, Peter Bohm, Lans Bovenberg, Trudy Cameron, Jon Conrad, J. R. DeShazo, Myrick Freeman, Don Fullerton, Lawrence Goulder, Gloria Helfand, Larry Karp, Nathaniel Keohane, Catherine Kling, Charles Kolstad, Richard Kosobud, Gilbert Metcalf, Juan-Pablo Montero, Ian Parry, Andrew Plantinga, Stephen Salant, Jason Shogren, Arthur Small, V. Kerry Smith, Stephen Swallow, Martin Weitzman, and Peter Zapfel.

For their help with the preceding version, produced by Porter Hoagland and Robert Stavins in 1992, we thank: Peter Berck, Richard Bishop, Glen Blomquist, John Braden, David Brookshire, Gardner Brown, Ilana Cohen, Parzival Copes, Maureen Cropper, Donald Dewees, Diane DuPont, Roderick Eggert, Anthony Fisher, Myrick Freeman, Charles Howe, Randall Kramer, Jeffrey Krautkraemer, Eric Lichtenberg, Robert Mendelsohn, Raymond Mikesell, Gordon Munro, Philip Neher, George Parsons, Steve Polasky, Guilio Pontecorvo, Robert Porter, Alan Randall, Bruce Rettig, Stephen Salant, Kathleen Segerson, Joseph Seneca, V. Kerry Smith, Tom Tietenberg, and David Zilberman.

We welcome suggestions of ways to improve this document, including additions and other changes to the outline and reading list. Please send your suggestions to Rob Stavins at the John F. Kennedy School of Government, Harvard University, 79 John F. Kennedy Street, Cambridge, Massachusetts 02138; phone 617-495-1820; fax 617-496-3783; e-mail: robert_stavins@harvard.edu.

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a. Overview

- Krautkraemer 1998
- Hanley, Shogren, and White 1997
- Neher 1990, Ch. 4
- Hartwick 1989, Ch. 1-5
- Conrad and Clark 1987, Ch. 3, pp. 117-145
- Neary and van Wijnbergen 1986
- Johansson and Lofgren 1985, Ch. 2, 3
- Fisher 1981, Ch. 2
- Dasgupta and Heal 1979, Ch. 6-10
- Peterson and Fisher 1977
- Weinstein and Zeckhauser 1975

b. Single-Owner Private Production (or Public Management)

(1) Overview

- Dasgupta and Heal 1979, Ch. 6-8
- Stiglitz 1979
- Schulze 1974
- Solow, R.M. 1974a
- Vousden, N. 1973
- Cummings, R.G. 1969
- Herfindahl, O.C. 1967
- Gordon, R.L. 1967
- Gray, L.C. 1914

(2) The Hotelling Rule

(a) Theory

- Caputo, M.R. 1990b
- Caputo, M.R. 1990a
- Devarajan and Fisher 1981
- Levhari and Liviatan 1977
- Solow 1974a
- Hotelling 1931

(b) Effects of Uncertainty

- Harris and Vickers 1995
- Gaudet and Howitt 1989
- Brannan and Schwartz 1985
- Pindyck 1980
- Dasgupta and Heal 1979, Ch. 13-14
- Heal 1979
- Dasgupta and Heal 1974

(3) Backstops

- Heal 1976

(4) Discount Rate Effects

- Farzin 1984

(5) Stochastic Time Horizons

- Long 1975
- Henderson and Salant 1978

(6) Increasing Extraction Costs

- Stollery 1983
- Eswaran, Lewis, and Salant 1983
- Hanson 1980

(7) Risk Aversion

- Lewis 1977

(8) Variable Technological Capabilities

- Cropper *et al.* 1978

(9) Exploration

- Fulton and Just 1989
- Swierzbinski and Mendelsohn 1989
- Ayres 1988
- Bohi and Toman 1984
- Arrow and Chang 1982
- Devarajan and Fisher 1982, pp. 327-336
- Uhler 1979
- Loury 1978
- Pindyck 1978b

(10) Multiple Deposits

- Ambigues *et al.* 1998
- Kolstad 1994
- Hartwick 1978
- Weitzman 1976b

(11) Multiple Uses/Users

- Chakravorty, Roumasset, and Tse 1997
- Charkravoty and Krulce 1994
- Swallow 1994
- Kolstad 1994

(12) Recycling

- Fullerton and Wu 1998
- Weinstein and Zeckhauser 1974

(13) Durables

- Karp 1996
- Karp 1993
- Levhari and Pindyck 1981
- Malueg and Solow 1990
- Stewart 1980

(14) Multi-Sector Economy

- Gale 1967

(15) Imperfect Competition

(a) General

- Bohi and Toman 1984, Ch. 5
- Dasgupta and Heal 1979, Ch. 11
- Khalatbari 1977
- Sweeney 1977
- Heal 1976
- Hotelling 1931

(b) Monopoly

- Pindyck 1987
- Gilbert 1978
- Lewis 1976
- Stiglitz 1976
- Weinstein and Zeckhauser 1974

(c) Oligopoly

- Reinganum and Stokey 1985
- Lewis and Schmalensee 1980
- Pindyck 1978a
- Pindyck 1977
- Salant 1976

2. Renewable Resources

a. Overview

(1) The Basic Model

(a) General

- Swallow 1990
- Dasgupta 1982, Ch. 3, 5-7
- Smith 1977a
- Fisher and Peterson 1976

- Plourde 1970

(b) Basic Forests

- Clark 1990, Ch. 9.1
- Neher 1990, Ch. 2
- Swallow, Parks, and Near 1990
- Dasgupta 1982, Ch. 9
- Faustmann 1849

(c) Basic Fisheries

- Clark 1990, Ch. 1-4
- Neher 1990, Ch. 1
- Dasgupta 1982, Ch. 6-7
- Gordon 1954
- Schaefer 1954

(2) Other Theoretical Formulations

- Mitra and Wan 1986
- Mitra and Wan 1985
- Samuelson 1976
- Binkley 1987
- Chang 1984
- Hartman 1976
- Reed 1993
- Swallow and Wear 1993
- Vincent and Binkley 1993
- Newman, Gilbert, and Hyde 1985

(3) Endogenous Prices

- Clark 1990, Ch. 5
- Levhari *et al.* 1981

(4) Uncertainty

- Clark 1990, Ch. 11.2, 11.4
- Morck *et al.* 1989
- Pindyck 1984
- Lewis 1981
- Brazee and Mendelsohn 1988
- Cropper 1988
- Clarke and Reed 1989
- Haight and Holmes 1991
- Norstrom 1975
- Plantinga 1998
- Thomson 1992

b. Public Management (or Single-Owner Private Production)

- Clark 1990, Ch. 2.4-4.6
- Anderson 1986
- Kellogg 1988
- Collins and Headley 1983

(1) Stock Externalities

- Kolstad 1996a
- Berck 1981
- Falk and Mendelsohn 1993
- Newell and Pizer 1998

(2) Irreversible Investment

- Clark *et al.* 1979
- Charles 1983

(3) Limited Entry

- DuPont 1990
- Clark 1990, Ch. 8.3
- Wilen 1988

(4) Contracting

- Johnson and Libecap 1982

(5) Enforcement

- Anderson 1989
- Sutinen and Anderson 1985

(6) Taxation

- Chang 1982

(7) Information Management

- Arnason 1990

(8) Multispecies Management

- Wilson 1982

(9) Downstream Sectors

- Clark and Munro 1980

(10) User Group Conflicts

- Bishop and Samples 1980

(11) Congestion

- Brown 1974

3. External Effects

a. General

(1) Open Access

- Feeny *et al.* 1996

(2) Common Property

- Schlager *et al.* 1994
- Ostrom and Gardner 1993
- Schlager and Ostrom 1992
- Dutta and Sundaram 1993
- Seabright 1993
- Ostrom 1990

b. Nonrenewable Resources

(1) Open Access

- Brooks, Controneo, Murray, and Salant 1999
- Negri 1990
- Wiggins and Libecap 1985
- Bohi and Toman 1984, Ch. 3
- Berck and Perloff 1984
- Dasgupta 1982
- Heal 1982
- Kamien and Schwartz 1982
- Dasgupta and Heal 1979, Ch. 3
- Hardin 1968

(2) Common Property

- Karp 1992
- Ciriacy-Wantrup and Bishop 1975

(3) Information Spillovers

- Hendricks and Kovenock 1989

c. Renewable Resources

(1) Open Access

- Provencher and Burt 1994
- Clark 1990, Ch. 1, 2.1-2.3
- Neher 1990, Ch. 12
- Bjorndal and Conrad 1987
- Berck 1979b
- Dasgupta and Heal 1979, Ch. 5
- Bell 1972
- Heal 1982
- Scott 1955

(2) Common Property

- Sethi and Somanathan 1996
- Thompson and Wilson 1994
- Bardhan 1993
- Clark 1990, Ch. 5.4
- Munro 1990
- Salchenberger 1989
- Kaitala and Pohjola 1988
- Clarke and Munro 1987
- Levhari and Mirman 1980
- Sobel 1982

4. Appendix: Topics in Dynamic Optimization

a. Calculus of Variations

- Kamien and Schwartz 1991, pp. 1-120

b. Optimal Control--Maximum Principle

- Kamien and Schwartz 1991, pp. 218-221
- Clark 1990, Ch. 4, pp. 88-121
- Conrad and Clark 1987, pp. 25-31
- Dorfman 1969
- Pontryagin 1962

c. Deterministic Dynamic Programming

- Kamien and Schwartz 1991, pp. 259-263
- Stokey and Lucas 1989
- Williams 1989
- Conrad and Clark 1987, pp. 22-24
- Beckmann 1968
- Bellman and Dreyfus 1962
- Bellman 1957

d. Analytical Solutions

(1) Phase Diagrams

- Kamien and Schwartz 1991, pp. 102-111, 174-184
- Clark 1990, pp. 97-102
- Conrad and Clark 1987, pp. 158-159

(2) Computational and Numerical Techniques

- Chapman 1987
- Conrad and Clark 1987, pp. 40-56

e. Additional Topics

(1) Constraint Qualification

- Seierstad and Sydsaeter 1987, p. 83

(2) Sufficiency

- Kamien and Schwartz 1991, pp. 41-46, 133-135, 221-226
- Seierstad and Sydsaeter 1977
- Arrow and Kurz 1970
- Mangasarian 1966

(3) Free Horizon

- Kamien and Schwartz 1991, pp. 57-64
- Hotelling 1931

(4) Infinite Horizon

- Kamien and Schwartz 1991, pp. 95-96, 174-184
- Seierstad and Sydsaeter 1987, pp. 379-385
- Michel 1982

(5) Commitment and Time Consistency

- Laibson 1991
- Cohen and Michel 1988
- Kahn 1986
- Reinganum and Stokey 1985
- Bulow 1982
- Coase 1972
- Pollak 1968
- Strotz 1956

(6) Bang-Bang Control

- Kamien and Schwartz 1991, pp. 202-208

(7) Most Rapid Approach Paths

- Kamien and Schwartz 1991, pp. 209-217
- Clark *et al.* 1979
- Spence and Starrett 1975

f. Stochastic Dynamic Optimization

(1) Metric Spaces

- Malliaris and Brock 1982

(2) Stochastic Calculus

- Malliaris and Brock 1982, Ch. 2, pp. 65-140

(3) Blackwell's Theorem

- Sargent 1987, pp. 339-363

(4) Stochastic Dynamic Programming

- Kelly and Kolstad 1999
- Clark 1990, Ch. 11, pp. 343-364

- Bertsekas 1987
- Conrad and Clark 1987, pp. 176-223
- Mangel 1985
- Cropper *et al.* 1978
- Dasgupta and Heal 1974

(5) Stochastic Optimal Control

- Kamien and Schwartz 1991, pp. 264-271
- Sargent 1987, pp. 29-40
- Malliaris and Brock 1982, pp. 108-117

(6) Bounded and Unbounded Payoffs

- Bertsekas 1987

B. Numerical Measures

1. Resource Scarcity

a. Theory

- Dale 1984
- Devarajan and Fisher 1982
- Solow 1974a
- Stiglitz 1974a
- Stiglitz 1974b

b. Measuring Scarcity

- Krautkramer 1998
- Farzin 1995
- Cleveland 1993
- Farzin 1992
- Norgaard 1990
- Halvorsen and Smith 1984
- Harris and Skinner 1982
- Smith 1980
- Brown and Field 1979
- Fisher 1979
- Barnett and Morse 1963

c. Testing Hotelling

(1) Valuation Principle

- Berck and Bentley 1997
- Smith and Jin-Tan 1989
- Farrow 1985
- Miller and Upton 1985
- Slade 1982

(2) Price Paths

- Berck and Roberts 1996

- Heal and Barrow 1981
- Pindyck 1981
- Smith 1981
- Slade 1982a
- Slade 1982b
- Slade 1982c

2. Adding Up The Numbers

a. Resource Accounting

(1) National Income Accounts

- Maler 1991
- Devarajan and Weiner 1990
- Repetto 1989
- Stauffer 1985
- Weitzman and Lofgren 1997
- Weitzman 1999

(2) Growth Accounting

- Squires 1992
- Hartwick 1988
- Weitzman 1976a

(3) Valuing Resource Holdings

- McDonald 1994
- Boskin 1985

b. Applied Benefit-Cost Analysis

- Browder *et al.* 1996
- Jacoby and Laughton 1992

C. Policy

1. Overview

- Clark 1990, Ch. 8
- Neher 1990, Ch. 19
- Gamponia and Mendelsohn 1985
- Helliwell and Heaps 1985
- Dasgupta and Heal 1979, Ch. 12
- Nordhaus 1973

2. Individual Instruments

a. Property Rights

(1) Establishing Rights

- Provencher 1993
- Razzaz 1993
- Townsend 1992

(2) Unitization of Common Pools

- Libecap and Wiggins 1985
- Uhler 1979

b. Regulation

- Jones 1993
- Bjorndal 1993

c. Taxes/Subsidies

- Wolfson and Koopmans 1996
- Hyde 1992
- Amundsen *et al.* 1992
- Karp and Livernois 1992
- Burness 1976
- Krautkraemer 1990
- Conrad and Hool 1981

3. Issues

a. Market Structure

- Gilligan 1992

b. Resource Security

- Bohi *et al.* 1996

c. Trade

- Khanna and Harford 1996
- Barnes 1996
- Karp and Newbery 1992
- Karp and Newbery 1991

d. Effects on Growth

- Krautkraemer 1995
- Barham and Coomes 1994
- Teisberg 1993
- Benjamin *et al.* 1989
- Corden 1984
- Roemer 1970

e. Effects on Distribution

(1) Cross-Sectional Distribution

- Geisler 1995
- Bull *et al.* 1994
- Prahladachar 1994
- Sutherland 1994
- Gaffney 1992

(2) Temporal Distribution and Sustainability

- Chichilnisky 1997
- Chichilnisky 1996
- Norton and Toman 1997
- Page 1997
- Woodward and Bishop 1997
- Heijmam 1991, Ch. 6
- Norgaard and Howarth 1991
- Solow 1991
- Barbier and Markandya 1990
- Howarth and Norgaard 1990
- Batie 1989
- Pezzey 1989
- Dasgupta and Heal 1979, Ch. 16
- Eagan 1987
- Hartwick 1977
- Solow 1974b

4. Policy Formulation

- Ando 1999
- Metrick and Weitzman 1996
- Salant 1995
- Kunioka and Rothenberg 1993

5. Specific Resource and Energy Studies

a. Nonrenewable Resources and Energy

(1) General

(2) Oil/Gasoline

- Borenstein and Shepard 1996
- Gulen 1996
- Gately 1995
- Shepard 1993
- Gately 1992
- Griffin 1985
- Gately 1984
- Newbery 1981
- Loury 1980
- Hnyilicza and Pindyck 1976
- Salant 1976

(3) Natural Gas

- King and Cuc 1996
- Hendricks and Porter 1996
- Porter 1995
- Crocker 1994
- Doane and Spulber 1994
- De Vany and Walls 1993
- Hendricks *et al.* 1993

- Pierce 1992
- Kelly 1992

(4) Coal

- Boal 1995
- Friedlaender 1992
- Wolak and Kolstad 1991
- Kolstad and Wolak 1985
- Kalt 1983
- Kolstad and Wolak 1983

(5) Minerals

- Rudel and Roper 1997

(6) Electricity

- Hogan 1997
- Joskow 1997
- Parfomak and Lave 1996
- Ozog and Waldman 1994
- Stoft and Gilbert 1994
- Hogan 1993
- Hirst 1993
- Joskow and Marron 1992
- Green and Newbery 1992

b. Renewable Resources

(1) Water

- Booker and Young 1994
- Kanazawa 1993
- Moncur and Pollock 1988
- Young and Haveman 1985
- Gisser 1983
- Turvey 1976
- Burt 1967a
- Burt 1967b

(2) Land/Soil

- Miller and Plantinga 1999
- Pfaff 1999
- Innes 1997
- Hardie and Parks 1997
- Plantinga 1996
- Wu and Segerson 1995
- Parks 1995
- Lohr and Parks 1995
- Parks and Murray 1994
- Miceli and Segerson 1994
- Barrett 1991
- Zinkham 1991
- Stavins and Jaffe 1990

- Stavins 1990
- Clark and Furtan 1983
- McConnell 1983
- Burt 1981
- Dales 1968

(3) Biological Diversity

(a) Genetic Diversity and Its Value

- Rausser and Small 1999
- Simpson *et al.* 1996
- Weitzman 1993
- Solow *et al.* 1992
- Weitzman 1992
- Randall 1991
- Bachmura 1971

(b) Endangered Species/Resource Management

- Ando 1999
- Metrick and Weitzman 1996
- Norton-Griffiths and Southey 1995
- Simon *et al.* 1995
- Sedjo 1992
- Conrad 1989
- Brown and Goldstein 1984
- Miller and Menz 1979
- Berck 1979b
- Bishop 1978
- Miller 1978
- Clark and Munro 1978
- Amacher *et al.* 1976
- Simpson 1998
- Brown and Shogren 1998
- Metrick and Weitzman 1998

(c) Habitat and Protected Areas

- Dixon and Sherman 1991
- Barbier *et al.* 1991
- Pearce and Maler 1991
- Nickerson 1990
- Ehui and Hertel 1989
- Fisher and Krutilla 1985
- Porter 1982
- Clark 1973

(4) Forestry

(a) Theory

- Deacon 1995
- Swallow, Talukdar, and Wear 1997
- Binkley 1987
- Hellsten 1988

- Hartman 1976
- Samuelson 1976
- Chang 1984
- Albers 1996
- Plantinga and Birdsey 1994
- Swallow and Wear 1993
- Vincent and Binkley 1993

(b) Empirical

- Neher 1990 13
- Bowes and Krutilla 1985
- Baldwin *et al.* 1997
- Provencher 1995
- Berck 1979a
- Johnson and Libecap 1980
- Washburn and Binkley 1990

(5) Fisheries

(a) Theory

- Clark 1990, Ch. 8.1-8.2, 9.2-9.7
- Neher 1990, Ch. 10-11
- Munro and Scott 1985
- Smith 1977b
- Clark and Munro 1975
- Spence 1974

(b) Empirical

- Homans and Wilen 1997
- Graddy 1995
- Deacon 1989
- Bell 1972

II. ENVIRONMENTAL ECONOMICS

A. Theory of Pollution Control

1. Overview

- Hanley, Shogren, and White 1997
- Bromley 1995
- Cropper and Oates 1992
- Daly 1992
- Tolley *et al.* 1981
- Fisher and Peterson 1976
- Mills and Peterson 1975
- Maler 1974
- Ciriacy-Wantrup 1952

2. Efficiency, Public Goods and Truthful Revelation

a. Optimality Conditions

- Ballard and Fullerton 1992
- Varian 1984, Ch. 7.1
- Just *et al.* 1982, Ch. 2
- Bergstrom and Cornes 1983
- Bergstrom and Cornes 1981
- Weisbrod 1964
- Samuelson 1954

b. Public Good Decision Problems and Implementation Mechanisms

- Teoh 1997
- Epple and Romano 1996
- Hochman *et al.* 1995
- Andreoni 1995
- Cornes 1993
- Chander 1993
- Andreoni 1993
- Gradstein 1992
- Varian 1984, Ch. 7.2
- Mueller 1979, Ch. 3-4

3. Efficiency and Externalities

a. General

- Varian 1994
- Baumol and Oates 1988, Ch. 2-4, 6-8
- Conrad and Clark 1987, Ch. 4, pp. 147-156
- Laffont 1987
- Varian 1984, Ch. 7.3
- Oates 1983
- Just *et al.* 1982, Ch. 12
- Dasgupta and Heal 1979, Ch. 3
- Haveman 1973
- Turvey 1963

b. Individual Instruments

- Simpson 1996
- Dasgupta 1982, Ch. 2-3
- Just *et al.* 1982, Ch. 12

(1) Property Rights

(a) Coase Theorem

- Shogren 1998a
- Farrell 1987
- Demsetz 1967
- Coase 1960

(b) Common Property

- Gordon 1954

(c) Exchange/Enforcement

- Demsetz 1964

(d) Efficiency

- Richer and Stranlund 1997
- de Meza and Gould 1992
- Farrell 1986

(2) Quantity-Based and Markets

- Manne and Rutherford 1994
- Baumol and Oates 1988, Ch. 8
- Krupnick *et al.* 1983
- Montgomery 1972

c. Dynamic Externalities

(1) General Theory

- Conrad and Clark 1987, Ch. 4, pp. 157-175
- Cropper 1984
- Smith 1977a
- Keeler *et al.* 1972
- Conrad 1992

(2) Consumption Planning

- Forster 1973

(3) Catastrophic Effects

- Cropper 1976

(4) Effects of Government Policies

- Stavins and Jaffe 1990

d. Uncertainty

(1) General

- Metcalf and Rosenthal 1995
- Baumol and Oates 1988, Ch. 11-12
- Segerson 1988
- Nichols and Zeckhauser 1986
- Dasgupta 1982, Ch. 4
- Dasgupta 1982
- Just *et al.* 1982, Ch. 11
- Dasgupta and Heal 1979, Ch. 13
- Hochman and Zilberman 1978
- Viscusi and Zeckhauser 1976

(2) Instrument Choice

- Newell and Pizer 1998
- Hoel and Karp 1998
- Pizer 1997
- Stavins 1996a
- Kolstad 1987
- Mendelsohn 1986
- Roberts and Spence 1976
- Yohe 1976
- Adar and Griffin 1976
- Weitzman 1974

e. Private Information

- Lewis 1996
- Herriges, Govindasamy, and Shogren 1994

f. Market Structure

- Kohn 1985
- Asch and Seneca 1976

g. Nonconvexities

- Helfand and Rubin 1994
- Fisher and Karp 1993
- Burrows 1986
- Cooter 1980
- Starrett 1972

h. Experimental Evidence

- Shogren 1993
- Harrison and Hirshleifer 1989
- Plott 1983

B. Numerical Measures

1. Theory of the Measurement of Economic Welfare

- Debreu 1951

a. Consumers' and Producers' Surplus

(1) General Theory

- Slesnick 1998
- Varian 1984, Ch. 7.4-7.5
- Just *et al.* 1982, Ch. 4, 5, 7
- Hausman 1981
- Randall and Stoll 1980
- Willig 1976

(2) Willingness to Pay vs. Willingness to Accept

- Hanemann 1999
- Pratt and Zeckhauser 1996
- Shogren *et al.* 1994
- Hanemann 1991
- Coursey *et al.* 1987
- Knetsch and Sinden 1984
- Randall and Stoll 1980
- Willig 1976

(3) Deadweight Loss

- Haveman *et al.* 1987
- Hausman 1981

b. Aggregation across Individuals

- Varian 1984, Ch. 3.16, 5.7, 4.5-4.7, 7.7-7.8
- Dasgupta 1982, Ch. 5
- Just *et al.* 1982, Ch. 8
- Dasgupta and Heal 1979, Ch. 9
- Rawls 1972

c. Alternative Approaches to Aggregation and Welfare Evaluation

- Slesnick 1998
- Jorgenson and Slesnick 1984
- Jorgenson 1984
- Jorgenson *et al.* 1983
- McKenzie 1983, Ch. 1-3, 8
- Jorgenson *et al.* 1980

d. Temporal Aggregation: Discount Rates and Intergenerational Equity

(1) General Theory

- Weitzman 1994
- Asheim 1991
- Just *et al.* 1982, Ch. 13
- Lind 1982, Ch. 1-3, 12
- Georgescu-Roegen 1979
- Daly 1973
- Baumol 1968

(2) Distributional Weights

- Harberger 1978

(3) Opportunity Costs of Public Projects

- Bradford 1975
- Harberger 1970
- Feldstein 1964
- Marglin 1963

(4) Inter- vs. Intra-Generational Equity

- Dasgupta and Heal 1979, Ch. 10
- Solow 1974b

(5) Imperfect Capital Markets

- Arrow 1982

(6) International Capital Mobility

- Lind 1990

(7) Ethical Basis for Discount Rate

- d'Arge *et al.* 1982
- Schulze *et al.* 1981

(8) Uncertainty

- Wilson 1982
- Arrow and Lind 1970
- Hirshleifer 1966
- Weitzman 1998

e. Uncertainty

(1) General

- Gallagher and Smith 1985
- Cook and Graham 1977
- Henry 1974

(2) Option Value

(a) General

- Cory and Saliba 1987
- Adams *et al.* 1984
- Freeman 1984c
- Smith 1983
- Bishop 1982
- Dasgupta 1982, Ch. 10
- Graham 1981
- Dasgupta and Heal 1979, Ch. 13
- Bohm 1971
- Schmalensee 1971
- Weisbrod 1964

(b) Transactions

- Fischhoff and Furby 1988

(c) Supply Uncertainty

- Freeman 1985b

(d) Empirical Applications

- Cameron and Englin 1997
- Fisher and Hanemann 1986
- Smith and Desvousges 1987

(3) Quasi-Option Value

- Hanemann 1989
- Fisher and Hanemann 1987
- Samples *et al.* 1986
- Freeman 1984b
- Miller and Lad 1984
- Conrad 1980
- Fisher *et al.* 1972
- Arrow and Fisher 1974
- Krutilla 1964

2. Environmental Risk Measurement

a. General

- EPA 1990

b. Risks to Life, Health, and Safety

(1) General

- Shogren and Crocker 1999
- Viscusi 1998
- Viscusi 1993
- Cropper *et al.* 1992
- Shogren and Crocker 1991
- Cropper and Portney 1990
- Lichtenberg *et al.* 1989
- Lichtenberg and Zilberman 1988
- Smith and Desvousges 1988b
- Schulze and Kneese 1981
- Lave and Seskin 1977
- Freeman 1993

(2) Empirical Methods

- Smith and Desvousges 1988a
- Smith and Desvousges 1987
- Viscusi 1983, Ch. 6

(3) Private Market Choices

- Atkinson and Halvorsen 1984

(4) Individual Perceptions of Risk

(a) Decision Analysis

- Howard 1979

(b) Reference Theory

- Smith 1992

(c) Ex Ante vs. Ex Post Values

- Freeman 1989

(d) Learning

- Poe and Bishop 1999
- Smith, Desvousges, and Payne 1995
- Ippolito and Mathios 1990
- Smith, Desvousges, Johnson, and Fisher 1990
- Smith and Desvousges 1988b
- Viscusi and O'Connor 1984

3. Measuring the Benefits of Environmental Improvement

a. Estimating Benefits from Market Data

- Bockstael and McConnell 1993
- Cameron 1992
- Hanemann 1992

(1) General

- Kling and Herriges 1999
- Phaneuf, Kling, and Herriges 1999
- Freeman 1993
- Braden and Kolstad 1991
- Bockstael, McConnell, and Strand 1991
- Bockstael *et al.* 1987
- Freeman 1985a
- Burt and Brewer 1971

(2) Welfare Evaluation of Price Changes

- Brookshire *et al.* 1987
- Knetsch and Sinden 1984

(3) Household Production Functions

- Smith 1991
- Bockstael *et al.* 1987
- Bockstael and McConnell 1983
- Bockstael and McConnell 1981

(4) Hotelling-Clawson-Knetsch Model

- Bockstael 1996
- Smith 1990
- Smith 1989
- Kling 1988
- Ward and Loomis 1986
- Freeman 1985a

- McConnell 1985
- Smith and Desvousges 1985
- Freeman 1993

(5) Hedonic Price Analysis

- Smith and Huang 1995
- Palmquist 1991
- Kohlhase 1991
- Clark and Kahn 1989
- Blomquist, Berger, and Hoehn 1988
- Bartik 1988a
- Freeman 1985a
- Ragozin and Brown 1985
- Scotchmer 1985
- Atkinson and Halvorsen 1984
- Brown and Mendelsohn 1984
- McConnell and Phipps 1984
- Bartik and Smith 1984
- Brown and Rosen 1982
- Vaughan and Huckins 1982
- Freeman 1993
- Harrison and Rubinfeld 1978
- Rosen 1974
- Adelman and Griliches 1961

(6) Hedonic Travel Cost Method

- Brown and Mendelsohn 1984
- Smith, Palmquist, and Jakus 1991

(7) Defensive Expenditures

- Bartik 1988b

(8) Private Options for Public Goods

- Stavins 1996b

(9) Parallel Private Markets

- List and Shogren 1998
- Crocker, Shogren, and Turner 1998
- Vaughan and Russell 1982

(10) Event Studies

- Hamilton 1993
- Hamilton 1995a

(11) Experimental Markets

- Cummings, Harrison, and Rustrom 1995
- Dickie, Gerking, and Fisher 1987
- Bishop *et al.* 1983
- Bishop and Heberlein 1979

b. Estimating Benefits from Non-Market Data: Contingent Valuation

(1) General

- Bishop and Heberlein 1990
- Mitchell and Caron 1989
- Cummings *et al.* 1986
- Smith and Desvousges 1986
- McConnell 1985
- Just *et al.* 1982, Ch. 12
- Freeman 1993

(2) Nonuse Value

- Rollins and Lyke 1998
- Madariaga and McConnell 1987
- Brookshire *et al.* 1983
- Harrington and Fisher 1982

(3) Sources of Bias

- Diamond 1996
- Smith and Osborne 1996
- Phillips and Zeckhauser 1989
- Hanemann 1984b
- Bishop and Heberlein 1979
- Cameron and Englin 1997

(4) Reliability

(a) General

- Carson, Hanemann, Kopp 1997
- Fischhoff 1991
- Kahneman and Thaler 1991
- Smith 1990
- Boyle and Bishop 1988
- Brookshire and Coursey 1987

(b) Arbitrary Values

- Smith 1991

(c) Closed-End Surveys

- Hanemann and Kanninen 1999
- Cameron and James 1987

(d) Test-Retest

- Loomis 1989

(e) Nature of the Good

- Kealy *et al.* 1990

(f) Dichotomous Choice vs. Open-Ended

- Loomis 1990

(5) Discrete Choice Methods

- Johnston and Swallow 1998
- McConnell 1995
- McConnell 1990
- Bowker and Stoll 1988
- Cameron 1988
- Hanemann 1984a
- Hanemann 1984b
- Hanemann 1983

(6) Conjoint Analysis

- Louviere, Hensher, and Swait 1998
- Swait, Adamowicz, and Louviere 1998
- Adamowicz, *et al.* 1996
- Mazzotta and Opaluch 1995
- Carson, *et al.* 1994
- Louviere 1994

c. Combining Revealed and Stated Preference Data

- Fox *et al.* 1997
- Cameron 1992
- Adamowicz, Louviere, and Williams 1994
- Huang, Haab, and Whitehead 1997

d. Comparison of Valuation Methods

- Burness *et al.* 1991
- Smith and Kaoru 1990
- Smith, Desvousges, and Fisher 1986
- Sellar *et al.* 1985
- Brookshire *et al.* 1982
- Bishop and Heberlein 1979

4. Adding Up The Numbers

a. Environmental Accounting

(1) National Income Accounts

- Stockhammer *et al.* 1997
- Lintott 1996
- Kaufmann 1995
- da Motta 1994
- Pearce and Atkinson 1993

(2) Valuing Environmental Holdings

- Unsworth and Bishop 1994
- Crocker and Shogren 1993

b. Applied Benefit-Cost Analysis

(1) General Theory

- Viscusi 1994
- Hoehn and Randall 1989
- Dorfman 1976

(2) Regulatory Flexibility

- Harrison and Nichols 1983

(3) Applications

- Carson, Flores, and Hanemann 1998
- Arrow *et al.* 1996
- Kopp 1992
- Krupnick and Portney 1991
- Boyle and Bishop 1987
- Kalt 1983
- Schulze *et al.* 1983
- Porter 1982

(4) Uncertainty

- Graham 1992
- McDonald and Siegel 1986
- Mendelsohn and Strang 1984
- Graham 1981
- Hammond 1981
- Zeckhauser 1981

(5) Critiques

- Lave 1991
- Bromley 1990
- Norgaard 1989
- Kneese and Schulze 1985
- Smith and Krutilla 1982
- Kelman 1981
- DeLong *et al.* 1981
- Regan 1981
- Baram 1980
- Pearce 1976

C. Policy

1. Overview: instrument choice and design

- Hahn and Stavins 1992
- OECD 1991
- Hahn and Noll 1990
- Tietenberg 1990
- Oates, Portney, and McGartland 1989
- Opschoor and Vos 1989
- Bohm and Russell 1985

- Dewees 1983
- Smith and Vaughan 1980
- Rose-Ackerman 1973
- Baumol and Oates 1971
- Crocker 1966

2. Individual Instruments

a. Regulation

(1) Standards

(a) General Theory

- Espey 1997
- Helfand 1991
- Besanko 1987
- Baumol and Oates 1971, Ch. 10

(b) Uncertainty

- Dasgupta 1982, Ch. 4, pp. 68-99
- Weitzman 1974

(c) Underestimation of Benefits

- Oates *et al.* 1989

(d) Applied Studies

- Godek 1997
- Henderson 1996
- Kahn 1996
- Crandall 1992
- Zilberman 1991
- McGartland 1988
- Atkinson and Tietenberg 1982
- White 1982
- Atkinson and Lewis 1974

(2) Other Regulations

- Viscusi 1996
- Pollak 1995
- Segal 1995
- Applegate 1992
- Swallow, Oplach, and Weaver 1992

b. Tradeable Permit Systems

(1) Overview

- Montgomery 1972
- Hahn 1989
- Tietenberg 1980
- Axtell and Hahn 1990

(2) Design and Implementation

- Hahn and Noll 1982
- Noll 1982
- Downing 1981
- Fullerton *et al.* 1997
- Bohm 1997

(3) Market Structure and Strategic Issues

- Hahn 1984
- Pashigan 1984
- Misolek and Elder 1989
- Malueg 1990
- Stavins 1995
- Kerr and Mare 1997

(4) Uncertainty

- Hahn and Noll 1990
- Opaluch and Kashmanian 1985

(5) Applied Studies

- Cansier and Krumm 1997
- Johnson and Pikelney 1996
- Foster and Hahn 1995
- Cason 1995
- Bohm and Larsen 1994
- Atkinson 1983
- Seskin *et al.* 1983
- Krupnick *et al.* 1983

c. Pigouvian Taxes/Subsidies

(1) Overview

- Fullerton and Wolverton 1999
- Fullerton 1997
- Fullerton 1996
- Palmquist 1990
- Carlton and Loury 1986
- Lee and Misiolek 1986
- Sadka 1978
- Green and Sheshinski 1976
- Holtermann 1976
- Baumol 1972

(2) Market Structure/Imperfection

- Berg *et al.* 1997
- Tschirhart 1994
- Newbery 1992
- Oates and Strassmann 1984
- Barnett 1980
- Blackman and Baumol 1980

(3) Imperfect Information

- Dasgupta *et al.* 1980
- Kwerel 1977

(4) Depletable Externalities

- Freeman 1984a

(5) Applied Studies

- Peszko and Zylicz 1998
- Fullerton and Kinnaman 1996
- Sigman 1996
- Palmer *et al.* 1995a
- Sigman 1995
- Hahn 1995b
- Alberini *et al.* 1995
- Poterba 1994
- Miranda *et al.* 1994
- Nordhaus 1992
- Jorgenson and Wilcoxon 1992
- Nordhaus 1982

d. Deposit/Refund Systems

- Palmer *et al.* 1997
- Fullerton and Kinnaman 1995
- Bohm 1981

e. Liability

- Larson 1996
- Pitchford 1995
- Zweifel and Tyran 1994
- Kornhauser and Revesz 1994
- Strasser and Rodosevich 1993
- Segerson 1993
- Segerson and Tietenberg 1992
- Shavell 1980

f. Environmental Bonds

- Cornwell and Costanza 1994
- Shogren *et al.* 1993

g. Information Provision

- Kiker and Putz 1997
- Pargal and Wheeler 1996
- Arora and Cason 1996
- Grodsky 1993

3. Issues

a. Pollution Technologies

- van der Voet *et al.* 1995
- Eiswerth 1993

(1) Spatial Differentiation

- Mendelsohn 1986
- Tietenberg 1978
- Hochman *et al.* 1977

(2) Temporal Accumulation

- Toman and Palmer 1997

b. Dynamic Issues

(1) Dynamic Efficiency/Effectiveness

(2) Discounting The Future

- Cropper *et al.* 1992

(3) Technological Change

- Milliman and Prince 1989
- Magat 1978
- Downing and White 1986
- Malueg 1989
- Berndt *et al.* 1993
- Jaffe and Stavins 1994
- Jaffe and Stavins 1995
- Hassett and Metcalf 1995
- Juing, Krutilla, and Boyd 1996
- Newell *et al.* 1999

c. Private Avoidance

(1) Defensive Expenditures

(2) Firm and Private Locational Decisions

- McConnell and Schwab 1990

d. Second-Best: Instruments in Presence of Distortionary Taxes

(1) Green Tax Shifts and the “Double Dividend”

- Sandmo 1975
- Bovenberg and de Mooij 1994
- Van der Ploeg and Bovenberg 1994
- Oates 1995
- Parry 1995
- Goulder 1995a

- Goulder 1995b
- Fullerton 1997
- Bovenberg and Goulder 1996
- Fullerton and Metcalf 1998
- Bohm 1998

(2) Instrument Choice

- Goulder, Parry, and Burtraw 1997
- Fullerton and Metcalf 1997
- Goulder 1998
- Parry *et al.* 1999
- Goulder *et al.* 1999

e. Monitoring and Enforcement

(1) Monitoring

- Russell 1990
- Beavis and Walker 1983

(2) Enforcement

(a) General Theory

- Swierzbinski 1994
- Kaplow and Shavell 1994
- Burby and Paterson 1993
- Naysnerski and Tietenberg 1992
- Harford 1987
- Russell *et al.* 1986 1986
- Shibata and Winrich 1983
- Harford 1978
- Viscusi and Zeckhauser 1979

(b) Noncompliance

- Stranlund 1995
- Malik 1990
- Gray and Deily 1996

(c) Fines: Probability vs. Magnitude

- Friedman 1993
- Polinsky and Shavell 1992
- Polinsky and Shavell 1979

f. Trade

- Barrett 1997
- Bhagwati and Srinivasan 1996
- Hoel 1996
- Copeland and Taylor 1995
- Hecht 1995
- Barrett 1994b
- Chichilniskly 1994

- Copeland and Taylor 1994
- Esty 1994
- Bustani and Cobas 1993
- Low 1992

g. Growth

(1) Abatement Costs and Competitiveness

- Palmer *et al.* 1995b
- Porter 1995
- Jaffe *et al.* 1995
- Robinson 1995
- O'Reilly 1994
- Azzoni and Isai 1994
- Walker and Gover 1993
- Goto and Sawa 1993
- Blitzer *et al.* 1993
- Gaskins and Weyant 1993
- Hazilla and Kopp 1990
- Jorgenson and Wilcoxon 1990
- Ascher and Healy 1990
- Gray 1987
- Christiansen and Haveman 1981
- Peskin *et al.* 1981

(2) Economic Development

- Agras and Chapman 1999
- Rothman and de Bruyn 1998
- Barbier 1997
- Dasgupta 1996C
- Dasgupta 1995
- Selden and Song 1995
- Grossman and Krueger 1995
- Selden and Song 1994
- Gruver 1976
- d'Arge and Kogiku 1973

h. Distribution

(1) Effects On Distribution

(a) Cross-Sectional Distribution

- Jacoby *et al.* 1997
- Resosudarmo and Thorbecke 1996
- Hamilton 1995b
- Coates *et al.* 1994
- Hird 1993
- Bingham *et al.* 1987
- De Meza and Gould 1987
- Robison 1985
- Pearce 1985
- Christiansen and Tietenberg 1985
- Gianessi and Peskin 1980

- Gianessi *et al.* 1979

(b) Temporal Distribution and Sustainability

- Toman 1994

(2) Effects Of Distribution

- Boyce 1994

4. Policy Formulation

a. General

- Earnhart 1997
- Finkelshtain and Kislev 1997
- Gupta *et al.* 1996
- Simon *et al.* 1995
- Rabe 1995
- Kahn and Matsusaka 1995
- Rhodes and Wilson 1995
- Barthold 1994
- Sunstein 1993
- Hornstein 1993
- Gersbach 1993
- O'Hare and Sanderson 1993
- Cropper *et al.* 1992
- Hausker 1992
- Hahn and Stavins 1991
- Hahn 1990
- Nelson 1987
- Baumol and Oates 1988, Ch. 13-14, 16-17
- Tietenberg 1985

b. Environmental Federalism

- Peltzman and Tideman 1972
- Wheeler 1994
- Revesz 1996
- Levinson 1997

c. Coordination/Treaties

- Barrett 1999
- Markowska and Zylicz 1999
- Murdoch and Sandler 1997
- Jehiel and Moldovanu 1995
- Barrett 1994a
- Mohr 1994
- Chander and Tulkens 1994
- Carraro and Siniscalco 1993
- Hamilton 1993
- Parkash and Tulkens 1992
- Hoel 1992

d. Conflict

- Hurley and Shogren 1997
- Baik and Shogren 1994

e. Positive Political Economy

- Buchanan and Tullock 1975
- Maloney and McCormick 1982
- Keohane, Revesz, and Stavins 1998
- Joskow and Bailey 1998
- Shogren 1998b
- Boyer and Laffont 1999

5. Specific Environmental Studies

a. Waste

(1) Municipal Solid Waste

- Dinan 1993
- Opaluch *et al.* 1993
- Miranda *et al.* 1994
- Strathman *et al.* 1995
- Fullerton and Kinnaman 1996
- Palmer, Sigman, and Walls 1997

(2) Hazardous Waste

- Peretz *et al.* 1997
- Sigman 1998

b. Water Pollution

- Weinberg and Kling 1996
- Carson and Mitchell 1993
- O'Neil, David, Moore, and Joeres 1983

c. Air Pollution

(1) Local Air Pollution

- Henderson 1996
- Innes 1996
- Alberini and McConnell 1995
- Zylicz 1995
- Krupnick and Walls 1992
- Hahn 1995a

(2) Transboundary Air Pollution: Acid Rain

- Maler 1989
- Cason 1993
- Burtraw 1996
- Coggins and Swinton 1996

- Burtraw *et al.* 1997
- Fullerton *et al.* 1997
- Schmalensee *et al.* 1998
- Stavins 1998
- Joskow, Schmalensee, and Bailey 1998
- Ellerman and Montero 1998
- Montero 1999

(3) Global Air Pollution: Greenhouse Gases and Climate Change

- Nordhaus 1993a
- Nordhaus 1993b
- Falk and Mendelsohn 1993
- Weyant 1993
- Bohm 1993
- Nordhaus 1994
- Mendelsohn *et al.* 1994
- Kosobud 1994
- Kolstad 1996b
- Schmalensee 1997
- Barrett 1998a
- Barrett 1998b
- Schelling 1998
- Jacoby *et al.* 1998
- Stavins 1999

REFERENCES

- Ackerman, Bruce A., and William T. Hassler. (1981). *Clean Coal/Dirty Air*. New Haven: Yale University Press.
- Adamowicz, W., J. Louviere, and M. Williams. (1994). "Combining Revealed and Stated Preference Methods for Valuing Environmental Amenities." *Journal of Environmental Economics and Management* 26: 271-92.
- Adamowicz, W.L., Swait, J., Boxall, P., Louviere, J., & Williams, M. (1996) "Perceptions versus Objective Measures of Environmental Quality in Combined Revealed and Stated Preference Models of Environmental Valuation." *Journal of Environmental Economics and Management*, 32, 65-84.
- Adams, Richard M., Thomas D. Crocker, and Richard W. Katz. (1984). "Assessing the Adequacy of Natural Science Information: A Bayesian Approach". *Review of Economics and Statistics*, 66, 568-575.
- Adar, Zvi, and James M. Griffin. (1976). "Uncertainty and the Choice of Pollution Control Instruments". *Journal of Environmental Economics and Management*, 3, 178-188.
- Adelman, Irma, and Zvi Griliches. (1961). "On an Index of Quality Change". *Journal of the American Statistical Association*, 56, 535-548.
- Alberini, Anna, Winston Harrington, and Virginia McConnell. (1995). "Determinants of participation in accelerated vehicle-retirement programs". *RAND Journal of Economics*, 26(1), 93-112.
- Albers, Heidi. (1996). "Modeling Ecological Constraints on Tropical Forest Management: Spatial Interdependence, Irreversibility, and Uncertainty." *Journal of Environmental and Resource Economics*, 30, 73-94.
- Agras, Jean and Duane Chapman. (1999). "A Dynamic Approach to the Environmental Kuznets Curve Hypothesis." *Ecological Economics* 28, 267-277.
- Amacher, R.C., R.D. Tollison, and T.D. Willett. (1976). "The Economics of Fatal Mistakes: Fiscal Mechanisms for Preserving Endangered Predators". *Public Policy*, 20, 411-441.
- Amigues, J.P., Favard, P., G Gaudet and M Moreaux. (1998). "On the optimal order of natural resource use when the capacity of the inexhaustible substitute is limited." *Journal of Economic Theory*, 80:153-170.
- Amundsen, Eirik S., Christian Andersen, and Jan Gaute Sannarnes. (1992). "Rent Taxes on Norwegian Hydropower Generation". *Energy Journal*, 13(1), 97-116.
- Anderson, Lee G. (1986). *The Economics of Fisheries Management*. Baltimore: Johns Hopkins University Press.
- Anderson, Lee G. (1989). "Enforcement Issues in Selecting Fisheries Management Policy". *Marine Resource Economics*, 6(3), 261-277.
- Ando, Amy W. (1999). "Waiting to be Protected under the Endangered Species Act: The Political Economy of Regulatory Delay." *Journal of Law and Economics*, volume 42.
- Andreoni, James. (1993). "An Experimental Test of the Public-Goods Crowding-Out Hypothesis". *AER*, 83(5), 1317-1327.
- Andreoni, James. (1995). "Cooperation in Public-Goods Experiments: Kindness or Confusion?". *American Economic Review*, 85(4), 891-904.
- Applegate, John S. (1992). "Worst Things First: Risk, Information, and Regulatory Structure in Toxic Substances Control". *Yale Journal on Regulation*, 9, 276-353.

- Arnason, Ragnar. (1990). "Minimim information management in fisheries". *Canadian Journal of Economics*, 23(3), 630-653.
- Arora, Seema, and Timothy N. Cason. (1996). "Why Do Firms Volunteer to Exceed Environmental Regulations? Understanding Participation in EPA's 33/50 Program". *Land Economics*, 72(4), 413-432.
- Arrow, Kenneth J. (1982). "The Rate of Discount on Public Investments with Imperfect Capital Markets". In R. C. Lind (Ed.), *Discounting for Time and Risk in Energy Policy* (pp. 115-150). Washington: Resources for the Future.
- Arrow, Kenneth J., and Sheldon Chang. (1982). "Optimal Pricing, Use, and Exploration of Uncertain Natural Resource Stocks". *Journal of Environmental Economics and Management*, 9, 1-10.
- Arrow, Kenneth, Maureen Cropper, George Eads, Robert Hahn, Lester Lave, Roger Noll, Paul Portney, Miton Russell, Richard Schmalensee, Kerry Smith, and Robert Stavins (1996). "Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?" *Science*, April 12.
- Arrow, Kenneth J., and Anthony C. Fisher. (1974). "Environmental Preservation, Uncertainty, and Irreversibility". *Quarterly Journal of Economics*, 87, 312-319.
- Arrow, Kenneth J., and Mordecai Kurz. (1970). *Public Investment, the Rate of Return, and Optimal Fiscal Policy*. Baltimore: Johns Hopkins Press.
- Arrow, Kenneth J. , and Robert C. Lind. (1970). "Uncertainty and the Evaluation of Public Investment Decisions". *American Economic Review*, 60, 364-378.
- Asch, Peter, and Joseph J. Seneca. (1976). "Monopoly and External Costs: An Application of Second-Best Theory to the Automobile Industry". *Journal of Environmental Economics and Management*, 3, 69-79.
- Ascher, William, and Robert Healy. (1990). *Natural Resource Policymaking in Developing Countries: Economic Growth and Income Distribution*. Durham, NC: Duke University Press.
- Asheim, Geir. (1991). "Unjust Intergenerational Allocations." *Journal of Economic Theory*, 54, 350-471.
- Atkinson, Scott E. (1983). "Marketable Pollution Permits and Acid Rain Externalities." *Canadian Journal of Economics*, 16(4): 704-722.
- Atkinson, Scott E., and Robert Halvorsen. (1984). "A New Hedonic Technique for Estimating Attribute Demand: An Application to the Demand for Automobile Fuel Efficiency". *Review of Economics and Statistics*, 66, 417-426.
- Atkinson, Scott E. and Donald H. Lewis. (1974). "A Cost-Effectiveness Analysis of Alternative Air Quality Control Strategies." *Journal of Environmental Economics and Management*, 1: 237-250.
- Atkinson, Scott E., and T.H. Tietenberg. (1982). "The Empirical Properties of Two Classes of Designs for Transferable Discharge Permit Markets". *Journal of Environmental Economics and Management*, 9, 101-121.
- Axtell, Robert L., and Robert W. Hahn. (1990). "On the Presumed Superiority of Transferable Property Rights". *Draft*, 1, 1-28.
- Ayres, Robert U. (1988). "Optimal Investment Policies with Exhaustible Resources: An Information-Based Model". *Journal of Environmental Economics and Management*, 15, 439-461.
- Azzoni, Carlos R., and Joao Y. Isai. (1994). "Estimating the costs of environmental protection in Brazil". *Ecological Economics*, 11, 127-133.
- Bachmura, F.T. (1971). "Economics of Vanishing Speices". *Natural Resources Journal*, 11, 674-692.

- Baik, K. W., and J. Shogren. (1994). "Environmental Conflicts with Reimbursement for Citizen Suits." *Journal of Environmental Economics and Management*, 27, 1-20.
- Baldwin, Laura H., Robert C. Marshall, and Jean-Francois Richard. (1997). "Bidder Collusion at Forest Service Timber Sales". *Journal of Political Economy*, 105(4), 657-699.
- Ballard, Charles L., and Don Fullerton. (1992). "Distortionary Taxes and the Provision of Public Goods". *Journal of Economic Perspectives*, 6(3), 117-131.
- Baram, Michael S. (1980). "Cost Benefit Analysis: An Inadequate Basis for Health, Safety and Environmental Regulatory Decisionmaking". *Ecology Law Quarterly*, 8, 473-531.
- Barbier, Edward B. (1997). "Introduction to the Environmental Kuznets Curve Special Issue." *Environment and Development Economics* 2, 369-381.
- Barbier, Edward B., J.C. Burgess, and Anil Markandya. (1991). "The Economics of Tropical Deforestation". *Ambio*, 20(2), 55-58.
- Barbier, Edward B., and Anil Markandya. (1990). "The Conditions for Achieving Environmentally Sustainable Development". *European Economic Review*, 34(2-3), 659-669.
- Bardhan, Pranab. (1993). "Symposium on Management of Local Commons". *Journal of Economic Perspectives*, 7(4), 87-92.
- Barham, B.L., and O.T. Coomes. (1994). "Reinterpreting the Amazon rubber boom: investment, the state, and Dutch disease". *Latin American Research Review*, 29(2), 73-109.
- Barnes, J.I. (1996). "Changes in the economic use value of elephant in Botswana: the effect of international trade prohibition". *Ecological Economics*, 18, 215-230.
- Barnett, A.H. (1980). "The Pigouvian Tax Rule under Monopoly". *AER*, 70(5), 1037-1041.
- Barnett, Harold J., and Chandler Morse. (1963). *Scarcity and Growth: The Economics of Natural Resource Availability*. Baltimore: Johns Hopkins University Press, for Resources for the Future.
- Barrett, Scott. (1991). "Optimal Soil Conservation and the Reform of Agricultural Pricing Policies." *Journal of Development Economics*, 36, 167-187.
- Barrett, Scott. (1994a). "Self-Enforcing International Environmental Agreements." *Oxford Economic Papers*, 46, 878-894.
- Barrett, Scott. (1994b). "Strategic Environmental Policy and International Trade". *Journal of Public Economics*, 54, 325-338.
- Barrett, Scott. (1997). "The Strategy of Trade Sanctions in International Environmental Agreements". *Resource and Energy Economics*, 19, 345-361.
- Barrett, Scott. (1998a). "On the Theory of Diplomacy of Environmental Treaty-Making." *Environmental and Resource Economics* 11(3-4):317-333.
- Barrett, Scott. (1998b). "Political Economy of the Kyoto Protocol." *Oxford Review of Economic Policy*, 14, 20-39.
- Barrett, Scott. (1999b). "A Theory of Full International Cooperation." *Journal of Theoretical Politics*, forthcoming.
- Barthold, Thomas. (1994). "Issues in the Design of Environmental Excise Taxes". *JEP*, 8(1), 133-152.

- Bartik, Timothy J. (1988a). "Benefits of Amenity Improvements in Hedonic Price Models". *Land Economics*, 64, 172-183.
- Bartik, Timothy J. (1988b). "Evaluating the Benefits of Non-Marginal Reductions in Pollution Using Information on Defensive Expenditures". *Journal of Environmental Economics and Management*, 15, 111-127.
- Bartik, Timothy J., and V. Kerry Smith. (1984). "Urban Amenities and Public Policy". *draft, Working paper No. 84-W8 at Vanderbilt University, Department of Economics and Business Administration*.
- Batie, Sandra S. (1989). "Sustainable Development: Challenges to the Agricultural Economics Profession". *American Journal of Agricultural Economics*, 71, 1083-1101.
- Baumol, William J. (1968). "On the Social Rate of Discount". *American Economic Review*, 57, 788-802.
- Baumol, William J. (1972). "On Taxation and the Control of Externalities". *AER*, 62(3), 307-322.
- Baumol, William J., and Wallace E. Oates. (1971). "The Use of Standards and Prices For Protection of the Environment". *Swedish Journal of Economics*, 73(1), 42-54.
- Baumol, William J., and Wallace E. Oates. (1988). *The Theory of Environmental Policy: Externalities, Public Outlays, and the Quality of Life*. Englewood Cliffs, NJ: Prentice-Hall.
- Beavis, Brian, and Martin Walker. (1983). "Random Wastes, Imperfect Monitoring and Environmental Quality Standards". *Journal of Public Economics*, 21, 377-387.
- Beckmann, Martin J. (1968). *Dynamic Programming of Economic Decisions*. New York: Springer-Verlag.
- Bell, Frederick W. (1972). "Technological Externalities and Common Property Resources: An Empirical Study of the U.S. Northern Lobster Fishery". *Journal of Political Economy*, 80, 148-153.
- Bellman, Richard. (1957). *Dynamic Programming*. Princeton, NJ: Princeton University Press.
- Bellman, Richard, and Stuart Dreyfus. (1962). *Applied Dynamic Programming*. Princeton, NJ: Princeton University Press.
- Benjamin, N.C, S. Devarajan, and R.J. Weiner. (1989). "The 'Dutch' disease in a developing country: oil reserves in Cameroon". *Journal of Development Economics*, 30, 71-92.
- Berck, Peter. (1979a). "Economics of Timber: A Renewable Resource in the Long Run". *Bell Journal of Economics*, 10, 447-462.
- Berck, Peter. (1979b). "Open Access and Extinction". *Econometrica*, 47, 877-882.
- Berck, Peter. (1981). "Optimal Management of Renewable Resources with Growing Demand and Stock Externalities". *Journal of Environmental Economics and Management*, 8, 105-117.
- Berck, Peter, and Bentley, William R. (1997). "Hotelling's Theory, Enhancement, and the Taking of the Redwood National Park." *American Journal of Agricultural Economics*, 79, pp. 287-298.
- Berck, Peter, and Perloff, Jeffrey M. (1984). "An Open-Access Fishery with Rational Expectations." *Econometrica*, 52, pp. 489-506.
- Berck, Peter, and Roberts, Michael. (1996). "Natural Resource Prices: Will They Ever Turn Up?" *Journal of Environmental Economics and Management*, 31, pp. 65-78.
- Berg, Elin, Snorre Kverndokk, and Knut Einar Rosendahl. (1997). "Market Power, International CO2 Taxation and Oil Wealth". *Energy Journal*, 18(4), 33-71.

- Bergstrom and Cornes. (1981). "Gorman and Musgrave are Dual: An Antipodean Theorem on Public Goods" *Economics Letters*, 7:371-378.
- Bergstrom and Cornes. (1983). "Independence of Allocative Efficiency from Distribution in the Theory of Public Goods." *Econometrica*, 51(6):1753-65.
- Berndt, Ernst, Charles Kolstad, and J. K. Lee. (1993). "Measuring the Energy Efficiency and Productivity Impacts of Embodied Technical Change." *Energy Journal*, 14, 33-55.
- Bertsekas, Dimitri. (1987). *Dynamic Programming: Deterministic and Stochastic Models*. Englewood Cliffs, NJ: Prentice Hall.
- Besanko, David. (1987). "Performance versus design standards in the regulation of pollution." *Journal of Public Economics*, 34: 19-44.
- Bhagwati, J., and T.N. Srinivasan. (1996). "Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?". In J. N. Bhagwati and R. E. Hudec (Eds.), *Fair Trade and Harmonization* (Vol. 1,). Cambridge: MIT Press.
- Bingham, Taylor H., Donald W. Anderson, and Philip C. Cooley. (1987). "Distribution of the Generation of Air Pollution". *Journal of Environmental Economics and Management*, 14, 30-40.
- Binkley, C.S. (1987). "When is the Optimal Economics Rotation longer Than the Rotation of Maximum Sustained Yield?". *Journal of Environmental Economics and Management*, 14, 152-158.
- Bishop, Richard C. (1978). "Endangered Species and Uncertainty; The Economics of a Safe Minimum Standard". *American Journal of Agricultural Economics*, 60, 10-18.
- Bishop, Richard C. (1982). "Option Value: An Exposition and Extension". *Land Economics*, 58, 1-15.
- Bishop, Richard C., and Thomas A. Heberlein. (1979). "Measuring Values of Extramarket Goods: Are Indirect Measures Biased?". *American Journal of Agricultural Economics*, 61, 926-930.
- Bishop, Richard C., and Thomas A. Heberlein. (1990). "The Contingent Valuation Method". In R. Johnson and G. Johnson (Eds.), *Economic Valuation of Natural Resources: Issues, Theory and Applications*. Boulder, CO: Westview Press.
- Bishop, Richard C., Thomas A. Heberlein, and Mary Jo Kealy. (1983). "Hypothetical Bias in Contingent Valuation: Results from a Simulated Market". *Natural Resources Journal*, 23, 619-633.
- Bishop, Richard C., and Karl C. Samples. (1980). "Sport and Commercial Fishing Conflicts: A Theoretical Analysis". *Journal of Environmental Economics and Management*, 7, 220-233.
- Bjorndal, Trond. (1993). "Optimal Vessel Size in Norwegian Fishing". *Land Economics*, 69(1), 98.
- Bjorndal, Trond, and Jon M. Conrad. (1987). "The Dynamics of an Open Access Fishery". *Canadian Journal of Economics*, 20, 74-85.
- Blackman, Sue A. Batey, and William J. Baumol. (1980). "Modified Fiscal Incentive in Environmental Policy". *Land Economics*, 56, 417-431.
- Blitzer, Charles, Richard Eckaus, Supriya Lahiri, and Alexander Meeraus. (1993). "Growth and Welfare Losses from Carbon Emissions Restrictions: A General Equilibrium Analysis of Egypt". *The Energy Journal*, 14(1), 57-82.

- Blomquist, G.C., M.C. Berger, and J.P. Hoehn. (1988). "New Estimates of Quality of Life in Urban Areas." *American Economic Review* 78(1): 89-107.
- Boal, William M. (1995). "Testing for employer monopsony in turn-of-the-century coal mining". *RAND Journal of Economics*, 26(3), 519-536.
- Bockstael, N. (1996). "Travel Cost Models." *The Handbook of Environmental Economics*, D. Bromley, ed., Blackwell Publishers.
- Bockstael, Nancy E. and W. Michael Hanemann. (1987). "Time and the Recreation Demand Model." *American Journal of Agricultural Economics*, 293-302.
- Bockstael, Nancy E., W. Michael Hanemann, and Catherine L. Kling. (1987). "Estimating the value of water quality improvements in a recreational demand framework". *Water Resources Research*, 23, 951-960.
- Bockstael, Nancy E., and Kenneth E. McConnell. (1981). "Theory and Estimation of the Household Production Function for Wildlife Recreation". *Journal of Environmental Economics and Management*, 8, 199-214.
- Bockstael, Nancy E., and Kenneth E. McConnell. (1983). "Welfare Measurement in the Household Production Framework". *American Economic Review*, 73, 806-814.
- Bockstael, Nancy E., and Kenneth E. McConnell. (1993). "Public Goods as Characteristics of Non-Market Commodities." *Economic Journal*, pp. 1244-1257.
- Bockstael, N., K. McConnell, and I. Strand. (1991). "Recreation," Braden and Kolstad, eds., *Measuring the Demand for Environmental Quality*.
- Bohi, Douglas R., and Michael A. Toman. (1984). *Analyzing Nonrenewable Resource Supply*. Washington, D.C.: Resources for the Future.
- Bohi, Douglas R., Michael A. Toman, and Margaret Walls. (1996). *The Economics of Energy Security*. Boston: Kluwer.
- Bohm, Peter. (1981). *Deposit-Refund Systems: Theory and Applications to Environmental, Conservation and Consumer Policy*. Baltimore: Johns Hopkins Press, for Resources For the Future.
- Bohm, Peter. (1993). "Incomplete International Cooperation to Reduce CO₂ Emissions: Alternative Policies." *Journal of Environmental Economics and Management* 24, 258-271.
- Bohm, Peter. (1997). *Joint Implementation as Emission Quota Trade: An Experiment Among Four Nordic Countries*, Nordic Council of Ministers, Copenhagen.
- Bohm, Peter. (1975) "Option Demand and Consumer's Surplus: Comment." *American Economic Review*, 65, 733-736.
- Bohm, Peter. (1998) "Public Investment Issues and Efficient Climate Change Policy", Part 1, in *The Welfare State, Public Investment, and Growth*, eds. H. Shibata and T. Ihori, Springer-Verlag Tokyo.
- Bohm, Peter and Bjorn Larsen. (1994) "Fairness in a Tradeable-Permit Treaty for Carbon Emissions Reductions in Europe and the Former Soviet Union." *Environment and Resource Economics*, 4:219-239.
- Bohm, Peter, and Clifford F. Russell. (1985). "Comparative Analysis of Alternative Policy Instruments". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 1,). Amsterdam: North-Holland.
- Booker, J. F., and R. A. Young. (1994). "Modeling intrastate and interstate markets for Colorado river water resources." *Journal of Environmental Economics and Management*, 26: 66-87.

- Borenstein, Severin, and Andrea Shepard. (1996). "Dynamic pricing in retail gasoline markets". *RAND Journal of Economics*, 27(3), 429-451.
- Boskin, Michael J. *et al.* (1985). "New Estimates of the Value of Federal Mineral Rights and Land". *American Economic Review*, 75, 923-936.
- Bovenberg, A. Lans, and Ruud A. de Mooij. (1994). "Environmental Levies and Distortionary Taxation". *American Economic Review*, 84(4), 1085-1089.
- Bovenberg, A. Lans, and Lawrence H. Goulder. (1996). "Optimal Environmental Taxation in the Presence of Other Taxes: General-Equilibrium Analyses". *American Economic Review*, 86(4), 985-1000.
- Bowes, Michael D., and John V. Krutilla. (1985). "Multiple Use Management of Public Forestlands". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 2,). Amsterdam: North-Holland.
- Bowker, J.M., and John R. Stoll. (1988). "Use of Dichotomous Choice Nonmarket Methods to Value the Whooping Crane Resource". *American Journal of Agricultural Economics*, 70, 372-381.
- Boyce, James K. (1994). "Inequality as a cause of environmental degradation". *Ecological Economics*, 11, 169-178.
- Boyer, Marcel, and Jean-Jacques Laffont. (1999). "Toward a Political Theory of the Emergence of Environmental Incentive Regulation." *RAND Journal of Economics* 30(1), pp. 137-157.
- Boyle, Kevin J., and Richard C. Bishop. (1987). "The Total Value of Wildlife: A Case Study Involving Endangered Species". *Water Resources Research*, 23, 943-950.
- Boyle, Kevin J., and Richard C. Bishop. (1988). "Welfare Measurements Using Contingent Valuation: A Comparison of Techniques". *American Journal of Agricultural Economics*, 70, 20-28.
- Braden, John B. and Charles D. Kolstad, eds. (1991). *Measuring the Demand for Environmental Quality*. Amsterdam: North Holland.
- Bradford, D.F. (1975). "Constraints on Government Investment Opportunities and the Choice of a Discount Rate". *American Economic Review*, 65, 887-895.
- Brannan, M., and E. Schwartz. (1985). "Evaluating Natural Resource Investments." *Journal of Business*, No. 58, pp. 135-157.
- Brazee, R., and R. Mendelsohn. (1988). Timber harvesting with fluctuating prices. *Forest Science*, 34:359-372.
- Bromley, Daniel W. (1990). "The Ideology of Efficiency: Searching for a Theory of Policy Analysis". *Journal of Environmental Economics and Management*, 19, 86-107.
- Bromley, Daniel W., ed. (1995). *The Handbook of Environmental Economics*. Cambridge, USA: Blackwell.
- Brooks, R., M. Murray, J. Cotroneo, and S. Salant. (1999). "When is the Standard Analysis of Common Property Extraction Under Free Access Correct? A Game-Theoretic Justification for Non Game-Theoretic Analyses." *Journal of Political Economy*, forthcoming.
- Brookshire, David S., and Don L. Coursey. (1987). "Measuring the Value of a Public Good: An Empirical Comparison of Elicitation Procedures". *American Economic Review*, 77, 554-556.
- Brookshire, David S., Don L. Coursey, and William D. Schulze. (1987). "The External Validity of Experimental Economics Techniques: Analysis of Demand Behavior". *Economic Inquiry*, 25, 239-250.

- Brookshire, David S., Larry S. Eubanks, and Alan Randall. (1983). "Estimating Option Prices and Existence Values for Wildlife Resources". *Land Economics*, 59, 1-15.
- Brookshire, David S., Mark A. Thayer, William D. Schulze, and Ralph d'Arge. (1982). "Valuing Public Goods: A Comparison of Survey and Hedonic Approaches". *American Economic Review*, 72, 165-177.
- Browder, John O., Eraldo Aparecido Trondoli Matricardi, and Wilson Soares Abdala. (1996). "Is sustainable tropical timber production financially viable? A comparative analysis of mahogany silviculture among small farmers in the Brazilian Amazon". *Ecological Economics*, 16, 147-159.
- Brown, Gardner M. (1974). "An Optimal Program for Managing Common Property Resources with Congestion Externalities". *Journal of Political Economy*, 82, 163-173.
- Brown, Gardner M. and Robert Mendelsohn. (1984). "The Hedonic Travel Cost Method." *Review of Economics and Statistics*, 66(3), 427-33.
- Brown, Gardner M., and Barry C. Field. (1979). "The Adequacy of Measures for Signalling the Scarcity of Resources". In V. K. Smith (Ed.), *Scarcity and Growth Reconsidered*. Baltimore: Johns Hopkins University Press.
- Brown, Gardner M., and J.H. Goldstein. (1984). "A Model for Valuing Endangered Species". *Journal of Environmental Economics and Management*, 11, 303-309.
- Brown, Gardner M., and Robert Mendelsohn. (1984). "The Hedonic Travel Cost Method". *Review of Economics and Statistics*, 66, 427-433.
- Brown, Gardner M. and Jason F. Shogren. (1998). "The Economics of the Endangered Species Act." *Journal of Economic Perspectives*, volume 12, number 3, pp. 3-20.
- Brown, James N., and Harvey S. Rosen. (1982). "On the Estimation of Structural Hedonic Prices Models". *Econometrica*, 50, 765-768.
- Buchanan, James M. and Gordon Tullock. (1975). "Polluters' profits and political response: Direct controls vs. taxes." *American Economic Review*, 65: 981-984.
- Bull, Nicholas, Kevin A. Hassett, and Gilbert E. Metcalf. (1994). "Who Pays Broad-Based Energy Taxes? Computing Lifetime and Regional Incidence". *Energy Journal*, 15(3), 145-164.
- Bulow, J. (1982). "Durable Goods Monopolist". *Journal of Political Economy*, 90, 314-332.
- Burby, Raymond J., and Robert G. Paterson. (1993). "Improving Compliance with State Environmental Regulations". *Journal of Policy Analysis and Management*, 12(4), 753-772.
- Burness, H. Stuart. (1976). "On the Taxation of Nonreplenishable Natural Resources". *Journal of Environmental Economics and Management*, 3, 289-311.
- Burness, H. Stuart, Ronald G. Cummings, and G.W. Harrison. (1991). "Valuing Environmental Goods: A Critical Appraisal of the State of the Art". In A. Dinar and D. Zilberman (Eds.), *The Economics and Management of Water and Drainage in Agriculture*. Boston: Kluwer Academic Publishers.
- Burrows, Paul. (1986). "Nonconvexity Induced by External Costs on Production: Theoretical Curio or Policy Dilemma?". *Journal of Environmental Economics and Management*, 13, 101-128.
- Burt, Oscar R. (1967a). "Groundwater Management under Quadratic Criteria Function". *Water Resources Research*, 3, 673-682.

- Burt, Oscar R. (1967b). "Temporal Allocation of Groundwater". *Water Resources Research*, 3, 45-56.
- Burt, Oscar R. (1981). "Farm Level Economics of Soil Conservation in the Palouse Area of the Northwest". *American Journal of Agricultural Economics*, 63, 83-92.
- Burt, O. and D. Brewer. (1971). "Estimates of Net Social Benefits for Outdoor Recreation." *Econometrica*, 39, 813-827.
- Burtraw, Dallas. (1996). "The SO₂ Emissions Trading Program: Cost Savings Without Allowance Trades", *Contemporary Economic Policy*, April, 14, 79-94.
- Burtraw, Dallas, Alan Krupnick, Erin Mansur, David Austin, and Deirdre Farrell. (1997). "The Costs and Benefits of Reducing Acid Rain", Discussion Paper 97-31-REV, Resources for the Future, Washington, D.C.
- Bustani, Alberto, and Elisa Cobas. (1993). "The Impact of Natural Gas Imports on Air Pollutant Emissions in Mexico". *Energy Journal*, 14(3), 1-15.
- Cameron, Trudy A. (1988). "A New Paradigm for Valuing Nonmarket Goods Using Referendum Data: Maximum Likelihood Estimation by Censored Logistic Regression". *Journal of Environmental Economics and Management*, 15, 355-379.
- Cameron, Trudy A. (1992). "Combining Contingent Valuation and Travel Cost Data for the Valuation of Nonmarket Goods." *Land Economics*, pp. 302-317.
- Cameron, T.A. and J.Englin. (1997). "Welfare Effects of Changes in Environmental Quality Under Individual Uncertainty about Use." *Rand Journal of Economics* 28(Special Issue): S45-S70.
- Cameron, Trudy A., and M.D. James. (1987). "Efficient Estimation Methods for 'Closed-Ended' Contingent Valuation Survey Data". *Review of Economics and Statistics*, 69, 269-276.
- Cansier, Dieter, and Raimund Krumm. (1997). "Air pollutant taxation: an empirical survey". *Ecological Economics*, 22, 59-70.
- Caputo, Michael R. (1990a). "New Qualitative Properties in the Competitive Nonrenewable Resource Extracting Model of the Firm". *International Economics Review*, 31, 829-839.
- Caputo, Michael R. (1990b). "A Qualitative Characterization of the Competitive Nonrenewable Resource Extracting Firm". *Journal of Environmental Economics and Management*, 18, 206-226.
- Carraro, Carlo and Dominico Siniscalco. (1993). "Strategies for the International Protection of the Environment." *Journal of Public Economics*, 52, 309-328.
- Carlton, D.W. and G.C. Loury. (1986). "The Limitations of Pigouvian Taxes as a Long-Run Remedy for Externalities: An Extension of Results." *Quarterly Journal of Economics* 101(3): 631-634.
- Carson, R. T., N. E. Flores, and W. M. Hanemann. (1998). "Sequencing and Valuing Public Goods." *E*, November.
- Carson R.T., W.M. Hanemann, R.J. Kopp, *et al.* (1997). "Temporal Reliability of Estimates from Contingent Valuation." *Land Economics* 73(2): 151-163.
- Carson, R.T., Louviere, J.J., Anderson, D.A., Arabie, P., Bunch, D.S., Hensher, D.A., Johnson, R.M., Kuhfeld, W.F., Steinberg, D., Swait, J.D., Timmermans, H. and Wiley, J.B. (1994). "Experimental Analysis of Choice." *Marketing Letters: Special Issue on the Duke Invitational Conference on Consumer Decision-Making and Choice Behavior*, 5(4): 351-368.

- Carson, R. T. and R. C. Mitchell. (1993). "The Value of Clean Water: Willingness to Pay for Boatable, Fishable, and Swimmable Water quality." *WRR*, July.
- Cason, Timothy N. (1993). "Seller Incentive Properties of EPA's Emission Trading Auction." *Journal of Environmental Economics and Management* 25, 177-195.
- Cason, Timothy N. (1995). "An Experimental Investigation of the Seller Incentives in the EPA's Emission Trading Auction". *American Economic Review*, 85(4), 905-922.
- Chakravorty, Ujjayant, James Roumasset, and Kinping Tse. (1997). "Endogenous Substitution among Energy Resources and Global Warming." *Journal of Political Economy*, 105, 1201-1234.
- Chakravorty, Ujjayant and Darrell L. Krulce. (1994). "Heterogeneous Demand and Order of Resource Extraction." *Econometrica*, 62, 1445-1452.
- Chander, Parkash. (1993). "Dynamic Procedures and Incentives in Public Good Economies". *Econometrica*, 61(6), 1341-1354.
- Chander, Parkash, and Henry Tulkens. (1994, 22-25 August 1994). "A Core-theoretical Solution for the Design of Cooperative Agreements on Transfrontier Pollution". Paper presented at the 50th Congress of the International Institute of Public Finance, Cambridge, MA.
- Chang, Sun J. (1982). "An Economic Analysis of Forest Taxation's Impact on Optimal Rotation Age". *Land Economics*, 58, 310-323.
- Chang, Sun J. (1984). "Determination of the Optimal Rotation Age: A Theoretical Analysis". *Forest Ecology and Management*, 8, 137-147.
- Chapman, Duane. (1987). "Computation Techniques for Intertemporal Allocation of Natural Resources". *American Journal of Agricultural Economics*, 69, 134-142.
- Charles, Anthony T. (1983). "Optimal Fisheries Investment under Uncertainty". *Canadian Journal of Fisheries and Aquatic Science*, 40, 2080-2091.
- Chichilnisky, Graciela. (1994). "North-South Trade and the Global Environment". *American Economic Review*, 84(4), 851-874.
- Chichilnisky, Graciela. (1996). "Sustainable Development: An Axiomatic Approach." *Social Choice and Welfare*, 13(2), 219-248.
- Chichilnisky, Graciela. (1997). "What Is Sustainable Development." *Land Economics*, 73, 476-491.
- Christiansen, Gregory B., and Robert H. Haveman. (1981). "The Contribution of Environmental Regulations to the Slowdown in Productivity Growth". *Journal of Environmental Economics and Management*, 8, 381-390.
- Christiansen, Gregory B., and Thomas H. Tietenberg. (1985). "Distributional and Macroeconomic Aspects of Environmental Policy". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 1,). Amsterdam: North-Holland.
- Ciriacy-Wantrup, S.V. (1952). *Resource Conservation: Economics and Policies*. Berkeley: University of California Press.
- Ciriacy-Wantrup, S.V., and Richard C. Bishop. (1975). "'Common Property' As A Concept In Natural Resources Policy". *Natural Resources Journal*, 15(4), 713-727.

- Clark, Colin W. (1973). "The Economics of Overexploitation". *Science*, 181, 630-634.
- Clark, Colin W. (1990). *Mathematical Bioeconomics: The Optimal Management of Renewable Resources*. (2 ed.). New York: Wiley Inter-Interscience, John Wiley and Sons, Inc.
- Clark, Colin W., F.H. Clarke, and Gordon R. Munro. (1979). "The Optimal Exploitation of Renewable Resource Stocks: Some Problems of Irreversible Investment". *Econometrica*, 47, 25-47.
- Clark, Colin W., and Gordon R. Munro. (1975). "Economics of Fishing and Modern Capital Theory: A Simplified Approach". *Journal of Environmental Economics and Management*, 2, 91-106.
- Clark, Colin W., and Gordon R. Munro. (1978). "Renewable Resource Management and Extinction". *Journal of Environmental Economics and Management*, 5, 198-205.
- Clark, Colin W., and Gordon R. Munro. (1980). "Fisheries and the Processing Sector: Some Implications for Management Policy". *Bell Journal of Economics*, 11, 603-616.
- Clark, David E., and James R. Kahn. (1989). "The Two-Stage Hedonic Wage Approach: A Methodology for the Valuation of Environmental Amenities". *Journal of Environmental Economics and Management*, 16, 106-120.
- Clark, J.S., and William H. Furtan. (1983). "An Economic Model of Soil Depletion". *Journal of Environmental Economics and Management*, 10, 356-370.
- Clarke, F.H., and Gordon R. Munro. (1987). "Coastal States, Distant Water Fishing Nations and Extended Jurisdiction: A Principal-Agent Analysis". *Natural Resource Modeling*, 2, 81-107.
- Clarke, H.R., and W. J. Reed. (1989). "The tree-cutting problem in a stochastic environment: The case of age-dependent growth." *Journal of Economic Dynamics and Control*, 13:569-595 (1989).
- Cleveland, Cutler J. (1993). "An exploration of alternative measures of natural resource scarcity: the case of petroleum resources in the U.S.". *Ecological Economics*, 7, 123-157.
- Coase, Ronald H. (1960). "The Problem of Social Cost". *Journal of Law and Economics*, 3, 1-44.
- Coase, Ronald H. (1972). "Durability and Monopoly". *Journal of Law and Economics*, 15, 143-149.
- Coates, Dennis, Victoria Heid, and Michael Munger. (1994). "Not Equitable, Not Efficient: U.S. Policy on Low-Level Radioactive Waste Disposal". *Journal of Policy Analysis and Management*, 13(3), 526-538.
- Coggins, Jay S. and John R. Swinton. (1996). "The Price of Pollution: A Dual Approach to Valuing SO₂ Allowances." *Journal of Environmental Economics and Management*, 30, 58-72.
- Cohen, Daniel, and Philippe Michel. (1988). "How Should Control Theory Be Used to Calculate a Time-Consistent Government Policy?". *Review of Economic Studies*, 55, 263-274.
- Collins, Robert A., and J.C. Headley. (1983). "Optimal Investment to Reduce the Decay Rate of an Income Stream: The Case of Soil Conservation". *Journal of Environmental Economics and Management*, 19, 60-71.
- Conrad, Jon M. (1980). "Quasi-Option Value and the Expected Value of Information". *Quarterly Journal of Economics*, 94, 813-820.
- Conrad, Jon M. (1989). "Bioeconomics and the Bowhead Whale". *Journal of Political Economy*, 97, 974-987.
- Conrad, Jon M. (1991). "Stopping Rules and the Control of Stock Pollutants." *Natural Resource Modeling* vol. 6, no. 3, summer, pp. 315-327.

- Conrad, Jon M., and Colin W. Clark. (1987). *Natural Resource Economics: Notes and Problems*. New York: Cambridge University Press.
- Conrad, R.F., and B. Hool. (1981). "Resource Taxation with Heterogeneous Quality and Endogenous Reserves". *Journal of Public Economics*, 16, 17-33.
- Cook, P.J. and D.A. Graham. (1977). "The Demand for Insurance and Protection: The Case of an Irreplaceable Commodity." *Quarterly Journal of Economics* 9(2): 143-56.
- Cooter, Robert. (1980). "How the Law Circumvents Starrett's Nonconvexity". *Journal of Economic Theory*, 22, 499-504.
- Copeland, Brian R., and M. Scott Taylor. (1994). "North-South Trade and the Environment". *Quarterly Journal of Economics*, 109(3), 755-787.
- Copeland, Brian R., and M. Scott Taylor. (1995). "Trade and Transboundary Pollution". *American Economic Review*, 85(4), 716-737.
- Corden, W.M. (1984). "Booming sector and Dutch disease economics: survey and consolidation". *Oxford Economic Papers*, 36(3), 359-380.
- Cornes, Richard. (1993). "Dyke Maintenance and Other Stories: Some Neglected Types of Public Goods". *Quarterly Journal of Economics*, 1993(February), 259-271.
- Cornwell, Laura, and Robert Costanza. (1994). "An experimental analysis of the effectiveness of an environmental assurance bonding system on player behavior in a simulated firm". *Ecological Economics*, 11, 213-226.
- Cory, Dennis C., and Bonnie C. Saliba. (1987). "Requiem for Option Value". *Land Economics*, 63, 1-10.
- Coursey, Don L., John J. Hovis, and William D. Schulze. (1987). "The Disparity between Willingness to Accept and Willingness to Pay Measures of Value". *Quarterly Journal of Economics*, 102, 679-690.
- Crandall, Robert W. (1992). "Corporate Average Fuel Economy Standards". *Journal of Economic Perspectives*, 6(2), 171-180.
- Crocker, Keith J. (1994). "What do "Facilitating Practices" Facilitate? An Empirical Investigation of Most-Favored-Nation Clauses in Natural Gas Contracts". *Journal of Law and Economics*, 37(October), 297-322.
- Crocker, T. (1966). "The Structuring of Atmospheric Pollution Control Systems." *The Economics of Air Pollution*, H. Wolozin, ed. New York: Norton, pp. 61-86.
- Crocker, T., J. Shogren, and P. Turner. (1998). "Incomplete Beliefs and Nonmarket Valuation." *Resource and Energy Economics*, 20, 309-326.
- Crocker, Thomas D., and Jason F. Shogren. (1993). "Dynamic inconsistency in valuing environmental goods". *Ecological Economics*, 7, 239-254.
- Cropper, Maureen. (1976). "Regulating Activities with Catastrophic Environmental Effects". *Journal of Environmental Economics and Management*, 3, 1-15.
- Cropper, Maureen, Sema K. Aydede, and Paul R. Portney. (1992). "Rates of Time Preference for Saving Lives". *AEA Papers and Proceedings*, 82(2), 469-472.
- Cropper, Maureen L. (1984). "Economic Incentives for Pollution Control", *Lecture Notes in Environmental and Natural Resource Mathematics* : American Mathematical Society.

- Cropper, Maureen L. (1988). "A note on the extinction of renewable resources." *Journal of Environmental Economics and Management*, 15: 64-70.
- Cropper, Maureen L., William N. Evans, Stephen J. Berardi, Maria M. Ducla-Soares, and Paul R. Portney. (1992). "The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision Making". *Journal of Political Economy*, 100(1), 175-197.
- Cropper, Maureen L., and Wallace E. Oates. (1992). "Environmental Economics: A Survey". *Journal of Economic Literature*, 30, 675-740.
- Cropper, Maureen L., and Paul R. Portney. (1990). "Discounting and the Evaluation of Lifesaving Programs". *Journal of Risk and Uncertainty*, 3, 369-379.
- Cropper, Maureen L., Milton C. Weinstein, and Richard J. Zeckhauser. (1978). "The Optimal Consumption of Depletable Natural Resources: An Elaboration, Correction, and Extension". *Quarterly Journal of Economics*, 92, 337-344.
- Cummings, Ronald G. (1969). "Some Extensions of the Economic Theory of Natural Resources". *Western Economic Journal*, 7(201-210).
- Cummings, Ronald G., David S. Brookshire, and William D. Schulze. (1986). *Valuing Environmental Goods: An Assessment of the Contingent Valuation Method*. Totowa, NJ: Rowman and Allanheld Pub.
- Cummings, Ronald G., Steven Elliott, Glenn W. Harrison, and James Murphy. (1997). "Are Hypothetical Referenda Incentive Compatible?". *Journal of Political Economy*, 105(3), 609-621.
- Cummings, Ronald G., Glenn W. Harrison, and E. Elisabet Rutstrom. (1995). "Homegrown Values and Hypothetical Surveys: Is the Dichotomous Choice Approach Incentive-Compatible?". *American Economic Review*, 85(1), 260-266.
- da Motta, Ronaldo Seroa. (1994). "Some comments on depletion and degradation costs in income measurement". *Ecological Economics*, 11, 21-25.
- Dale, L.L. (1984). "The Pace of Mineral Depletion in the United States". *Land Economics*, 60, 255-267.
- Dales, J.H. (1968). "Land, Water, Ownership". *Canadian Journal of Economics*, 1, 791-804.
- Daly, Herman E. (1973). *Toward a Steady State Economy*. San Francisco: W.H. Freeman.
- Daly, Herman E. (1992). "Allocation, distribution, and scale: towards an economics that is efficient, just and sustainable." *Ecological Economics*, 6, 185-193.
- d'Arge, R.C., and K.C. Kogiku. (1973). "Economic growth and the environment". *Review of Economic Studies*, 40, 61-77.
- d'Arge, Ralph C., William S. Schulze, and David S. Brookshire. (1982). "Carbon Dioxide and Intergenerational Choice". *American Economic Review*, 72, 251-256.
- Dasgupta, Partha. (1982). *The Control of Resources*. Cambridge, MA: Harvard University Press.
- Dasgupta, Partha. (1995). "The Population Problem: Theory and Evidence". *Journal of Economic Literature*, 33(December), 1879-1902.
- Dasgupta, Partha. (1996). "The Economics of the Environment." *Environment and Development Economics*, 1, 387-429.
- Dasgupta, Partha S. (1982). "Environmental Management under Uncertainty". In V. K. Smith and J. V. Krutilla (Eds.), *Explorations in Natural Resource Economics*. Baltimore: Johns Hopkins University Press.

- Dasgupta, Partha S., Peter Hammond, and Eric Maskin. (1980). "On Imperfect Information and Optimal Pollution Control". *Review of Economic Studies*, 47, 857-860.
- Dasgupta, Partha S., and Geoffrey M. Heal. (1974). "The Optimal Depletion of Exhaustible Resources". *Review of Economic Studies, Symposium*, 3-28.
- Dasgupta, Partha S., and Geoffrey M. Heal. (1979). *Economic Theory and Exhaustible Resources*. New York: Cambridge University Press.
- De Meza, David, and J.R. Gould. (1987). "Free Access versus Private Property in a Resource: Income Distributions Compared". *JPE*, 95(6), 1317-1325.
- de Meza, David, and J. R. Gould. (1992). "The Social Efficiency of Private Decisions to Enforce Property Rights". *Journal of Political Economy*, 11(3), 561-580.
- De Vany, Arthur, and W. David Walls. (1993). "Pipeline Access and Market Integration in the Natural Gas Industry: Evidence from Cointegration Tests". *Energy Journal*, 14(4), 1-19.
- Deacon, Robert T. (1989). "An Empirical Model of Fishery Dynamics". *Journal of Environmental Economics and Management*, 16, 167-183.
- Deacon, Robert T. (1995). "Assessing the Relationship between Government Policy and Deforestation." *Journal of Environmental Economics and Management* 28, 1-18.
- Debreu, Gerard. (1951). "The Coefficient of Resource Utilization". *Econometrica*, 19, 273-292.
- DeLong, James V., Robert M. Solow, Gereard Butters, John Calfee, and Pauline Ippolito. (1981). "Defending Cost-Benefit Analysis: Replies to Steven Kelman." *Regulation*, March/April, pp. 39-42
- Demsetz, Harold. (1964). "The Exchange and Enforcement of Property Rights". *Journal of Law and Economics*, 7, 11-26.
- Demsetz, Harold. (1967). "Toward a Theory of Property Rights". *American Economic Review Papers and Proceedings*, 57, 347-359.
- Devarajan, Shantayanan, and Anthony C. Fisher. (1981). "Hotelling's Economics of Exhaustible Resources: Fifty Years Later". *Journal of Economic Literature*, 19, 65-73.
- Devarajan, Shantayanan, and Anthony C. Fisher. (1982). "Measures of Natural Resource Scarcity under Uncertainty". In V. K. Smith and J. V. Krutilla (Eds.), *Explorations in Natural Resource Economics* (pp. 327-336). Baltimore: Johns Hopkins University Press.
- Devarajan, Shantayanan, and Robert J. Weiner. (1990). "Natural Resource Depletion and National Income Accounting". *Mimeo, Harvard University*(JFK School of Government).
- Deweese, David N. (1983). "Instrument Choice in Environmental Policy". *Economic Inquiry*, 21, 53-70.
- Diamond, Peter. (1996). "Testing the Internal Consistency of Contingent Valuation Survey." *Journal of Environmental Economics and Management* 30(3): 337-347.
- Diamond, Peter A., and Jerry A. Hausman. (1994). "Contingent Valuation: Is Some Number Better than No Number?". *Journal of Economic Perspectives*, 8(4), 45-64.
- Dickie, M. Gerking, S. and A. Fisher. (1987). "Market Transactions and Hypothetical Demand Data: A Comparative Study," *Journal of the American Statistical Association*, 82:397, 69-75.

- Dinan, Terry M. (1993) "Economic Efficiency Effects of Alternative Policies for Reducing Waste Disposal." *Journal of Environmental Economics and Management* 25, 242-256.
- Dixon, John A., and P.B. Sherman. (1991). "Economics of Protected Areas". *Ambio*, 20(2), 68-74.
- Doane, Michael J., and Daniel F. Spulber. (1994). "Open Access and the Evolution of the U.S. Spot Market for Natural Gas". *Journal of Law and Economics*, 37(October), 477-517.
- Dorfman, Robert. (1969). "An Economic Interpretation of Optimal Control Theory". *American Economic Review*, 59, 817-831.
- Dorfman, Robert. (1976). "Forty Years of Cost-Benefit Analysis". *draft, Discussion Paper no. 498*(Cambridge, MA--Harvard University).
- Downing, Paul B. (1981). "A Political Economy Model of Implementing Pollution Laws". *Journal of Environmental Economics and Management*, 8, 255-271.
- Downing, Paul B., and Lawrence J. White. (1986). "Innovation in Pollution Control." *Journal of Environmental Economics and Management*, 13, 18-27.
- DuPont, Diane P. (1990). "Rent Dissipation in Restricted Access Fisheries". *Journal of Environmental Economics and Management*, 19, 26-44.
- Dutta, Prajit K., and Rangarajan K. Sundaram. (1993). "The tragedy of the commons?". *Economic Theory*, 3, 413-426.
- Eagan, Vince. (1987). "The Optimal Depletion of the Theory of Exhaustible Resources". *Journal of Post-Keynesian Economics*, 9, 565-571.
- Earnhart, Dietrich. (1997). "Enforcement of Environmental Protection Laws Under Communism and Democracy". *Journal of Law and Economics*, 40(October), 377-402.
- Ehui, Simeon K., and Thomas W. Hertel. (1989). "Deforestation and Agricultural Productivity in the Cote d'Ivoire". *American Agricultural Economics Association*, 1989(August), 703-711.
- Eiswerth, Mark E. (1993). "Using Dynamic Optimization for Integrated Environmental Management: An Application to Solvent Waste Disposal". *Land Economics*, 69(2), 168-180.
- Ellerman, A.D., and Juan-Pablo Montero. (1998). "The Declining Trend in Sulfur Dioxide Emissions: Implications for Allowance Prices." *Journal of Environmental Economics and Management* 36, pp. 26-45.
- EPA. (1990). *Environmental Investments: The Cost of a Clean Environment* (draft). Washington: EPA.
- Epple, Dennis, and Richard E. Romano. (1996). "Public Provision of Private Goods". *Journal of Political Economy*, 104(1), 57-84.
- Espey, Molly. (1997). "Pollution Control and Energy Conservation: Complements or Antagonists? A Study of Gasoline Taxes and Automobile Fuel Economy Standards". *Energy Journal*, 18(2), 23-38.
- Esty, D.C. (1994). *Greening the GATT*. Washinton, D.C.: Institute for International Economics.
- Eswaran, M., T. Lewis, and S. Salant. (1983). "The Length of Optimal Extraction Programs When Depletion Affects Extraction Costs." *Journal of Economic Theory*, December.
- Falk, Ita and Robert Mendelsohn. (1993). "The Economics of Controlling Stock Pollutants: An Efficient Strategy for Greenhouse Gases." *Journal of Environmental Economics and Management* 25, 76-88.

- Farrell, Joseph. (1986). "Rights and Efficiency". *Working Paper 86-1, GTE Laboratories, Inc.*
- Farrell, Joseph. (1987). "Information and the Coase Theorem." *Journal of Economic Perspectives*, 1, 113-129.
- Farrow, Scott. (1985). "Testing the Efficiency of Extraction from a Stock Resource". *Journal of Political Economy*, 93, 452-487.
- Farzin, . Hossein. (1984). "The Effect of Discount Rates on Depletion of Exhaustible Resources". *Journal of Political Economy*, 92, 841-851.
- Farzin, Y.H. (1995). "Technological Change and the Dynamics of Resource Scarcity Measures." *Journal of Environmental Economics and Management* 29(July): 105-120.
- Farzin, Y. H. (1992). "The Time Path of Scarcity Rent in the Theory of Exhaustible Resources," *Economics Journal*, 102(413):813-31.
- Faustmann, Martin. (1849). "On the Determination of the Value Which Forest Land and Immature Stands Pose for Forestry". *Oxford Institute Paper No. 42.*
- Feeny, David, Susan Hanna, and Arthur F. McEvoy. (1996). "Questioning the Assumptions of the "Tragedy of the Common" Model of Fisheries". *Land Economics*, 72(2), 187-205.
- Feldstein, Martin S. (1964). "Net Social Benefit Calculations and the Public Investment Decision". *Oxford Economic Papers*, 16, 114-131.
- Finkelshtain, Israel, and Yoav Kislev. (1997). "Prices versus Quantities: The Political Perspective". *Journal of Political Economy*, 105(1), 83-100.
- Fischhoff, Baruch. (1991). "Is There Anything in There?". In H. M., L. Cooper, and L. Nadel (Eds.), *Values*. Stanford, CA: Stanford University Press.
- Fischhoff, Baruch, and Lita Furby. (1988). "Measuring Values: A Conceptual Framework for Interpreting Transactions with Special Reference to Contingent Valuation of Visibility". *Journal of Risk and Uncertainty*, 1(2), 147-184.
- Fisher, Anthony C. (1979). "On Measures of Natural Resource Scarcity". In V. K. Smith (Ed.), *Scarcity and Growth Reconsidered*. Baltimore: Johns Hopkins University Press.
- Fisher, Anthony C. (1981). *Resource and environmental economics*. Cambridge: Cambridge University Press.
- Fisher, Anthony C., and W. Michael Hanemann. (1986). "Option Value and the Extinction of Species". In V. K. Smith (Ed.), *Advances in Applied Microeconomics* (Vol. 4, pp. 169-190).
- Fisher, Anthony C., and W. Michael Hanemann. (1987). "Quasi-Option Value: Some Misconceptions Dispelled". *Journal of Environmental Economics and Management*, 14, 183-190.
- Fisher, Anthony C., and Larry S. Karp. (1993). "Nonconvexity, Efficiency and Equilibrium in Exhaustible Resource Depletion." *Environmental and Resource Economics*, Vol. 3, pp. 97-106.
- Fisher, Anthony C., and John V. Krutilla. (1985). "Economics of Nature Preservation". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resources and Energy Economics* (Vol. 1, pp. 165-189). Amsterdam: North Holland.
- Fisher, Anthony C., John V. Krutilla, and Charles Cicchetti. (1972). "The Economics of Environmental Preservation: A Theoretical and Empirical Analysis". *American Economic Review*, 62, 605-619.

- Fisher, Anthony C., and Frederick M. Peterson. (1976). "The Environment in Economics: A Survey". *Journal of Economic Literature*, 14, 1-33.
- Forster, Bruce A. (1973). "Optimal Consumption Planning in a Polluted Environment". *Economic Record*, 49, 534-545.
- Foster, Vivien, and Robert W. Hahn. (1995). "Designing More Efficient Markets: Lessons from Los Angeles Smog Control". *Journal of Law and Economics*, 38, 19-48.
- Fox, J. J. Shogren, D. Hayes, and J. Kliebenstein. (1997). "CVM-X: Calibrating Contingent Values with Experimental Auction Markets." *American Journal of Agricultural Economics*, 80, 455-465.
- Freeman, A. Myrick. (1979). *The Benefits of Environmental Improvement*. Baltimore: Johns Hopkins University Press.
- Freeman, A. Myrick. (1984a). "Depletable Externalities and Pigouvian Taxation". *Journal of Environmental Economics and Management*, 11, 173-179.
- Freeman, A. Myrick. (1984b). "The Quasi-Option Value of Irreversible Development". *Journal of Environmental Economics and Management*, 11, 292-295.
- Freeman, A. Myrick. (1984c). "The Sign and Size of Option Value". *Land Economics*, 60, 1-13.
- Freeman, A. Myrick. (1985a). "Methods for Assessing the Benefits of Environmental Programs". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resources and Energy Economics* (Vol. 1, pp. 223-270). Amsterdam: North Holland.
- Freeman, A. Myrick. (1985b). "Supply Uncertainty, Option Price, and Option Value". *Land Economics*, 61, 176-181.
- Freeman, A. Myrick. (1989). "Ex Ante and Ex Post Values for Changes in Risk". *Risk Analysis*, 9(3), 309-317.
- Friedlaender, Ann F. (1992). "Coal rates and revenue adequacy in a quasi-regulated rail industry". *RAND Journal of Economics*, 23(3), 376-394.
- Friedman, David. (1993). "Hanged for a Sheep--The Economics of Marginal Deterrence". *Journal of Legal Studies*, 22(June), 345-366.
- Fullerton, Don. (1996). "Why Have Separate Environmental Taxes?" *Tax Policy and the Economy*, 10, 33-70.
- Fullerton, Don. (1997). "Environmental Levies and Distortionary Taxation: Comment," *American Economic Review*, 87, 245-251.
- Fullerton, Don, and Thomas C. Kinnaman. (1995). "Garbage, Recycling, and Illicit Burning or Dumping," *Journal of Environmental Economics and Management*, 29, 78-91.
- Fullerton, Don, and Thomas C. Kinnaman. (1996). "Household Responses to Pricing Garbage by the Bag". *American Economic Review*, 86(4), 971-984.
- Fullerton, Don, and Gilbert Metcalf. (1997). "Environmental Controls, Scarcity Rents, and Pre-Existing Distortions", NBER Working Paper 6091.
- Fullerton, Don, and Gilbert Metcalf. (1998). "Environmental Taxes and the Double-Dividend Hypothesis: Did you Really Expect Something for Nothing?" *Chicago Kent Law Review* 73, 221-256.
- Fullerton, Don, Shawn McDermott, and J. Caulkins. (1997). "Sulfur Dioxide Compliance of a Regulated Utility." *Journal of Environmental Economics and Management*, 34, 32-53.

- Fullerton, Don and A. Wolverton. (1999). "The Case for a Two-Part Instrument: Presumptive Tax and Environmental Subsidy," in P. Portney and R. Schwab, eds., *Environmental Economics and Public Policy: Essays in Honor of Wallace E. Oates*, Brookfield, VT: Edward Elgar (forthcoming).
- Fullerton, Don and W. Wu. (1998). "Policies for Green Design," *Journal of Environmental Economics and Management*, 36, 131-148.
- Fulton, Murray E., and Richard E. Just. (1989). "Antitrust, Exploration, and Social Optimality in Nonrenewable Resource Markets". *Journal of Environmental Economics and Management*, 17, 1-21.
- Gaffney, Mason. (1992). "Equity Premises and the Case for Taxing Rent". *AEA Papers and Proceedings*, 82(2), 274-279.
- Gale, D. (1967). "On Optimal Development in a Multi-Sector Economy". *Review of Economic Studies*, 34, 1-18.
- Gallagher, David R., and V. Kerry Smith. (1985). "Measuring Values for Environmental Resources under Uncertainty". *Journal of Environmental Economics and Management*, 12, 132-143.
- Gamponia, V., and Robert Mendelsohn. (1985). "The Taxation of Exhaustible Resources". *Quarterly Journal of Economics*, 100, 165-181.
- Gaskins, Darius W., and John P. Weyant. (1993). "Model Comparisons of the Costs of Reducing CO₂ Emissions". *AEA Papers and Proceedings*, 83(2), 318-323.
- Gately, Dermot. (1984). "A Ten-Year Retrospective: OPEC and the World Oil Market". *Journal of Economic Literature*, 22(September), 1100-1114.
- Gately, Dermot. (1992). "Imperfect Price-Reversibility of U.S. Gasoline Demand: Asymmetric Responses to Price Increases and Declines". *Energy Journal*, 13(4), 179-207.
- Gately, Dermot. (1995). "Strategies for OPEC's Pricing and Output Decisions". *Energy Journal*, 16(3), 1-38.
- Gaudet, G., and P. Howitt. (1989). "A Note on Uncertainty and the Hotelling Rule". *Journal of Environmental Economics and Management*, 16, 80-86.
- Geisler, Charles C. (1995). "Land and Poverty in the United States: Insights and Oversights". *Land Economics*, 71(1), 16-34.
- Georgescu-Roegen, Nicholas. (1979). "Comment". In V. K. Smith (Ed.), *Scarcity and Growth Reconsidered*. Baltimore: Johns Hopkins University Press.
- Gersbach, Hans. (1993). "Environmental Preservation and Majority Decisions". *Land Economics*, 69(2), 147-155.
- Gianessi, Leonard P., and Henry M. Peskin. (1980). "The Distribution of the Costs of Water Pollution Control Policy". *Land Economics*, 56, 85-102.
- Gianessi, Leonard P., Henry M. Peskin, and Edward Wolff. (1979). "The Distributional Effects of Uniform Air Pollution Policy in the United States". *Quarterly Journal of Economics*, 93, 281-301.
- Gilbert, Richard J. (1978). "Dominant firm pricing policy in a market for an exhaustible resource". *The Bell Journal of Economics*, 9(2), 385-395.
- Gilligan, Thomas W. (1992). "Imperfect Competition and Basing-Point Pricing: Evidence from the Softwood Plywood Industry". *American Economic Review*, 82(5), 1106-1119.
- Gisser, Micha. (1983). "Groundwater: Focusing on the Real Issue". *Journal of Political Economy*, 91, 1001-1027.

- Godek, Paul E. (1997). "The Regulation of Fuel Economy and the Demand for "Light Trucks"". *Journal of Law and Economics*, 40(October), 495-509.
- Gordon, H. Scott. (1954). "The Economic Theory of a Common Property Resource: The Fishery". *Journal of Political Economy*, 62, 124-142.
- Gordon, Richard L. (1967). "A Reinterpretation of the Pure Theory of Exhaustion". *Journal of Political Economy*, 75, 274-286.
- Goto, Noriyuki, and Takamitsu Sawa. (1993). "An Analysis of the Macro-Economic Costs of Various CO2 Emission Control Policies in Japan". *The Energy Journal*, 14(1), 83-110.
- Goulder, Lawrence H. (1995a). "Effects of Carbon Taxes in an Economy with Prior Tax Distortions: An Intertemporal General Equilibrium Analysis." *Journal of Environmental Economics and Management*, 29, 271-297.
- Goulder, Lawrence H. (1995b). "Environmental Taxation and the Double Dividend: A Reader's Guide." *International Tax and Public Finance* 157.
- Goulder, Lawrence H. (1998). "Environmental Policy Making in A Second-Best Setting." *Journal of Applied Economics*, volume 1, number 2, November, pp. 279-328
- Goulder, Lawrence H., Ian W. H. Parry, and Dallas Burtraw. (1997). "Revenue-Raising vs. Other Approaches to Environmental Protection: The Critical Significance of Pre-Existing Tax Distortions", *RAND Journal of Economics*, Winter.
- Goulder, Lawrence H., Ian W.H. Parry, Roberton C. Williams, and Dallas Burtraw. (1999). "The Cost-Effectiveness of Alternative Instruments for Environmental Protection in a Second-Best Setting." *Journal of Public Economics*, forthcoming.
- Graddy, Kathryn. (1995). "Testing for imperfect competition at the Fulton fish market". *RAND Journal of Economics*, 26(1), 75-92.
- Gradstein, Mark. (1992). "Time Dynamics and Incomplete Information in the Private Provision of Public Goods". *Journal of Political Economy*, 100(31), 581-597.
- Graham, Daniel A. (1981). "Cost-Benefit Analysis under Uncertainty". *American Economic Review*, 71, 715-725.
- Graham, Daniel A. (1992). "Public Expenditure Under Uncertainty: The Net-Benefit Criteria". *American Economic Review*, 82(4), 822-846.
- Gray, L.C. (1914). "Rent under the Assumption of Exhaustibility". *Quarterly Journal of Economics*, 28, 466-489.
- Gray, Wayne B. (1987). "The Cost of Regulation: OSHA, EPA and the Productivity Slowdown". *American Economic Review*, 77, 998-1006.
- Gray, Wayne B. and Mary E. Deily. (1996). "Compliance and Enforcement: Air Pollution Regulation in the U.S. Steel Industry." *Journal of Environmental Economics and Management*, 31, 96-111.
- Green, J. and E. Sheshinski. (1976). "Direct vs. indirect remedies for externalities." *Journal of Political Economy*, 84: 797-808.
- Green, Richard J., and David M. Newbery. (1992). "Competition in the British Electricity Spot Market". *Journal of Political Economy*, 100(5), 929-953.
- Griffin, James M. (1985). "OPEC Behavior: A Test of Alternative Hypotheses". *American Economic Review*, 75, 954-963.

- Grodsky, Jamie A. (1993). "Certified Green: The Law and Future of Environmental Labeling". *Yale Journal on Regulation*, 10, 147-227.
- Grossman, Gene M., and Alan B. Krueger. (1995). "Economic Growth and the Environment". *Quarterly Journal of Economics*, 110(2), 353-377.
- Gruver, G.W. (1976). "Optimal investment in pollution control in a neoclassical growth context". *Journal of Environmental Economics and Management*, 3, 165-177.
- Gulen, S. Gurcan. (1996). "Is OPEC a Cartel? Evidence from Cointegration and Causality Tests". *Energy Journal*, 17(2), 43-57.
- Gupta, Shreekant, George Van Houtven, and Maureen Cropper. (1996). "Paying for permanence: an economic analysis of EPA's cleanup decisions at Superfund sites". *RAND Journal of Economics*, 27(3), 563-582.
- Hahn, Robert. (1989). "Economic Prescription for Environmental Problems: How the Patient Followed the Doctor's Orders". *Journal of Economic Perspectives*, 3(2), 95-114.
- Hahn, Robert, and Roger Noll. (1982). "Designing Market for Tradable Emissions Permits". In W. Magat (Ed.), *Reform of Environmental Legislation*: Ballinger.
- Hahn, Robert W. (1984). "Market Power and Transferable Property Rights". *Quarterly Journal of Economics*, 99, 753-765.
- Hahn, Robert W. (1990). "The Political Economy of Environmental Regulation: Towards a Unifying Framework". *Public Choice*, 65, 21-47.
- Hahn, Robert W. (1995a). "Choosing Among Fuels and Technologies for Cleaning Up the Air". *Journal of Policy Analysis and Management*, 14(4), 532-554.
- Hahn, Robert W. (1995b). "An economic analysis of scrappage". *RAND Journal of Economics*, 26(2), 222-242.
- Hahn, Robert W., and Roger G. Noll. (1990). "Environmental Markets in the Year 2000". *Journal of Risk and Uncertainty*, 3, 351-367.
- Hahn, Robert W., and Robert N. Stavins. (1991). "Incentive-Based Environmental Regulation: A New Era from an Old Idea?". *Ecology Law Quarterly*, 18, 1-42.
- Hahn, Robert W., and Robert N. Stavins. (1992). "Economic Incentives for Environmental Protection: Integrating Theory and Practice". *AEA Papers and Proceedings*, 82(2), 464-468.
- Haight, R.W., and T.P. Holmes. (1991). "Stochastic price models and optimal tree cutting: Results for Loblolly Pine." *Natural Resource Modeling*, 5:423-443.
- Halvorsen, Robert, and T.R. Smith. (1984). "On Measuring Natural Resource Scarcity". *Journal of Political Economy*, 92, 954-964.
- Hamilton, James T. (1995b). "Testing for Environmental Racism: Prejudice, Profits, Political Power?". *Journal of Policy Analysis and Management*, 14(1), 107-132.
- Hamilton, J.T. (1995a). "Pollution as News: Media and Stock Market Reactions to the Toxic Release Inventory Data." *Journal of Environmental Economics and Management* 28:98-113.
- Hamilton, J.T. (1993). "Politics and Social Costs: Estimating the Impact of Collective Action on Hazardous Waste Facilities." *RAND Journal of Economics* 24:101-125.

- Hammond, Peter J. (1981). "Ex-Ante and Ex-Post Welfare Optimality under Uncertainty". *Economica*, 48, 235-250.
- Hanemann, W. Michael. (1983). "Marginal Welfare Measures for Discrete Choice Models." *Economic Letters*, 129-136.
- Hanemann, W. Michael. (1984a). "Benefit Estimation with Discrete Choice Data". *Econometrica*, 52, 541-562.
- Hanemann, W. Michael. (1984b). "Welfare Evaluations in Contingent Valuation Experiments with Discrete Responses". *American Journal of Agricultural Economics*, 66, 332-341.
- Hanemann, W. Michael. (1989). "Information and the Concept of Option Value". *Journal of Environmental Economics and Management*, 16, 23-37.
- Hanemann, W. Michael. (1991). "Willingness to Pay and Willingness to Accept: How Much Can They Differ?". *American Economic Review*, 81, 635-647.
- Hanemann, W. Michael. (1992). "Preface." Navrud, S., ed., *Pricing the European Environment*. Scandinavian University Press.
- Hanemann, W. Michael. (1994). "Valuing the Environment Through Contingent Valuation". *Journal of Economic Perspectives*, 8(4), 19-43.
- Hanemann, W. M. (1999). "The Economic Theory of WTP and WTA" in Ian Bateman, Editor, *Oxford University Press*.
- Hanemann, W.M. and B. Kanninen. (1999). "The Statistical Analysis of Discrete-Response." In *Valuing the Environment Preferences: Theory and Practice of the Contingent Valuation Method in the US, EC and Developing Countries*, edited by Ian Bateman and Ken Willis, Oxford: Oxford University Press.
- Hanley, N., J. Shogren, and B. White. (1997). *Environmental Economics. Theory and Practice*. Oxford and London: Oxford University Press and MacMillan Publishers, p. 464.
- Hanson, Donald A. (1980). "Increasing Extraction Costs and Resource Prices: Some Further Results". *Bell Journal of Economics*, 11, 335-341.
- Harberger, Arnold C. (1970). "On Measuring the Social Opportunity Cost and Public Funds", *Project Evaluation: Collected Papers* (pp. 94-122). Chicago: Markham Publishing Co.
- Harberger, Arnold C. (1978). "On the Use of Distributional Weights in Social Cost-Benefit Analysis". *Journal of Political Economy*, 86, 87-120.
- Hardie, I.W., and P.J. Parks. (1997). "Land Use with Heterogeneous Quality: An Application of an Area Base Model." *American Journal of Agricultural Economics* 79(2):299-310.
- Hardin, Garrett. (1968). "The Tragedy of the Commons". *Science*, 162, 1243-1248.
- Harford, Jon D. (1978). "Firm Behavior Under Imperfectly Enforceable Pollution Standards and Taxes". *Journal of Environmental Economics and Management*, 5, 26-43.
- Harford, Jon D. (1987). "Self-Reporting of Pollution and the Firm's Behavior under Imperfectly Enforceable Regulations". *Journal of Environmental Economics and Management*, 14, 293-303.
- Harrington, Winston, and Anthony C. Fisher. (1982). "Endangered Species". In P. Portney (Ed.), *Current Issues in Natural Resource Policy*. Baltimore: Johns Hopkins University Press.
- Harris, Christopher, and John Vickers. (1995). "Innovation and natural resources: a dynamic game with uncertainty". *RAND Journal of Economics*, 26(3), 418-430.

- Harris, DeVerle P., and Brian J. Skinner. (1982). "The Assessment of Long-Term Supplies of Minerals". In V. K. Smith and J. V. Krutilla (Eds.), *Explorations in Natural Resource Economics* (pp. 247-326). Baltimore: Johns Hopkins University.
- Harrison, David, and Daniel L. Rubinfeld. (1978). "The Distribution of Benefits from Improvements in Urban Air Quality". *Journal of Environmental Economics and Management*, 5, 313-332.
- Harrison, David H., and Albert L. Nichols. (1983). "Benefit-Based Flexibility in Environmental Regulation". *Discussion Paper E-83-06, Energy and Environmental Policy Center, John F. Kennedy School of Government*.
- Harrison, G. and J. Hirshleifer. (1989). "An Experimental Evaluation of Weakest Link / Best Shot Models of Public Goods." *Journal of Political Economy* 97.
- Hartman, Richard. (1976). "The Harvesting Decision when a Standing Forest Has Value". *Economic Inquiry*, 14, 52-58.
- Hartwick, John M. (1978). "Exploitation of Many Deposits of an Exhaustible Resource". *Econometrica*, 46, 201-217.
- Hartwick, John M. (1977). "Intergenerational equity and the investing of rents from exhaustible resources." *American Economic Review*, 67 (5): 972-974.
- Hartwick, John M. (1988). "The Duality of Hotelling Rent and Economic Depreciation and Growth Accounting with Exhaustible Resources". *Discussion Paper 712, Kingston, Ontario--Queens University*.
- Hartwick, John M. (1989). *Nonrenewable Resources, Extraction Programs and Markets*: Harwood Publishers.
- Hassett, K.A. and G.E. Metcalf, (1995). "Energy Tax Credits and Residential Conservation Investment: Evidence from Panel Data," *Journal of Public Economics*, 57, 201-217.
- Hausker, Karl. (1992). "The Politics and Economics of Auction Design in the Market for Sulfur Dioxide Pollution". *Journal of Policy Analysis and Management*, 11(4), 553-572.
- Hausman, Jerry A. (1981). "Exact Consumer's Surplus and Deadweight Loss". *American Economic Review*, 71(4), 662-676.
- Haveman, Robert H. (1973). "Common Property, Congestion and Environmental Pollution". *Quarterly Journal of Economics*, 87, 278-287.
- Haveman, Robert H., M. Gabay, and J. Andreoni. (1987). "Exact Consumer's Surplus and Deadweight Loss: A Correction". *American Economic Review*, 77, 494-495.
- Hazilla, Michael, and Raymond J. Kopp. (1990). "Social Cost of Environmental Quality Regulations: A General Equilibrium Analysis". *Journal of Political Economy*, 98(4), 853-873.
- Heal, Geoffrey M. (1976). "The Relationship between Price and Extraction Cost for a Resource with a Backstop Technology". *Bell Journal of Economics*, 7, 371-378.
- Heal, Geoffrey M. (1979). "Uncertainty and the Optimal Supply Policy for an Exhaustible Resource". In R. S. Pindyck (Ed.), *Advances in the Economics of Energy and Resources: The Production and Pricing of Energy Resources* (Vol. 2, pp. 119-147). Greenwich, CT: JAI Press, Inc.
- Heal, Geoffrey M. (1982). "The Use of Common Property Resources". In V. K. Smith and J. V. Krutilla (Eds.), *Explorations in Natural Resource Economics* (pp. 72-106). Baltimore: Johns Hopkins University Press.
- Heal, Geoffrey M., and Michael Barrow. (1981). "Empirical Evaluation of the Long-Term Movement of Resource Prices--a Preliminary Report". *Economics Letters*, 7(1), 95-103.

- Hecht, Joy E. (1995). "Monitoring the environmental impacts of trade policy reform in Africa: lessons from Chad". *Ecological Economics*, 13, 155-167.
- Heijman, Willem J.M. (1991). "Growth Models". In W. J. M. Heijman (Ed.), *Depletable Resources and the Economy* (pp. Chap. 6).
- Helfand, Gloria E. (1991). "Standards versus Standards: The Effects of Different Pollution Restrictions". *American Economic Review*, 81, 622-634.
- Helfand, Gloria E. and Jonathan Rubin. (1994). "Spreading versus Concentrating Damages: Environmental Policy in the Presence of Nonconvexities." *Journal of Environmental Economics and Management*, 27, 84-91.
- Helliwell, John F., and Terry Heaps. (1985). "The Taxation of Natural Resources". In A. Auerbach and M. Feldstein (Eds.), *Public Economics*. New York: North Holland.
- Hellsten, Martin. (1988). "Socially Optimal Forestry". *Journal of Environmental Economics and Management*, 15, 387-394.
- Henderson, J. Vernon. (1996). "Effects of Air Quality Regulation". *American Economic Review*, 86(4), 789-813.
- Henderson, D. and S. Salant. (1978). "Market Anticipation of Government Policies and the Price of Gold." *Journal of Political Economy*, August.
- Hendricks, Kenneth, and Dan Kovenock. (1989). "Asymmetric information, information externalities, and efficiency: the case of oil exploration". *Rand Journal of Economics*, 20, 164-182.
- Hendricks, Kenneth, and Robert H. Porter. (1996). "The Timing Incidence of Exploratory Drilling on Offshore Wildcat Tracts". *American Economic Review*, 86(3), 388-407.
- Hendricks, Kenneth, Robert H. Porter, and Guofu Tan. (1993). "Optimal Selling Strategies for Oil and Gas Leases with an Informed Buyer". *American Economic Review*, 83(2), 234-239.
- Henry, C. (1974). "Investment Decisions under Uncertainty: The Irreversibility Effect". *American Economic Review*, 64, 1006-1012.
- Herfindahl, Orin C. (1967). "Depletion and Economic Theory". In M. Gaffney (Ed.), *Extractive Resources and Taxation*. Madison, WI: University of Wisconsin Press.
- Herriges, J. A. and C. L. Kling, eds. (1999). *Valuing Recreation and the Environment: Revealed Preference Methods in Theory and Practice*. London: Edward Elgar.
- Herriges, J., R. Govindasamy, and J. Shogren. (1994). "Budget Balancing Incentive Mechanisms." *Journal of Environmental Economics and Management*, 27, 275-285.
- Hird, John A. (1993). "Environmental Policy and Equity: The Case of Superfund". *Journal of Policy Analysis and Management*, 12(2), 323-343.
- Hirshleifer, Jack. (1966). "Investment Decisions under Uncertainty: Applications of the State Preference Approach". *Quarterly Journal of Economics*, 80, 252-277.
- Hirst, Eric. (1993). "Price and Cost Impacts of Utility DSM Programs". *Energy Journal*, 13(4), 75-90.
- Hnylicza, E., and Robert S. Pindyck. (1976). "Pricing Policies for a Two-Part Exhaustible Resource Cartel: The Case of OPEC". *European Economic Review*, 2, 139-159.

- Hochman, Eithan, David Pines, and David Zilberman. (1977). "The Effects of Pollution Taxation on the Pattern of Resource Allocation: The Downstream Diffusion Case". *Quarterly Journal of Economics*, 91, 625-638.
- Hochman, Eithan, and David Zilberman. (1978). "Examination of Environmental Policies Using Production and Pollution Microparameter Distributions". *Econometrica*, 46, 739-760.
- Hochman, Oded, David Pines, and Jacques-Francois Thisse. (1995). "On the Optimal Structure of Local Governments". *American Economic Review*, 85(5), 1224-1240.
- Hoehn, John P., and Alan Randall. (1989). "Too Many Proposals Pass the Benefit Cost Test". *American Economic Review*, 79(3), 544-551.
- Hoel, Michael. (1992). "International Environmental Conventions: The Case of Uniform Reductions in Emissions." *Environmental and Resource Economics*, 2, 141-159.
- Hoel, Michael. (1996). "Should a Carbon Tax be Differentiated Across Sectors?". *Journal of Public Economics*, 59, 17-32.
- Hoel, Michael, and Larry Karp. (1998). "Taxes Versus Quotas for a Stock Pollutant." Working Paper No. 855, Giannini Foundation of Agricultural Economics, University of California, Berkeley.
- Hogan, William W. (1993). "Markets in Real Electric Networks Require Reactive Prices". *Energy Journal*, 14(3), 171-200.
- Hogan, William W. (1997). "A Market Power Model with Strategic Interaction in Electricity Networks". *Energy Journal*, 18(4), 107-141.
- Holtermann, Sally. (1976). "Alternative tax systems to correct for externalities, and the efficiency of paying compensation." *Economica*, 43: 1-16.
- Homans, Frances R., and James E. Wilen. (1997). "A Model of Regulated Open Access Resource Use." *Journal of Environmental Economics and Management*, 32, 1-21.
- Hornstein, Donald T. (1993). "Lessons from Federal Pesticide Regulation on the Paradigms and Politics of Environmental Law Reform". *Yale Journal on Regulation*, 10, 369-446.
- Hotelling, Harold. (1931). "The Economics of Exhaustible Resources". *Journal of Political Economy*, 39, 137-175.
- Howard, Ronald A. (1979). "Life and Death Decision Analysis". *Research Report No. EES DA-79-2*, Palo Alto, CA--Department of Engineering Economic Systems, Stanford University(December).
- Howarth, Richard B., and Richard B. Norgaard. (1990). "Intergenerational Resource Rights: Efficiency and Social Optimality". *Land Economics*, 66, 1-11.
- Huang, J. C., T. C. Haab, and J. C. Whitehead. (1997). Willingness to Pay for Quality Improvements: Should Revealed and Stated Preferences Data be Combined?" *Journal of Environmental Economics and Management* November.
- Hurley, T. and J. Shogren. (1997). "Environmental Conflict and the SLAPP." *Journal of Environmental Economics and Management*, 33, 1997, 253-273.
- Hyde, William F. (1992). "Managing Tropical Forests: Reflections on the Rent Distribution Discussion". *Land Economics*, 68(3), 343-350.
- Innes, Robert. (1996). "Regulating Automobile Pollution under Certainty, Competition, and Imperfect Information," *Journal of Environmental Economics and Management*, 31, 219-239.

- Innes, Robert. (1997). "Takings, Compensation, and Equal Treatment for Owners of Developed and Undeveloped Property". *Journal of Law and Economics*, 40(October), 403-432.
- Ippolito, P.M. and A.D. Mathios. (1990). "Information, Advertising, and Health Choices: A Study of the Cereal Market." *Rand Journal of Economics* 21: 459-80.
- Jacoby, Henry D., Richard S. Eckaus, A. Denny Ellerman, Ronald G. Prinn, David M. Reiner, and Zili Yang. (1997). "CO2 Emissions Limits: Economic Adjustments and the Distribution of Burdens". *Energy Journal*, 18(3), 31-58.
- Jacoby, Henry D., Ronald Prinn, and Richard Schmalensee. (1998). "Kyoto's Unfinished Business." *Foreign Affairs* 77, July/August, pp. 54-66.
- Jacoby, Henry D., and David G. Laughton. (1992). "Project Evaluation: A Practical Asset Pricing Method". *Energy Journal*, 13(2), 19-47.
- Jaffe, Adam B., Steven R. Peterson, Paul R. Portney, and Robert N. Stavins. (1995). "Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?". *Journal of Economic Literature*, 33, 132-163.
- Jaffe, Adam B., and Robert N. Stavins. (1994). "The energy paradox and the diffusion of conservation technology". *Resource and Energy Economics*, 16, 91-122.
- Jaffe, Adam B. and Robert N. Stavins. (1995). "Dynamic Incentives of Environmental Regulation: The Effects of Alternative Policy Instruments on Technology Diffusion." *Journal of Environmental Economics and Management* 29, S43-S63.
- Jehiel, Philippe, and Benny Moldovanu. (1995). "Negative Externalities May Cause Delay in Negotiation". *Econometrica*, 63(6), 1321-1335.
- Johansson, Per-Olov, and Karl-Gustaf Lofgren. (1985). *The Economics of Forestry and Natural Resources*. London: Basil Blackwell.
- Johnson, Ronald N., and G.D. Libecap. (1982). "Contracting Problems and Regulation: The Case of the Fishery". *American Economic Review*, 72, 1005-1022.
- Johnson, R.N., and G.D. Libecap. (1980). "Efficient Markets and Great Lakes Timber: A Conservation Issue Reexamined." *Explorations in Economic History* 17: 372-385.
- Johnson, Scott Lee, and David M. Pikelney. (1996). "Economic Assessment of the Regional Clean Air Incentives Market: A New Emissions Trading Program for Los Angeles". *Land Economics*, 72(3), 277-297.
- Johnston, J.J., and S.K. Swallow. (1998). "Asymmetries in Ordered Strength of Preference Models: Implications of Focus Shift for Discrete Choice Preference Estimation." *Land Economics*, forthcoming.
- Jones, Clifton T. (1993). "Another Look at U.S. Passenger Vehicle Use and the 'Rebound' Effect from Improved Fuel Efficiency". *Energy Journal*, 14(4), 99-110.
- Jorgenson, Dale W. (1984). "Efficiency versus Equity in Economic Analysis". *Discussion Paper No. 1008, Harvard Institute for Economic Research*.
- Jorgenson, Dale W., Lawrence J. Lau, and Thomas M. Stoker. (1980). "Welfare Comparison and Exact Aggregation". *American Economic Review*, 70, 268-392.
- Jorgenson, Dale W., and Daniel T. Slesnick. (1984). "Aggregate Consumer Behavior and the Measurement of Inequality". *Review of Economic Studies*, 51, 369-392.

- Jorgenson, Dale W., Daniel T. Slesnick, and Thomas M. Stoker. (1983). "Exact Aggregation over Individuals and Commodities". *Discussion Paper No. 1005, Harvard Institute for Economic Research*.
- Jorgenson, Dale W., and Peter J. Wilcoxon. (1990). "Environmental regulation and US economic growth". *RAND Journal of Economics*, 21(2), 314-340.
- Jorgenson, Dale W., and Peter J. Wilcoxon. (1992). "Reducing U.S. Carbon Dioxide Emissions: The Cost of Different Goals", *Advances in the Economics of Energy and Resources* (Vol. 7, pp. 125-158): JAI Press.
- Joskow, Paul L. (1997). "Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector". *Journal of Economic Perspectives*, 11(3), 119-138.
- Joskow, Paul L., and Donald B. Marron. (1992). "What Does A Negawatt Really Cost? Evidence from Utility Conservation Programs". *Energy Journal*, 13(4), 41-74.
- Joskow, Paul L. and Richard Schmalensee. (1998). "The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program." *Journal of Law and Economics* 41, 89-135.
- Joskow, Paul L., Richard Schmalensee, and Elizabeth M. Bailey. "The Market for Sulfur Dioxide Emissions." *American Economic Review*, 88(4), pp. 669-685.
- Just, Richard E., Darrell Hueth, L., and Andrew Schmitz. (1982). *Applied Welfare Economics and Public Policy*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Jung, Chulho, Kerry Krutilla, and Roy Boyd. (1996). "Incentives for advanced pollution abatement technology at the industry level: An evaluation of policy alternatives." *Journal of Environmental Economics and Management*, 30: 95-111.
- Kahn, Charles. (1986). "The Durable Goods Monopolist and Consistency with Increasing Costs". *Econometrica*, 54(2), 275-294.
- Kahn, Matthew, and John G. Matsusaka. (1995). "Demand for Environmental Goods: Evidence from Voting Patterns on California Initiatives". *Columbia University Discussion Paper, Series 737*.
- Kahn, Matthew E. (1996). "New evidence on trends in vehicle emissions". *RAND Journal of Economics*, 27(1), 183-196.
- Kahneman, Daniel, and Richard Thaler. (1991). "Economic Analysis and the Psychology of Utility: Applications to Compensation Policy". *AEA Papers and Proceedings*, 81(2), 341-346.
- Kaitala, V., and M. Pohjola. (1988). "Optimal Recovery of A Shared Resource Stock: A Differential Game Model with Efficient Memory Equilibria". *Natural Resource Modeling*, 3(1), 91-119.
- Kalt, Joseph P. (1983). "The Costs and Benefits of Federal Regulation of Coal Strip Mining". *Natural Resources Journal*, 23, 893-915.
- Kamien, Morton I., and Nancy L. Schwartz. (1982). "The Role of Common Property Resources in Optimal Planning Models with Exhaustible Resources". In V. K. Smith and J. V. Krutilla (Eds.), *Explorations in Natural Resource Economics* (pp. 45-71).
- Kamien, Morton I., and Nancy L. Schwartz. (1991). *Dynamic Optimization: The Calculus of Variations and Optimal Control Theory in Economics and Management*. (2nd ed.). (Vol. 1). New York: North Holland.
- Kanazawa, Mark. (1993). "Pricing Subsidies and Economic Efficiency: The U.S. Bureau of Reclamation". *Journal of Law and Economics*, 36(April), 205-234.

- Kaplow, Louis, and Steven Shavell. (1994). "Optimal Law Enforcement with Self-Reporting of Behavior". *Journal of Political Economy*, 102(3), 583-606.
- Karp, Larry S. (1992). "Social Welfare in a Common Property Oligopoly." *International Economic Review*, Vol. 33, pp. 353-372.
- Karp, Larry S. (1993). "Monopoly Extraction of a Durable Non-Renewable Resource Failure of the Coase Conjecture." *Economica* 60, 1-11.
- Karp, Larry S. (1996). "Monopoly Power Can Be Disadvantageous in the Extraction of a Durable Nonrenewable Resource." *International Economic Review*, Vol. 37, No. 4, pp. 825-849.
- Karp, Larry S., and John Livernois. (1992). "On Efficiency-Inducing Taxation for a Non-Renewable Resource Monopolist." *Journal of Public Economics*, Vol. 49, pp. 219-239.
- Karp, Larry S., and David M. Newbery. (1991). "Optimal Tariffs on Exhaustible Resources." *Journal of International Economics*, Vol. 30, pp. 285-299.
- Karp, Larry S., and David M. Newbery. (1992). "Dynamically Consistent Oil Import Tariffs." *Canadian Journal of Economics*, Vol. 25 No. 1, pp. 1-21.
- Kaufmann, Robert K. (1995). "The economic multiplier of environmental life support: can capital substitute for a degraded environment?" *Ecological Economics*, 12, 67-79.
- Kealy, Mary Jo., Mark Montgomery, and John F. Dovidio. (1990). "Reliability and Predictive Validity of Contingent Values: Does the Nature of the Good Matter?" *Journal of Environmental Economics and Management*, 19, 244-263.
- Keeler, Emmett, A. Michael Spence, and Richard J. Zeckhauser. (1972). "The Optimal Control of Pollution". *Journal of Economic Theory*, 4, 19-34.
- Kellogg, Robert L. (1988). "Optimal Timing of Harvest for the North Carolina Bay Scallop Fishery". *American Journal of Agricultural Economics*, February 1988, 50-62.
- Kelly, Suedeen G. (1992). "Intrastate Natural Gas Regulation: Finding Order in the Chaos". *Yale Journal on Regulation*, 9, 355-406.
- Kelman, Steven. (1981). "Cost-Benefit Analysis: An Ethical Critique". *Regulation*, 5(1).
- Kelman, Steven J. (1981). *What Price Incentives? Economists and the Environment*. Boston: Auburn House.
- Kelly, David and Charles Kolstad. (1999). "Bayesian Learning, Growth and Pollution." *Journal of Economic Dynamics and Control*, 23, 491-518.
- Keohane, Nathaniel, Richard Revesz, and Robert Stavins (1998). "The Choice of Regulatory Instruments in Environmental Policy." *Harvard Environmental Law Review*, volume 22, number 2, pp. 313-367
- Kerr, Suzi, and David Maré. (1997). "Efficient Regulation Through Tradeable Permit Markets: The United States Lead Phasedown," Department of Agricultural and Resource Economics, University of Maryland, College Park, Working Paper 96-06.
- Khalatbari, F. (1977). "Market Imperfections and Optimal Rate of Depletion of an Exhaustible Resource". *Economica*, 44, 409-414.
- Khanna, Jyoti, and Jon Harford. (1996). "The ivory trade ban: Is it effective?" *Ecological Economics*, 19, 147-155.

- Kiker, Clyde F., and Francis E. Putz. (1997). "Ecological certification of forest products: Economic challenges". *Ecological Economics*, 20, 37-51.
- King, Martin, and Milan Cuc. (1996). "Price Convergence in North American Natural Gas Spot Markets". *Energy Journal*, 17(2), 17-42.
- Kling, Catherine. (1988). "The Reliability of Estimates of Environmental Benefits from Recreation Demand Models." *American Journal of Agricultural Economics*, 70, 892-901.
- Kneese, Allen V., and William D. Schulze. (1985). "Ethics and Environmental Economics". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 1,). Amsterdam: North Holland.
- Knetsch, Jack L., and John A. Sinden. (1984). "Willingness to Pay and Compensation Demanded: Experimental Evidence of an Unexpected Disparity in Measures of Value". *Quarterly Journal of Economics*, 99, 507-521.
- Kohlhase, Janet E. (1991). "The Impact of Toxic Waste Sites on Housing Values". *Journal of Urban Economics*, 30, 1-26.
- Kohn, Robert. (1985). "A General Equilibrium Analysis of the Optimal Number of Firms in a Polluting Industry". *Canadian Journal of Economics*, 18, 347-354.
- Kolstad, Charles D. (1987). "Uniformity vs. Differentiation in Regulating Externalities." *Journal of Environmental Economics and Management*, 14, 386-399.
- Kolstad, Charles D. (1994). "Hotelling Rents in Hotelling Space." *Journal of Environmental Economics and Management*, 26, 163-180.
- Kolstad, Charles D. (1996a). "Fundamental Irreversibilities in Stock Externalities." *Journal of Public Economics*, 60, 221-233.
- Kolstad, Charles D. (1996b). "Learning and Stock Effects in Environmental Regulation: The Case of Greenhouse Gas Emissions." *Journal of Environmental Economics and Management*, 31, 1-18.
- Kolstad, Charles D. and Frank Wolak. (1983). "Competition in INterregional Taxation: The Case of Western Coal." *Journal of Political Economy*, 91, 443-460.
- Kolstad, Charles D. and Frank Wolak. (1985). "Strategy and Market Structure in Western Coal Taxation." *Review of Economics and Statistics*, 67, 239-249.
- Kopp, Raymond J. (1992). "Why Existence Value Should Be Used in Cost-Benefit Analysis". *Journal of Policy Analysis and Management*, 11(1), 123-130.
- Kornhauser, Lewis A., and Richard L. Revesz. (1994). "Multidefendant Settlements Under Joint and Several Liability: The Problem of Insolvency". *Journal of Legal Studies*, 23(January), 517-542.
- Kosobud, Richard F. "Tradable Cumulation CO₂ Permits and Global Warming Control." *The Energy Journal*, 15-2, 213-232.
- Krautkraemer, Jeffrey A. (1990). "Taxation, Ore Quality Selection, and the Depletion of a Heterogeneous Deposit of a Nonrenewable Resource". *Journal of Environmental Economics and Management*, 18, 120-135.
- Krautkraemer, Jeffrey A. (1995). "A Note on Sustainability, Resource Endowment, and the Social Rate of Discount". *Draft*, 95, 25.
- Krautkraemer, Jeffrey A. (1998). "Nonrenewable Resource Scarcity." *Journal of Economic Literature*, 36, 2065-2107.

- Krupnick, Alan, Wallace E. Oates, and Eric van de Berg. (1983). "On Marketable Air-Pollution Permits: The Case for a System of Pollution Offsets". *Journal of Environmental Economics and Management*, 10, 233-247.
- Krupnick, Alan J., and Paul R. Portney. (1991). "Controlling Urban Air Pollution: A Benefit-Cost Assessment". *Science*, 252, 522-528.
- Krupnick, Alan J., and Margaret A. Walls. (1992). "The Cost-effectiveness of Methanol for Reducing Motor Vehicle Emissions and Urban Ozone". *Journal of Policy Analysis and Management*, 11(3), 373-396.
- Krutilla, John V. (1964). "Conservation Reconsidered". *American Economic Review*, 57, 777-786.
- Kunioka, Todd, and Lawrence S. Rothenberg. (1993). "The Politics of Bureaucratic Competition: The Case of Natural Resource Policy". *Journal of Policy Analysis and Management*, 12(4), 700-725.
- Kwerel, Evan R. (1977). "To Tell the Truth: Imperfect Information and Optimal Pollution Control". *Review of Economic Studies*, 44, 595-601.
- Laffont, Jean-Jacques. (1987). "Externalities". In J. Eatwell, M. Milgate, and P. Newman (Eds.), *Allocation, Information, and Markets (selections from the New Palgrave)* (pp. 112-116): W.W. Norton.
- Laibson, David A. (1991). "Notes on Dynamic Inconsistency". *draft, Department of Economics at MIT*.
- Larson, Bruce A. (1996). "Environmental Policy Based on Strict Liability: Implications of Uncertainty and Bankruptcy". *Land Economics*, 72(1), 33-42.
- Lave, Lester B. (1991). "Benefit-Cost Analyses of Environmental Issues: Does This Framework Optimize Social Decisions". *draft, Carnegie Mellon University*.
- Lave, Lester B., and Eugene P. Seskin. (1977). *Air Pollution and Human Health*. Baltimore: Johns Hopkins University Press for Resources for the Future.
- Lee, Dwight R., and Walter S. Misiolek. (1986). "Substituting Pollution Taxation for General Taxation: Some Implications for Efficiency in Pollution Taxation". *Journal of Environmental Economics and Management*, 13, 338-347.
- Levhari, David, and Nissan Liviatan. (1977). "Notes on Hotelling's Economics of Exhaustible Resources". *Canadian Journal of Economics*, 10, 177-192.
- Levhari, David, and Robert Pindyck. "The Pricing of Durable Exhaustible Resources." *Quarterly Journal of Economics*, 96, 365-377.
- Levhari, David, Ron Michener, and Leonard J. Mirman. (1981). "Dynamic Programming Models of Fishing: Competition". *AER*, 71(4), 649-661.
- Levhari, David, and Leonard J. Mirman. (1980). "The great fish war: an example using a dynamic Cournot-Nash solution". *Bell Journal of Economics*, 11(322-334).
- Levinson, Arik. (1997). "A Note on Environmental Federalism: Interpreting Some Contradictory Results." *Journal of Environmental Economics and Management* 33, pp. 359-366.
- Lewis, Tracy R. (1976). "Monopoly Exploitation of an Exhaustible Resource". *Journal of Environmental Economics and Management*, 3, 198-204.
- Lewis, Tracy R. (1977). "Attitudes toward Risk and the Optimal Exploitation of an Exhaustible Resource". *Journal of Environmental Economics and Management*, 4, 111-119.

- Lewis, Tracy R. (1981). "Exploitation of a Renewable Resource under Uncertainty". *Canadian Journal of Economics*, 14, 422-439.
- Lewis, Tracy R. (1996). "Protecting the environment when costs and benefits are privately known". *RAND Journal of Economics*, 27(4), 819-847.
- Lewis, Tracy R., and Richard Schmalensee. (1980). "On Oligopolistic Markets for Nonrenewable Natural Resources". *Quarterly Journal of Economics*, 95, 322-334.
- Libecap, G.D., and S.N. Wiggins. (1985). "The Influence of Private Contractual Failure on Regulation: The Case of Oil Field Unitization". *Journal of Political Economy*, 93, 690-714.
- Lichtenberg, Eric, David Zilberman, and Kenneth T. Bogen. (1989). "Regulating Environmental Health Risks under Uncertainty: Groundwater Contamination in California". *Journal of Environmental Economics and Management*, 17, 22-34.
- Lichtenberg, Eric, and Eric Zilberman. (1988). "Efficient Regulation of Environmental Health Risks". *Quarterly Journal of Economics*, 103, 167-178.
- Lind, Robert C. (1982). *Discounting for Time and Risk in Energy Policy*. Washington, DC: Resources For The Future.
- Lind, Robert C. (1990). "Reassessing the Government's Discount Rate Policy in Light of New Theory and Data in a World Economy with a High Degree of Capital Mobility". *Journal of Environmental Economics and Management*, 18, S8-S28.
- Lintott, John. (1996). "Environmental accounting; useful to whom and for what?". *Ecological Economics*, 16, 179-190.
- List, J. and J. Shogren. (1998). "Calibration Between Hypothetical and Actual Bids in a Field Experiment." *Journal of Economic Behavior and Organization*, 37, 193-205.
- Lohr, Luanne, and Timothy A. Park. (1995). "Utility-Consistent Discrete-Continuous Choices in Soil Conservation". *Land Economics*, 71(4), 474-490.
- Long, Ngo V. (1975). "Resource Extraction under the Uncertainty about Possible Nationalization". *Journal of Economic Theory*, 10, 42-53.
- Loomis, John B. (1989). "Test-Retest Reliability of the Contingent Valuation Method: A Comparison of General Population and Visitor Response". *American Journal of Agricultural Economics*, 71, 76-84.
- Loomis, John B. (1990). "Comparative Reliability of the Dichotomous Choice and Open-Ended Contingent Valuation Techniques". *Journal of Environmental Economics and Management*, 18, 78-85.
- Loury, Glenn C. (1978). "The Optimal Exploitation of an Unknown Reserve". *Review of Economic Studies*, 45, 621-636.
- Loury, Glenn C. (1980). "A Theory of "Oil"igopoly: Cournot Equilibrium in Exhaustible Resource Markets with Fixed Supplies". *draft, University of Michigan at Ann Arbor*.
- Louviere, J. (1994) "Conjoint Analysis." *Advances in Marketing Research*, R. Bagozzi, ed. Blackwell Publishers.
- Louviere, J.J., Hensher, D.A. and Swait, J. (1998). "Combining Sources of Preference Data." *Journal of Econometrics*, forthcoming.
- Low, P. (Ed.). (1992). *International Trade and the Environment*. Washington, D.C.: World Bank.

- Madariaga, Bruce, and Kenneth E. McConnell. (1987). "Exploring Existence Values". *Water Resource Research*, 23, 936-942.
- Magat, Wesley A. (1978). "Pollution Control and Technological Advance: A Dynamic Model of the Firm". *Journal of Environmental Economics and Management*, 5, 1-25.
- Maler, Karl-Goran. (1974). *Environmental Economics: A Theoretical Inquiry*. Baltimore: Johns Hopkins University Press.
- Maler, Karl-Goran. (1989). "The Acid Rain Game," in H. Folmer and E. Van Ierland, eds., *Valuation Methods and Policy Making in Environmental Economics*, pp. 231-252. Amsterdam: Elsevier.
- Maler, Karl-Goran. (1991). "National Accounts and Environmental Resources". *Environmental and Resource Economics*, 1, 1-15.
- Malik, Arun. (1990). "Markets for Pollution Control when Firms Are Noncompliant". *Journal of Environmental Economics and Management*, 18, 97-106.
- Malliari, A.G., and William A. Brock. (1982). *Stochastic Methods in Economic and Finance*. New York: North-Holland.
- Maloney, Michael T., and Robert E. McCormick. (1982). "A Positive Theory of Environmental Quality Regulation". *Journal of Law and Economics*, 25, 99-124.
- Malueg, D.A. (1989). "Emission Credit Trading and the Incentive to Adopt New Pollution Abatement Technology". *Journal of Environmental Economics and Management*, 16, 52-57.
- Malueg, David and J. L. Solow. (1990). "Monopoly Production of Durable Exhaustible Resources." *Economica*, 57, 29-47.
- Mangasarian, Olvi L. (1966). "Sufficient Conditions for the Optimal Control of Nonlinear Systems". *SIAM Journal on Control*, February 4, 139-152.
- Mangel, Marc. (1985). *Decision and Control in Uncertain Resource Systems*. New York: Academic Press.
- Manne, Alan S., and Thomas F. Rutherford. (1994). "International Trade in Oil, Gas and Carbon Emission Rights: An Intertemporal General Equilibrium Model". *Energy Journal*, 15(1), 57-76.
- Marglin, Stephen A. (1963). "The Opportunity Cost of Public Investment". *Quarterly Journal of Economics*, 77, 95-111.
- Markowska, Agnieszka and Tomasz Zylicz. (1999). "Costing an international public good: The case of the Baltic Sea." *Ecological Economics*, forthcoming.
- Mazzotta, M., Opaluch, J. (1995). "Decision Making When Choices are Complex: A Test of Heiner's Hypothesis." *Land Economics*, 71(4):500-515.
- McConnell, Kenneth E. (1983). "An Economic Model of Soil Conservation". *American Journal of Agricultural Economics*, 65, 83-89.
- McConnell, Kenneth E. (1985). "The Economics of Outdoor Recreation". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 1,). Amsterdam: North-Holland.
- McConnell, Kenneth E. (1990). "Models for Referendum Data: The Structure of Discrete Choice Models for Contingent Valuation". *Journal of Environmental Economics and Management*, 18, 19-34.

- McConnell, Kenneth E. (1995). "Consumer Surplus from Discrete Choice Models." *Journal of Environmental Economics and Management*, 263-270.
- McConnell, Kenneth E., and Tim T. Phipps. (1984). "Identification of Parameters in Hedonic Models: Consumer Demands with Nonlinear Budgets". *draft, University of Maryland, Department of Agricultural and Resource Economics*.
- McConnell, Virginia D., and Robert M. Schwab. (1990). "The Impact of Environmental Regulation in Industry Location Decisions: The Motor Vehicle Industry". *Land Economics*, 66, 67-81.
- McDonald, Stephen L. (1994). "The Hotelling Principle and In-Ground Values of Oil Reserves: Why the Principle Over-Predicts Actual Values". *Energy Journal*, 15(3), 1-17.
- McDonald, R., and D. Siegel. (1986). "The Value of Waiting to Invest." *Quarterly Journal of Economics*, pp. 707-727.
- McGartland, Albert. (1988). "A Comparison of Two Marketable Discharge Permit Systems". *Journal of Environmental Economics and Management*, 15, 35-44.
- McKenzie, George W. (1983). *Measuring Economic Welfare: New Methods*. Cambridge, England: Cambridge University Press.
- Mendelsohn, Robert. (1986). "Regulating Heterogeneous Emissions". *Journal of Environmental Economics and Management*, 13, 301-312.
- Mendelsohn, Robert, William D. Nordhaus, and Daigee Shaw. (1994). "The Impact of Global Warming on Agriculture: A Ricardian Analysis". *American Economic Review*, 84(4), 753-771.
- Mendelsohn, Robert, and William J. Strang. (1984). "Cost-Benefit Analysis under Uncertainty: Comment". *American Economic Review*, 74, 1096-1099.
- Metcalf, Gilbert E., and Donald Rosenthal. (1995). "The "New" View of Investment Decisions and Public Policy Analysis: An Application of Green Lights and Cold Refrigerators". *Journal of Policy Analysis and Management*, 14(4), 517-531.
- Metrick, Andrew, and Martin L. Weitzman. (1996). "Patterns of Behavior in Endangered Species Preservation". *Land Economics*, 72(1), 1-16.
- Metrick, Andrew and Martin L. Weitzman. (1998). "Conflicts and Choices in Biodiversity Preservation." *Journal of Economic Perspectives*, volume 12, number 3, pp. 21-34.
- Miceli, Thomas J., and Kathleen Segerson. (1994). "Regulatory Takings: When Should Compensation be Paid?". *Journal of Legal Studies*, 23(June), 749-776.
- Michel, Philippe. (1982). "On the Transversality Condition in Infinite Horizon Optimal Problems". *Econometrica*, 50(4), 975-985.
- Miller, J., and F. Lad. (1984). "Flexibility, Learning, and Irreversibility in Environmental Decisions: A Bayesian Approach". *Journal of Environmental Economics and Management*, 11, 161-172.
- Miller, Jon R. (1978). "A simple Model of Endangered Species Preservation in the United States". *Journal of Environmental Economics and Management*, 5, 292-300.
- Miller, Jon R., and Frederic C. Menz. (1979). "Some Economic Considerations for Wildlife Preservation". *Southern Economic Journal*, 45, 718-729.

- Miller, D.J., and A.J. Plantinga. (1999). "Modeling Land Use Decisions with Aggregate Data." *American Journal of Agricultural Economics* 81(1):180-94.
- Miller, Merton H., and Charles W. Upton. (1985). "A Test of the Hotelling Valuation Principle". *Journal of Political Economy*, 93, 1-25.
- Milliman, Scott R., and Raymond Prince. (1989). "Firm Incentives to Promote Technological Change in Pollution Control". *Journal of Environmental Economics and Management*, 17, 247-265.
- Mills, Edwin I., and Frederick M. Peterson. (1975). "Environmental Quality: The First Five Years". *American Economic Review*, 65, 259-268.
- Miranda, Marie Lynn, Jess W. Everett, Daniel Blume, and Jr. Roy, Barbeau A. (1994). "Market-Based Incentives and Residential Municipal Solid Waste". *Journal of Policy Analysis and Management*, 13(4), 681-698.
- Mitchell, Robert C., and Richard T. Caron. (1989). *Using Surveys to Value Public Goods*. Washington: Resources for the Future.
- Mitra, Tapan, and Henry Y. Wan, Jr. (1985). "Some Theoretical Results on the Economics of Forestry". *Review of Economic Studies*, 52, 263-282.
- Mitra, Tapan, and Henry Y. Wan, Jr. (1986). "On the Faustmann Solution to the Forest Management Problem". *Journal of Economic Theory*, 40, 229-249.
- Mohr, Ernst. (1994). "Environmental norms, society, and economics". *Ecological Economics*, 9, 229-239.
- Moncur, James E.T., and Richard L. Pollock. (1988). "Scarcity Rents for Water: A Valuation and Pricing Model". *Land Economics*, 64, 62-72.
- Montero, Juan-Pablo. (1999). "Voluntary compliance with market-based environmental policy: Evidence from the US Acid Rain Program." *Journal of Political Economy*, forthcoming.
- Montgomery, W. David. (1972). "Markets in Licenses and Efficient Pollution Control Programs". *Journal of Economic Theory*, 3, 395-418.
- Morck, R., E. Schwartz, and D. Strangeland. (1989). "The Valuation of Forestry Resources under Stochastic Prices and Inventory". *Journal of Financial and Quantitative Analysis*, 24, 473-487.
- Mueller, Dennis C. (1979). *Public Choice*. London: Cambridge University Press.
- Munro, Gordon R. (1990). "The Optimal Management of Transboundary Fisheries: Game Theoretic Considerations". *Natural Resource Modeling*, 4(4), 403-426.
- Munro, Gordon R., and Anthony D. Scott. (1985). "The Economics of Fisheries Management". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resources and Energy Economics*. New York: North Holland.
- Murdoch, James C. and Todd Sandler. (1997). "The Voluntary Provision of a Pure Public Good: The Case of Reduced CVC Emissions and the Montreal Protocol." *Journal of Public Economics*, 63, 331-349.
- Naysnerski, Wendy, and Tom Tietenberg. (1992). "Private Enforcement of Federal Environmental Law". *Land Economics*, 68(1), 28-48.
- Neary, J. Peter, and Sweder van Wijnbergen. (1986). *Natural Resources and the Macroeconomy*. Oxford: Basil Blackwell.

- Negri, Donald H. (1990). "'Stragedy' of the Commons". *Natural Resource Modeling*, 4(4), 521-537.
- Neher, Philip A. (1990). *Natural Resource Economics: conservation and exploitation*. Cambridge: Cambridge University Press.
- Nelson, Robert H. (1987). "The Economics Profession and the Making of Public Policy". *Journal of Economic Literature*, 25, 49-91.
- Newbery, David M. (1992). "Should Carbon Taxes Be Additional to Other Transport Fuel Taxes?". *Energy Journal*, 13(2), 49-60.
- Newbery, D.M.G. (1981). "Oil Prices, Cartels and the Problem of Dynamic Inconsistency". *Economic Journal*, 91, 617-646.
- Newell, Richard G., Adam B. Jaffe, and Robert N. Stavins. (1999). "The Induced Innovation Hypothesis and Energy-Saving Technological Change." *Quarterly Journal of Economics*, forthcoming.
- Newell, Richard G., and William A. Pizer (1998). "Stock Externality Regulation Under Uncertainty." Working Paper, Resources for the Future, Washington, D.C.
- Newman, D.H., C.B. Gilbert, and W.F. Hyde. (1985). "The optimal forest rotation with evolving prices." *Land Economics*, 61:347-353.
- Nichols, Albert L., and Richard J. Zeckhauser. (1986). "The Perils of Prudence". *Regulation*, 10(2), 13-24.
- Nickerson, P.H. (1990). "Markets for Preservation: Old Growth and Forest Service Auctions". *Land Economics*, 66, 473-477.
- Noll, Roger G. (1982). "Implementing Marketable Emissions Permits". *American Economic Review*, 72, 120-124.
- Nordhaus, William D. (1973). "The Allocation of Energy Resources". *Brookings Papers on Economic Activity*, 3, 529-570.
- Nordhaus, William D. (1982). "How Fast Should We Graze the Global Commons?". *American Economic Review*, 72, 242-246.
- Nordhaus, William D. (1992, August 11-13, 1992). "The Insurance Premium on Greenhouse Warming". Paper presented at the National Bureau of Economic Research Workshop on Environmental Economics, Cambridge, MA.
- Nordhaus, William D. (1993a). "Optimal Greenhouse-Gas Reductions and Tax Policy in the "DICE" Model". *AEA Papers and Proceedings*, 83(2), 313-317.
- Nordhaus, William D. (1993b). "Reflections on the Economics of Climate Change." *Journal of Economic Perspectives* 4, 11-25.
- Nordhaus, William D. (1994). *Managing the Global Commons: The Economics of Climate Change*. Cambridge: MIT Press.
- Norgaard, Richard B. (1989). "The Case for Methodological Pluralism". *Ecological Economics*, 1, 37-57.
- Norgaard, Richard B. (1990). "Economic Indicators of Natural Resource Scarcity: A Critical Essay". *Journal of Environmental Economics and Management*, 19, 19-25.

- Norgaard, Richard B., and Richard B. Howarth. (1991). "Sustainability and Discounting the Future". In R. Costanza (Ed.), *Ecological Economics* (pp. 525p). New York: Columbia University Press.
- Norstrom, C.J. (1975). "A stochastic model for the growth period decision in forestry." *Swedish Journal of Economics*, 77:329-37.
- Norton, Bryan G., and Michael Toman. (1997). "Sustainability: Ecological and Economic Perspectives." *Land Economics*, 73, 553-568.
- Norton-Griffiths, Michael, and Clive Southey. (1995). "The opportunity costs of biodiversity conservation in Kenya". *Ecological Economics*, 12, 125-139.
- Oates, Wallace E. (1983). "The Regulation of Externalities: Efficient Behavior by Sources and Victims". *Public Finance*, 38, 362-375.
- Oates, Wallace E. (1995). "Green Taxes: Can We Protect the Environment and Improve the Tax System at the Same Time?" *Southern Economic Journal* 61, pp. 914-922.
- Oates, Wallace E., Paul R. Portney, and Albert M. McGartland. (1989). "The Net Benefits of Incentive-based Regulation: A Case Study of Environmental Standard Setting". *American Economic Review*, 79, 1233-1241.
- Oates, Wallace E., and Diana L. Strassmann. (1984). "Effluent Fees and Market Structure". *Journal of Public Economics*, 24, 29-46.
- OECD. (1991). *Environmental Policy: How to Apply Economic Instruments*. Paris: OECD.
- O'Hare, Michael, and Debra Sanderson. (1993). "Facility Siting and Compensation: Lessons from the Massachusetts Experience". *Journal of Policy Analysis and Management*, 12(2), 364-376.
- O'Neil, W., M. David, C. Moore, and E. Joeres. (1983). "Transferable Discharge Permits and Economic Efficiency: The Fox River." *Journal of Environmental Economics and Management* 4(December): 346-55.
- Opaluch, James J., and M. Kashmanian. (1985). "Assessing the Viability of Marketable Permit Systems: An Application in Hazardous Waste Management". *Land Economics*, 61, 263-271.
- Opaluch, J. J., S. K. Swallow, T. Weaver, C. W. Wessells, and D. Wichelns. (1993). "Evaluating impacts from noxious facilities: Including public preferences in current siting mechanisms." *Journal of Environmental Economics and Management* 24(1):41-59.
- Opschoor, J.B., and Hans B. Vos. (1989). *Economic Instruments for Environmental Protection*. Paris: Organization for Economic Cooperation and Development.
- O'Reilly, James. T. (1994). "Environmental Racism, Site Cleanup and Inner City Jobs: Indiana's Urban In-fill Incentives". *Yale Journal on Regulation*, 11, 43-73.
- Ostrom, Elinor. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, United Kingdom: Cambridge University Press.
- Ostrom, Elinor, and Roy Gardner. (1993). "Coping with Asymmetries in the Commons: Self-Governing Irrigation Systems Can Work". *Journal of Economic Perspectives*, 7(4), 93-112.
- Ozog, Michael T., and Donald M. Waldman. (1994). "Weighting Nonrandom Samples in Voluntary Energy Conservation Program Evaluation". *Energy Journal*, 15(1), 129-141.

- Page, Talbot. (1997). "On the Problem of Achieving Efficiency and Equity, Intergenerationally." *Land Economics*, 73, 581-596.
- Palmer, Karen, Alan Krupnick, Hadi Dowlatabadi, and Stuart Siegel. (1995a). "Social Costing of Electricity in Maryland: Effects on Pollution, Investment and Prices". *The Energy Journal*, 16(1), 1-26.
- Palmer, Karen, Wallace E. Oates, and Paul R. Portney. (1995b). "Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm?". *Journal of Economic Perspectives*, 9(4), 119-132.
- Palmer, Karen, Hilary Sigman, and Margaret Walls. (1997). "The Cost of Reducing Municipal Solid Waste." *Journal of Environmental Economics and Management* 33, pp. 128-150.
- Palmquist, Raymond P. (1990). "Pollution Subsidies and Multiple Local Optima". *Land Economics*, 66, 394-401.
- Palmquist, R. B. (1991). "Hedonic Methods" in J. B. Braden and C. D. Kolstad (eds), *Measuring the Demand for Environmental Quality*, Amsterdam:North Holland
- Parfomak, Paul W., and Lester B. Lave. (1996). "How Many Kilowatts are in Negawatt? Verifying *Ex Post* Estimates of Utility Conservation Impacts at the Regional Level". *Energy Journal*, 17(4), 59-87.
- Pargal, Sheoli, and David Wheeler. (1996). "Informal Regulation of Industrial Pollution in Developing Countries: Evidence from Indonesia". *Journal of Political Economy*, 104(6), 1314-1327.
- Parks, Peter J. (1995). "Explaining 'Irrational' Land Use: Risk Aversion and Marginal Agricultural Land." *Journal of Environmental Economics and Management* 28, 34-47.
- Parks, P., and B. Murray. (1994). "Land Attributes and Land Allocation: Nonindustrial Forest Use in the Pacific Northwest." *Forest Science*, 40, 558-75.
- Parry, Ian W.H. (1995). "Pollution Taxes and Revenue Recycling." *Journal of Environmental Economics and Management*, 29, S-64 - S-77.
- Parry, Ian W. H., Robertson C. Williams III, and Lawrence H. Goulder. (1999). "When Can Carbon Abatement Policies Increase Welfare? The Fundamental Role of Distorted Factor Markets." *Journal of Environmental Economics and Management* 37, pp. 52-84.
- Pashigan, B. Peter. (1984). "The Effect of Environmental Regulation on Optimal Plant Size and Factor Shares". *Journal of Law and Economics*, 25, 99-124.
- Pearce, David W. (1976). "The Limits of Cost Benefit Analysis as a Guide to Environmental Policy". *Kyklos*, 29, 97-112.
- Pearce, David W. (1985). "Efficiency and Distribution in Corrective Mechanisms for Environmental Externality". In A. Schnaiberg and e. al (Eds.), *Distributional Conflicts in Environmental Policy*. Berlin: WZB Publications.
- Pearce, David W., and Giles D. Atkinson. (1993). "Capital theory and the measurement of sustainable development: an indicator of "weak" sustainability". *Ecological Economics*, 8, 103-108.
- Pearce, David W., and Karl-Goran Maler. (1991). "Environmental Economics and the Developing World". *Ambio*, 20(2), 52-54.
- Peltzman, Samuel, and T. Nicolaus Tideman. (1972). "Local versus National Pollution Control: Note". *American Economic Review*, 62, 959-963.

- Peretz, Jean H., Robert A. Bohm, and Philip D. Jasienczyk. (1997). "Environmental Policy and the Reduction of Hazardous Waste". *Journal of Policy Analysis and Management*, 16(4), 556-574.
- Peskin, Henry N., Paul R. Portney, and Allen V. Kneese. (1981). *Environmental Regulation and the U.S. Economy*. Baltimore: Johns Hopkins University Press.
- Peszko, Grzegorz and Tomasz Zylicz. (1998). "Environmental Financing in European Economies in Transition." *Environmental and Resource Economics*, 11(3-4), 521-538.
- Peterson, Frederick M., and Anthony C. Fisher. (1977). "The Exploitation of Extractive Resources: A Survey". *Economic Journal*, 87, 681-721.
- Pezzey, John. (1989). "Definition of Sustainability". *Centre for Economic and Environmental Development, United Kingdom, Paper no. 9*.
- Pfaff, Alexander S.P. (1999). "What Drives Deforestation in the Brazilian Amazon? Evidence from Satellite and Socioeconomic Data." *Journal of Environmental Economics and Management*, 37(2), 26-43.
- Phaneuf, D., C. Kling, and J. Herriges. (1999). "Estimation and Welfare Calculation in a Generalized Corner Solution Model with an Application to Recreation Demand." *Review of Economics and Statistics*, February.
- Phillips, Carl V., and Richard J. Zeckhauser. (1989). "Contingent Valuation of Damage to Natural Resources: How Accurate? How Appropriate?". *Toxic Law Reporter, October*, 520-529.
- Pierce, Jr., Richard J. (1992). "Intrastate Natural Gas Regulation: An Alternative Perspective". *Yale Journal on Regulation*, 9, 407-416.
- Pindyck, Robert S. (1977). "Cartel Pricing and the Structure of the International Bauxite Market". *Bell Journal of Economics*, 8, 343-360.
- Pindyck, Robert S. (1978a). "Gains to Producers from the Cartelization of Exhaustible Resources". *Review of Economics and Statistics*, 60, 238-251.
- Pindyck, Robert S. (1978b). "The Optimal Exploration and Production of Nonrenewable Resources". *Journal of Political Economy*, 86, 841-861.
- Pindyck, Robert S. (1980). "Uncertainty and Exhaustible Resource Markets". *Journal of Political Economy*, 88, 1203-1225.
- Pindyck, Robert S. (1981). "Models of Resource Markets and the Explanation of Resource Price Behavior". *Energy Economics*, 3, 130-139.
- Pindyck, Robert S. (1984). "Uncertainty in the Theory of Renewable Resource Markets". *Review of Economic Studies*, 51, 289-303.
- Pindyck, Robert S. (1987). "On Monopoly Power in Extractive Resource Markets". *Journal of Environmental Economics and Management*, 14, 128-142.
- Pitchford, Rohan. (1995). "How Liable Should a Lender Be? The Case of Judgment-Proof Firms and Environmental Risk". *American Economic Review*, 85(5), 1171-1186.
- Pizer, William A. (1997). "Prices vs. Quantities Revisited: The Case of Climate Change." Working Paper, Resources for the Future, Washington, D.C..

- Plantinga, A. J. (1996). "The Effect of Agricultural Policies on Land Use and Environmental Quality." *American Journal of Agricultural Economics*, 78, 1082-91.
- Plantinga, A.J. (1998). "The optimal timber rotation: An option value approach." *Forest Science*, 44(2):192-202.
- Plantinga, A.J., and R.A. Birdsey. (1994). "Optimal forest stand management when benefits are derived from carbon." *Natural Resources Modeling*, 8(4):373-87.
- Plott, Charles R. (1983). "Externalities and Corrective Policies in Experimental Markets". *Economic Journal*, 93, 106-127.
- Plourde, Charles G. (1970). "A Simple Model of Replenishable Natural Resources". *American Economic Review*, 60, 518-522.
- Poe, Greg, and R.C. Bishop. (1999). "Valuing the Incremental Benefits of Groundwater Protection when Exposure Levels are Known." *Environmental and Resource Economics* 13(3):341-367.
- Polinsky, A. Mitchell, and Steven Shavell. (1979). "The Optimal Tradeoff between the Probability and Magnitude of Fines". *American Economic Review*, 69, 880-891.
- Polinsky, A. Mitchell, and Steven Shavell. (1992). "Enforcement Costs and the Optimal Magnitude and Probability of Fines". *Journal of Law and Economics*, 35, 133-148.
- Pollak, R.A. (1968). "Consistent Planning". *Review of Economic Studies*, 36, 201-208.
- Pollak, Robert A. (1995). "Regulating Risks". *Journal of Economic Literature*, 33(March), 179-191.
- Pontryagin, L.S. et al. (1962). *The Mathematical Theory of Optimal Processes*. New York: Wiley.
- Porter, Michael E. (1995). "Toward a New Conception of the Environment-Competitiveness Relationship". *Journal of Economic Perspectives*, 9(4), 97-118.
- Porter, Richard C. (1982). "The New Approach to Wilderness Preservation through Benefit-Cost Analysis". *Journal of Environmental Economics and Management*, 9, 59-80.
- Porter, Robert H. (1995). "The Role of Information in U. S. Offshore Oil and Gas Lease Auctions". *Econometrica*, 63(1), 1-27.
- Portney, Paul R. (1994). "The Contingent Valuation Debate: Why Economists Should Care". *Journal of Economic Perspectives*, 8(4), 3-17.
- Poterba, James. (1994). "Is the Gasoline Tax Regressive?" *Tax Policy and the Economy*, 5, 145-164.
- Prahladachar, M. (1994). "Innovations in the use and management of groundwater in hardrock regions in India". *Ecological Economics*, 9, 267-272.
- Pratt, John W., and Richard J. Zeckhauser. (1996). "Willingness to Pay and the Distribution of Risk and Wealth". *Journal of Political Economy*, 104(4), 747-763.
- Provencher, Bill. (1993). "A Private Property Rights Regime to Replenish a Groundwater Aquifer". *Land Economics*, 69(4), 325-340.
- Provencher, Bill. (1995). "Structural Estimation of the Stochastic Dynamic Decision Problems of Resource Users: An Application to the Timber Harvest Decision". *Journal of Environmental Economics and Management*, 29, 321-338.

- Provencher, B. and O. Burt. (1994). "A Private Property Rights Regime for the Commons: The Case of Groundwater," *American Journal of Agricultural Economics*, November.
- Rabe, Barry G. (1995). "Integrating Environmental Regulation: Permitting Innovation at the State Level". *Journal of Policy Analysis and Management*, 14(3), 467-472.
- Ragozin, David L., and Gardner M. Brown. (1985). "Harvest Policies and Non-Market Valuation in Predator-Prey System". *Journal of Environmental Economics and Management*, 12, 155-168.
- Randall, Alan. (1991). "The Value of Biodiversity". *Ambio*, 20(2), 64-68.
- Randall, Alan, and John R. Stoll. (1980). "Consumer's Surplus in Commodity Space". *American Economic Review*, 70, 449-455.
- Rausser, Gordon C. and Arthur A. Small. (1999). "Valuing Research Leads: Bioprospecting and the Conservation of Genetic Resources." *Journal of Political Economy*, forthcoming.
- Rawls, John. (1972). *A Theory of Justice*. Oxford: Clarendon Press.
- Razzaz, Omar M. (1993). "Examining Property Rights and Investment in Informal Settlements: The Case of Jordan". *Land Economics*, 69(4), 341-355.
- Reed, W.J. (1993). "The decision to conserve or harvest old-growth forest." *Ecological Economics*, 8:45-69.
- Regan, T. (1981). "The Nature and Possibility of an Environmental Ethic". *Environmental Economics*, 3, 19-34.
- Reinganum, Jennifer, and Nancy L. Stokey. (1985). "Oligopoly Extraction of Common Property Natural Resource: The Importance of the Period of Commitment in Dynamic Games". *International Economic Review*, 26, 161-173.
- Repetto, Robert *et al.* (1989). *Wasting Assets: Natural Resources in the National Income Accounts*. Washington: World Resources Institute.
- Resosudarmo, Budy P., and Erik Thorbecke. (1996). "The impact of environmental policies on household incomes for different socio-economic classes: The case of air pollutants in Indonesia". *Ecological Economics*, 17, 83-94.
- Revesz, Richard L. (1996). "Federalism and Interstate Environmental Externalities," *University of Pennsylvania Law Review*, 144, 2341.
- Rhodes, Thomas C., and Paul N. Wilson. (1995). "Sky Islands, Squirrels, and Scopes: The Political Economy of an Environmental Conflict". *Land Economics*, 71(1), 106-121.
- Richer, Jerrell, and John K. Stranlund. (1997). "Threat Positions and the Resolution of Environmental Conflicts". *Land Economics*, 73(1), 58-71.
- Roberts, Marc J., and Michael Spence. (1976). "Effluent Charges and Licenses under Uncertainty". *Journal of Public Economics*, 5(3-4), 193-208.
- Robinson, James C. (1995). "The Impact of Environmental and Occupational Health Regulation on Productivity Growth in U.S. Manufacturing". *Yale Journal of Regulation*, 12, 386-434.
- Robison, H. David. (1985). "Who Pays for Industrial Pollution Abatement?". *Review of Economics and Statistics*, 67, 702-706.
- Roemer, Michael. (1970). *Fishing for Growth: Export-led Development in Peru, 1950-1967*. Cambridge, MA: Harvard University Press.

- Rollins, K. and A. Lyke. (1998). "The Case for Diminishing Marginal Existence Values." *Journal of Environmental Economics and Management* 36: 324-344.
- Rose-Ackerman, Susan. (1973). "Effluent Charges: A Critique". *Canadian Journal of Economics*, 6, 512-528.
- Rosen, Sherwin. (1974). "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition". *Journal of Political Economy*, 82, 34-55.
- Rothman, Dale S. and Sander M. de Bruyn. (1998). "Probing into the Environmental Kuznets Curve Hypothesis." *Ecological Economics* 25, 143-145.
- Rudel, T., and J. Roper. (1997). "The paths to rainforest destruction: crossnational patterns of tropical deforestation, 1975-1990". *World Development*, 25(1), 53-65.
- Russell, Clifford S. (1990). "Monitoring and Enforcement". In P. Portney (Ed.), *Public Policies for Environmental Protection*. Baltimore: Johns Hopkins University Press.
- Russell, Clifford S., Winston Harrington, and W. J. Vaughan. (1986). *Enforcing Pollution Control Laws*. Baltimore: Johns Hopkins University Press.
- Sadka, Efraim. (1978). "On the optimal taxation of consumer externalities." *Quarterly Journal of Economics*, 165-174.
- Salant, David J. (1995). "Behind the revolving door: a new view of public utility regulation". *RAND Journal of Economics*, 26(3), 362-377.
- Salant, Stephen. (1976). "Exhaustible Resources and Industrial Structure: A Nash-Cournot Approach to the World Oil Market". *Journal of Political Economy*, 84, 1079-1093.
- Salchenberger, L. (1989). "Sole Owner Harvesting Policies under the Threat of Entry: A Two Stage Linear Game". *Journal of Environmental Economics and Management*, 16, 121-133.
- Samples, Karl C., John A. Dixon, and M.M. Gowen. (1986). "Information Disclosure and Engandered Species Valuation". *Land Economics*, 62, 306-312.
- Samuelson, Paul A. (1954). "The Pure Theory of Public Expenditure". *Review of Economics and Statistics*, 36, 387-389.
- Samuelson, Paul A. (1976). "Economics of Forestry in an Evolving Society". *Economic Inquiry*, 14, 466-492.
- Sandmo, Angnar. (1975). "Optimal taxation in the presence of externalities." *Swedish Journal of Economics*, 77: 86-98.
- Sargent, T.J. (1987). *Dynamic Macroeconomic Theory*. Cambridge, MA: Harvard University Press.
- Schaefer, Milner B. (1954). "Some Aspects of the Dynamics of Populations Important in the Management of Commercial Fisheries". *Inter-American Tropical Tuna Commission Bulletin*, 1, 25-56.
- Schelling, Thomas C. (1998). "The Cost of Combating Global Warming." *Foreign Affairs* 76, number 6, pp. 8-14.
- Schlager, Edella, William Blomquist, and Shui Yan Tang. (1994). "Mobile Flows, Storage, and Self-Organized Institutions for Governing Common-Pool Resources". *Land Economics*, 70(3), 294-317.
- Schlager, Edella, and Elinor Ostrom. (1992). "Property-Rights Regimes and Natural Resources: A Conceptual Analysis". *Land Economics*, 68(3), 249-262.

- Schmalensee, Richard. (1971). "Option Demand and Consumer's Surplus: Valuing Price Changes under Uncertainty". *American Economic Review*, 62, 813-824.
- Schmalensee, Richard. (1996). "Greenhouse Policy Architecture and Institutions," MIT Joint Program on the Science and Policy of Global Change, Report 13.
- Schmalensee, Richard, Paul Joskow, A. Denny Ellerman, Juan-Pablo Montero, and Elizabeth Bailey. (1998). "An Interim Evaluation of Sulfur Dioxide Emissions Trading." *Journal of Economic Perspectives*, 12, 3, 53-68, Summer.
- Schulze, William D. (1974). "The Optimal Use of Non-Renewable Resources: The Theory of Extraction". *Journal of Environmental Economics and Management*, 1, 53-73.
- Schulze, William D., David S. Brookshire, and Todd Sandler. (1981). "The Social Rate of Discount for Nuclear Waste Storage: Economics or Ethics?". *Natural Resource Journal*, 21, 811-832.
- Schulze, William D., David S. Brookshire, Eric G. Walther, Karen Kelley MacFarland, Mark A. Thayer, Regan L. Whitworth, Shaul Ben-David, William Malm, and John Molenat. (1983). "The Economic Benefits of Preserving Visibility in the National Parklands of the Southwest". *Natural Resources Journal*, 23(January), 149-173.
- Schulze, William D., and Allen V. Kneese. (1981). "Risk in Benefit-Cost Analysis". *Risk Analysis*, 1, 81-88.
- Scotchmer, Susan. (1985). "Hedonic Prices and Cost-Benefit Analysis". *Journal of Economic Theory*, 37, 55-75.
- Scott, Anthony. (1955). "The Fishery: The Objectives of Sole Ownership". *Journal of Political Economy*, 63, 116-124.
- Seabright, Paul. (1993). "Managing Local Commons: Theoretical Issues in Incentive Design". *Journal of Economic Perspectives*, 7(4), 113-134.
- Sedjo, Roger A. (1992). "Property Rights, Genetic Resources, and Biotechnological Change". *Journal of Law and Economics*, 35(1), 199-213.
- Segal, Robin. (1995). "Forecasting the Market for Electric Vehicles in California Using Conjoint Analysis". *Energy Journal*, 16(3), 89-111.
- Segerson, Kathleen. (1988). "Uncertainty and Incentives for Nonpoint Pollution Control". *Journal of Environmental Economics and Management*, 15, 87-98.
- Segerson, Kathleen. (1993). "Liability Transfers: An Economic Assessment of Buyer and Lender Liability." *Journal of Environmental Economics and Management* 25, S-46 - S-63.
- Segerson, Kathleen, and Tom Tietenberg. (1992). "The Structure of Penalties in Environmental Enforcement: An Economic Analysis". *Journal of Environmental Economics and Management*, 23, 179.
- Seierstad, Atle, and Knut Sydsaeter. (1977). "Sufficient Conditions in Optimal Control Theory". *International Economic Review*, 18(2), 367-391.
- Seierstad, Atle, and Knut Sydsaeter. (1987). *Optimal Control Theory with Economic Applications*. (Vol. 24). Amsterdam: North-Holland.
- Selden, Thomas M. and D. Song. (1994). "Environmental quality and development: is there a U for air pollution emissions?". *Journal of Environmental Economics and Management*, 27(2), 147-162.

- Selden, Thomas M. and D. Song. (1995). "Neoclassical growth, the J curve for abatement and the inverted U curve for pollution". *Journal of Environmental Economics and Management*, 29(2), 162-168.
- Sellar, Christine, John R. Stoll, and Jean-Paul Chavas. (1985). "Validation of Empirical Measures of Welfare Change: A Comparison of Nonmarket Techniques". *Land Economics*, 61, 156-175.
- Seskin, Eugene P., Robert J. Anderson, and Robert O. Reid. (1983). "An Empirical Analysis of Economic Strategies for Controlling Air Pollution". *Journal of Environmental Economics and Management*, 10, 112-124.
- Sethi, Rajiv, and E. Somanathan. (1996). "The Evolution of Social Norms in Common Property Resource Use". *American Economic Review*, 86(4), 767-788.
- Shavell, Steven. (1980). "Strict Liability Versus Negligence". *Journal of Legal Studies*, 9, 1.
- Shepard, Andrea. (1993). "Contractual form, retail price, and asset characteristics in gasoline retailing". *RAND Journal of Economics*, 24(1), 58-77.
- Shibata, Hirofumi, and Steven Winrich. (1983). "Control of Pollution when the Offended Defend Themselves". *Economica*, 50, 425-437.
- Shogren, J. (1998a). "Coasean Bargaining with Symmetric Delay Costs." *Resources and Energy Economics*, 20, 309-326.
- Shogren, Jason F. (1998b). "A Political Economy in an Ecological Web." *Environment and Resource Economics* 11, 557-570.
- Shogren, J. (1993). "Experimental Markets and Environmental Policy." *Agricultural and Resource Economic Review*, 22, 117-129.
- Shogren, J. and T. Crocker. (1991). "Risk, Self-Protection, and Ex Ante Economic Value." *Journal of Environmental Economics and Management*, 20, 1-15.
- Shogren, J. and T. Crocker. (1999). "Risk and its Consequences." *Journal of Environmental Economics and Management*, 37, 44-51.
- Shogren, Jason F., Joseph A. Herriges, and Ramu Govindasamy. (1993). "Limits to environmental bonds". *Ecological Economics*, 8, 109-133.
- Shogren, Jason F., Seung Y. Shin, Dermot J. Hayes, and James B. Kliebenstein. (1994). "Resolving Differences in Willingness to Pay and Willingness to Accept". *American Economic Review*, 84(1), 255-270.
- Sigman, Hilary A. (1995). "A comparison of public policies for lead recycling". *RAND Journal of Economics*, 26(3), 452-478.
- Sigman, Hilary A. (1996). "The Effects of Hazardous Waste Taxes on Waste Generation and Disposal." *Journal of Environmental Economics and Management*, 20, 199-217.
- Sigman, Hilary A. (1998). "Liability Funding and Superfund Clean-Up Remedies." *Journal of Environmental Economics and Management* 35, pp. 205-224.
- Simon, Benjamin M., Craig S. Leff, and Harvey Doerksen. (1995). "Allocating Scarce Resources for Endangered Species Recovery". *Journal of Policy Analysis and Management*, 14(3), 415-432.
- Simpson, A.W. Brian. (1996). "Coase v. Pigou Reexamined". *Journal of Legal Studies*, 25(January), 53-101.

- Simpson, R. David. (1998). "Economic Analysis and Ecosystems: Some Concepts and Issues." *Ecological Applications* 8, 342-349.
- Simpson, R. David, Roger A. Sedjo, and John W. Reid. (1996). "Valuing Biodiversity for Use in Pharmaceutical Research". *Journal of Political Economy*, 104(1), 163-185.
- Slade, Margaret E. (1982a). "Empirical Tests of Economic Rent in the Copper Industry". In J. Moroney (Ed.), *Advances in the Economics of Energy and Resources*. Greenwich, CT: JAI Press.
- Slade, Margaret E. (1982b). "Trends in natural-resource commodity prices: an analysis of the time domain." *Journal of Environmental Economics and Management*, 9: 122-137.
- Slade, Margaret E. (1982c). "Trends in natural-resource commodity prices: an analysis of the frequency domain." *Journal of Environmental Economics and Management*, 9:138.
- Slesnick, Daniel. (1998). "Empirical Approaches to the Measurement of Welfare" *Journal of Economic Literature*, December.
- Smith, Kerry V., and William H. Desvousges. (1986). *Measuring Water Quality Benefits*. (1st ed.). Norwell, MA: Kluwer Academic Publishers.
- Smith, V. Kerry. (1980). "The Evaluation of Natural Resource Adequacy: Elusive Quest or Frontier of Economics Analysis?". *Land Economics*, 56, 257-298.
- Smith, V. Kerry. (1981). "The Empirical Evidence of Hotelling's Model for Natural Resources". *Resources and Energy*, 3, 105-117.
- Smith, V. Kerry. (1983). "Option Value: A Conceptual Overview". *Southern Economic Journal*, 49, 654-688.
- Smith, V. Kerry. (1990). "Can We Measure the Economic Value of Environmental Amenities?". *Southern Economic Journal*, 56, 865-878.
- Smith, V. Kerry. (1991, December 13-14, 1991). "Can Hedonic Models Value Air Quality? A Meta-Analysis". Paper presented at the Universities Research Conference, Economics of the Environment, Cambridge, MA.
- Smith, V. Kerry. (1992). "Environmental Risk Perception and Valuation: Conventional versus Prospective Reference Theory". In D. Bromley and K. Segerson (Eds.), *The Social Response to Environmental Risk: Policy Formulation in an Age of Uncertainty*. Boston: Kluwer Academic Publishers.
- Smith, V. Kerry. (1993). "Nonmarket Valuation of Environmental Resources: An Interpretative Appraisal". *Land Economics*, 69(1), 1-26.
- Smith, V.K. (1991) "Household Production Functions and Environmental Benefit Measurement." In John Braden and Charles Kolstad, eds., *Measuring the Demand for Environmental Improvement* (Amsterdam: North Holland).
- Smith V.K. (1989). "Taking Stock of the Progress with Travel Cost Recreation Demand Models: Theory and Implementation," *Marine Resource Economics* Vol. 6 (No. 4).
- Smith, V. K., Desvousges, W. H., Johnson, F. R. and A. Fisher. (1990). "Can Public Information Programs Affect Risk Perceptions?" *Journal of Policy Analysis and Management*, 9:1, 41-59
- Smith, V. Kerry. (1996). "Can Contingent Valuation Distinguish Economic Values for Different Public Goods?". *Land Economics*, 72(2), 139-151.

- Smith, V.K., W.H. Desvousges, and J.W. Payne. (1995). "Do Risk Information Programs Promote Mitigating Behavior?" *Journal of Risk and Uncertainty* 10:203-21.
- Smith V.K. and L. Osborne. (1996). "Do Contingent Valuation Estimates Pass a 'Scope' Test?" *Journal of Environmental Economics and Management* 31(3): 287-301.
- Smith, V.K., R.B. Palmquist, and P. Jakus. (1991). "Combining Farrell Frontier and Hedonic Travel Cost Models for Valuing Estuarine Quality." *Review of Economics and Statistics* 73(4): 694-9.
- Smith, V. Kerry, and Ju Chin Huang. (1995). "Can Markets Value Air Quality? A Meta-Analysis of Hedonic Property Value Models". *Journal of Political Economy*, 103(11), 209-227.
- Smith, V. Kerry, and William H. Desvousges. (1985). "The Generalized Travel Cost Model and Water Quality Benefits: A Reconsideration". *Southern Economic Journal*, 52, 371-381.
- Smith, V. Kerry, and William H. Desvousges. (1987). "An Empirical Analysis of the Economic Value of Risk Changes". *Journal of Political Economy*, 95, 89-114.
- Smith, V. Kerry, and William H. Desvousges. (1988a). "Contingent Valuation Methods and the Valuation of Environmental Risk". *draft, Resource and Environmental Economics Program, North Carolina State University at Raleigh*.
- Smith, V. Kerry, and William H. Desvousges. (1988b). "Risk Perception, Learning, and Individual Behavior". *American Journal of Agricultural Economics*, 70, 1113-1117.
- Smith, V. Kerry, William H. Desvousges, and Anthony C. Fisher. (1986). "A Comparison of Direct and Indirect Methods for Estimating Environmental Benefits". *American Journal of Agricultural Economics*, 68, 280-290.
- Smith, V. Kerry, and Liu Jin-Tan. (1989). "A Micro-Evaluation of the Hotelling Valuation Principle". *draft*.
- Smith, V. Kerry, and Yoshiaki Kaoru. (1990). "Signals or Noise? Explaining the Variation in Recreation Benefit Estimates". *American Journal of Agricultural Economics*, 72, 419-433.
- Smith, V. Kerry, and John V. Krutilla. (1982). *Explorations in Natural Resource Economics*. Baltimore: Johns Hopkins University Press.
- Smith, V. Kerry, and William J. Vaughan. (1980). "The Implications of Model Complexity for Environmental Management". *Journal of Environmental Economics and Management*, 7, 184-208.
- Smith, Vernon L. (1977a). "Control Theory Applied to Natural and Environmental Resources: An Exposition". *Journal of Environmental Economics and Management*, 4, 1-24.
- Smith, Vernon L. (1977b). "On Models of Commercial Fishing". *Journal of Political Economy*, 77, 181-198.
- Sobel, M. (1982). "Stochastic Fisher Games with Myopic Equilibria". In L. J. Mirman and D. J. Spulber (Eds.), *Essays in the Economics of Renewable Resources*.
- Solow, Andrew R., Stephen Polasky, and James M. Broadus. (1992). "On the Measurement of Biological Diversity". *Journal of Environmental Economics and Management*.
- Solow, Robert. (1991,). "Sustainability: An Economist's Perspective". Paper presented at the Eighteenth J. Seward Johnson Lecture, Woods Hole, MA.
- Solow, Robert M. (1974a). "The Economics of Resources or Resources of Economics". *American Economic Review*, 64, 1-14.

- Solow, Robert M. (1974b). "Intergenerational Equity and Exhaustible Resources". *Review of Economic Studies*, 41, 29-45.
- Spence, A. Michael. (1974). "Blue Whales and Applied Control Theory". In H. W. Gottinger (Ed.), *System Approaches and Environmental Problems*. Gottingen: Vandenhoeck and Ruprecht.
- Spence, Michael, and David Starrett. (1975). "Most Rapid Approach Paths in Accumulation Problems". *International Economic Review*, 16(2), 388-403.
- Squires, Dale. (1992). "Productivity measurement in common property resource industries: an application to the Pacific coast trawl fishery". *RAND Journal of Economics*, 23(2), 221-236.
- Starrett, David A. (1972). "Fundamental Nonconvexities in the Theory of Externalities". *Journal of Economic Theory*, 4, 180-199.
- Stauffer, Thomas R. (1985). "Accounting for 'Wasting Assets': Measurements of Income and Dependency in Oil-Rentier States". *Journal of Energy and Development*, 11, 69-93.
- Stavins, Robert N. (1990). "Alternative Renewable Resource Strategies: A Simulation of Optimal Use." *Journal of Environmental Economics and Management* 19, 143-159.
- Stavins, Robert N. (1995). "Transaction Costs and Tradeable Permits." *Journal of Environmental Economics and Management* 29, 133-148.
- Stavins, Robert N. (1996a). "Correlated Uncertainty and Policy Instrument Choice." *Journal of Environmental Economics and Management* 30, 218-232.
- Stavins, Robert N. (1996b). "Private Options to Use Public Goods: The Demand for Fishing Licenses and The Benefits of Recreational Fishing." Paper presented at the Allied Social Science Associations meetings, New Orleans, January 1997.
- Stavins, Robert N. (1997). "Policy Instruments for Climate Change: How Can National Governments Address a Global Problem?" *The University of Chicago Legal Forum*, pp. 293-329.
- Stavins, Robert N. (1998). "What Can We Learn from the Grand Policy Experiment? Lessons from SO₂ Allowance Trading." *Journal of Economic Perspectives*, Volume 12, Number 3, pages 69-88, Summer.
- Stavins, Robert N. (1999). "The Costs of Carbon Sequestration: A Revealed-Preference Approach." *American Economic Review*, forthcoming.
- Stavins, Robert N., and Adam B. Jaffe. (1990). "Unintended Impacts of Public Investments on Private Decisions: The Depletion of Forested Wetlands". *American Economic Review*, 80(3), 337-352.
- Stewart, M. B. (1980). "Monopoly and the Intertemporal Production of a Durable Exhaustible Resource." *Quarterly Journal of Economics*, 94, 99-111.
- Stiglitz, Joseph E. (1974a). "Growth with Exhaustible Natural Resources: Efficient and Optimal Growth Paths". *Review of Economic Studies, Symposium*, 123-137.
- Stiglitz, Joseph E. (1974b). "Growth with Exhaustible Natural Resources: The Competitive Economy". *Review of Economic Studies, Symposium*, 139-152.
- Stiglitz, Joseph E. (1976). "Monopoly and the Rate of Extraction of Exhaustible Resources". *American Economic Review*, 66, 655-661.

- Stiglitz, Joseph E. (1979). "A Neoclassical Analysis of the Economics of Natural Resources". In V. K. Smith (Ed.), *Scarcity and Growth Reconsidered*. Baltimore: Johns Hopkins University Press.
- Stockhammer, Engelbert, Harald Hochreiter, Bernhard Obermayr, and Klaus Steiner. (1997). "The index of sustainable economic welfare (ISEW) as an alternative to GDP in measuring economic welfare. The results of the Austrian (revised) ISEW calculation 1955-1992". *Ecological Economics*, 21, 19-34.
- Stoft, Steven, and Richard J. Gilbert. (1994). "A Review and Analysis of Electric Utility Conservation Incentives". *Yale Journal on Regulation*, 11, 1-42.
- Stokey, Nancy L., and R.E. Lucas. (1989). *Recursive Methods in Economics*. Cambridge, MA: Harvard University Press.
- Stollery, Kenneth R. (1983). "Mineral Depletion with Cost as the Extraction Limit: A Model Applied to the Behavior of Prices in the Nickel Industry". *Journal of Environmental Economics and Management*, 10, 151-165.
- Stranlund, John K. (1995). "Public Mechanisms to Support Compliance to an Environmental Norm". *Journal of Environmental Economics and Management*, 28, 205-222.
- Strasser, Kurt A., and Denise Rodosevich. (1993). "Seeing the Forest for the Trees in CERCLA Liability". *Yale Journal on Regulation*, 10, 493-560.
- Strathman, James G., Anthony M. Rufolo, and Gerard C.S. Mildner. (1995). "The Demand for Solid Waste Disposal". *Land Economics*, 71(1), 57-64.
- Strotz, R.H. (1956). "Myopia and Inconsistency in Dynamic Utility Maximization". *Review of Economic Studies*, 23, 165-180.
- Sunstein, Cass R. (1993). "Endogenous Preferences, Environmental Law". *Journal of Legal Studies*, 22, 217-254.
- Sutherland, Ronald J. (1994). "Income Distribution Effects of Electric Utility DSM Programs". *Energy Journal*, 15(4), 103-118.
- Sutinen, Jon G., and Peder Anderson. (1985). "The Economics of Fisheries Law Enforcement". *Land Economics*, 61, 387-397.
- Swait, J., Adamowicz, W. and Louviere, J. (1998). "Attribute-based stated choice methods for resource compensation: An application to oil spill damage assessment." Paper presented at the NOAA workshop on Application of Stated Preference Methods to Resource Compensation, Washington D.C.
- Swallow, Steven K. (1990). "Depletion of the environmental basis for renewable resources: The economics of interdependent renewable and nonrenewable resources." *Journal of Environmental Economics and Management*, 19: 281-96.
- Swallow, S. K. (1994). "Renewable and nonrenewable resource theory applied to coastal agriculture, forest, wetland, and fishery linkages." *Marine Resource Economics* 9(4):291-310.
- Swallow, S. K., J. J. Opaluch, and T. Weaver. (1992). "Siting noxious facilities: An approach that integrates technical, economic, and political considerations." *Land Economics* 68(3):283-301.
- Swallow, S. K., P. J. Parks and D. N. Wear. (1990). "Policy relevant nonconvexities in the production of multiple forest benefits." *Journal of Environmental Economics and Management* 19(3):281-296.
- Swallow, S.K., P. Talukdar, and D.N. Wear. (1997). "Spatial and Temporal Specialization in Forest Ecosystem Management under Sole Ownership." *American Journal of Agricultural Economics* 79(2):311-326.

- Swallow, S. K. and D. N. Wear. (1993). "Spatial interactions in multiple-use forestry and substitution and wealth effects for the single stand." *Journal of Environmental Economics and Management*, 25: 103-20.
- Sweeney, James L. (1977). "Economics of Depletable Resources: Market Forces and Intertemporal Bias". *Review of Economic Studies*, 44, 125-141.
- Swierzbinski, Joseph E. (1994). "Guilty until Proven Innocent — Regulation with Costly and Limited Enforcement." *Journal of Environmental Economics and Management*, 27, 127-146.
- Swierzbinski, Joseph E., and Robert Mendelsohn. (1989). "Information and Exhaustible Resources". *Journal of Environmental Economics and Management*, 16, 193-208.
- Teisberg, Elizabeth Olmsted. (1993). "Capital investment strategies under uncertain regulation". *RAND Journal of Economics*, 24(4), 591-604.
- Teoh, Siew Hong. (1997). "Information disclosure and voluntary contributions to public goods". *RAND Journal of Economics*, 28(3), 385-406.
- Thompson, Gary D., and Paul N. Wilson. (1994). "Ejido Reforms in Mexico: Conceptual Issues and Potential Outcomes". *Land Economics*, 70(4), 448-465.
- Thomson, T.A. (1992). "Optimal forest rotation when stumpage prices follow a diffusion process." *Land Economics*, 68:329-342.
- Tietenberg, Thomas H. (1978). "Spatially Differentiated Air Pollution Emission Charges: An Economic and Legal Analysis". *Land Economics*, 54, 265-277.
- Tietenberg, Thomas H. (1980). "Transferable Discharge Permits and the Control of Stationary Source Air Pollution: A Survey and Synthesis". *Land Economics*, 56, 391-416.
- Tietenberg, Thomas H. (1985). *Emissions Trading: An Exercise in Reforming Pollution Policy*. Washington: Resources for the Future.
- Tietenberg, Thomas H. (1990). "Economic Instruments for Environmental Regulation". *Oxford Review of Economic Policy*, 6(1), 17-33.
- Tolley, George S., Phillip E. Graves, and Glenn C. Blomquist. (1981). *Elements of Environmental Analysis*. Cambridge, MA: Ballinger.
- Toman, M., and K. Palmer. (1997). "How Should An Accumulative Toxic Substance Be Banned?". *Environmental and Resource Economics*, 9, 513-515.
- Toman, Michael A. (1994). "Economics and "Sustainability": Balancing Trade-offs and Imperatives". *Land Economics*, 70(4), 399-413.
- Townsend, Ralph E. (1992). "A Fractional Licensing Program for Fisheries". *Land Economics*, 68(2), 185-190.
- Tschirhart, John. (1994). "On the Use of 'Adders' by Public Utility Commissions". *Energy Journal*, 15(1), 121-128.
- Turvey, Ralph. (1963). "On Divergences between Social Cost and Private Cost". *Economica*, 30, 309-313.
- Turvey, Ralph. (1976). "Analyzing the Marginal Cost of Water Supply". *Land Economics*, 52, 158-168.

- Uhler, Russell S. (1979). "The Rate of Petroleum Exploration and Extraction". In R. S. Pindyck (Ed.), *Advances in the Economics of Energy and Resources* (Vol. 2: The Production and Pricing of Energy Resources,). Greenwich, CT: JAI Press, Inc.
- Unsworth, Robert E., and Richard C. Bishop. (1994). "Assessing natural resource damages using environmental annuities". *Ecological Economics*, 11, 35-41.
- Van der Ploeg, and Lans Bovenberg. (1994). "Environmental Policy, Public Finance, and the Labor Market in a Second-Best World." *Journal of Public Economics*, 55, 3, 349-390.
- van der Voet, Ester, Rene Kleijn, and Gjalte Huppes. (1995). "Economic characteristics of chemicals as a basis for pollutants policy". *Ecological Economics*, 13, 11-26.
- Varian, Hal R. (1984). *Microeconomic Analysis*. (2nd ed.). New York: W.W. Norton.
- Varian, Hal R. (1994). "A Solution to the Problem of Externalities When Agents Are Well-Informed". *American Economic Review*, 84(5), 1278-1293.
- Vaughan, William J., and Clifford S. Russell. (1982). *Freshwater Recreational Fishing: The National Benefits of Water Pollution Control*. Washington D.C.: Resources for the Future.
- Vaughan, W.K., and L.E. Huckins. (1982). "The Costs of Urban Expressway Noise". In D. B. Diamond and G. S. Tolley (Eds.), *The Economics of Urban Amenities*. New York: Academic Press.
- Vincent, J.R., and C.S. Binkley. (1993). "Efficient Multiple-Use Forestry May Require Land-Use Specialization." *Land Economics*, 69(4): 370-376.
- Viscusi, W. Kip. (1983). *Risk by Choice*. Cambridge, MA: Harvard University Press.
- Viscusi, W. Kip. (1993). "The Value of Risks to Life and Health". *Journal of Economic Literature*, 31(December), 1912-1946.
- Viscusi, W. Kip. (1994). "Mortality effects of regulatory costs and policy evaluation criteria". *RAND Journal of Economics*, 25(1), 94-109.
- Viscusi, W. Kip. (1996). "Economic Foundations of the Current Regulatory Reform Efforts". *Journal of Economic Perspectives*, 10(3), 119-134.
- Viscusi, W. Kip. (1998). *Rational Risk Policy*. Oxford, United Kingdom: Oxford University Press.
- Viscusi, W. K. and C. J. O'Connor. (1984). "Adaptive Responses to Chemical Labeling: Are Workers Bayesian Decision Makers?" *American Economic Review* 74(December):942-956.
- Viscusi, W. Kip, and Richard J. Zeckhauser. (1976). "Environmental Policy Choice under Uncertainty". *Journal of Environmental Economics and Management*, 3, 97-112.
- Viscusi, W. Kip and Richard J. Zeckhauser. (1979). "Optimal standards with incomplete enforcement." *Public Policy*, 27(4): 437-456.
- Vousden, Neil. (1973). "Basic Theoretical Issues of Resource Depletion". *Journal of Economic Theory*, 6, 126-143.
- Walker, Jana L., and Kevin Gover. (1993). "Commercial Solid and Hazardous Waste Disposal Projects on Indian Lands". *Yale Journal on Regulation*, 10, 229-262.

- Ward, F.A., and John B. Loomis. (1986). "The Travel Cost Demand Model as an Environmental Policy Assessment Tool: A Review of the Literature". *Western Journal of Agricultural Economics*, 11, 164-178.
- Washburn, C., and C. Binkley. (1990). "Informational efficiency of markets for stumpage." *American Journal of Agricultural Economics*, 72:394-405.
- Weinberg, M. and C.L. Kling. (1996). "Uncoordinated Agricultural and Environmental Policy Making: An Application to Irrigated Agriculture in the West." *American Journal of Agricultural Economics* 78(1): 65-78.
- Weinstein, Milton C., and Richard J. Zeckhauser. (1974). "Use Patterns for Depletable and Recyclable Resources". *Review of Economic Studies, Symposium*, 67-88.
- Weinstein, Milton C., and Richard J. Zeckhauser. (1975). "The optimal consumption of depletable natural resources." *Quarterly Journal of Economics*, 89: 371-92.
- Weisbrod, Burton A. (1964). "Collective-Consumption Services of Individual Consumption Goods". *Quarterly Journal of Economics*, 78, 471-477.
- Weitzman, Martin L. (1974). "Prices vs. Quantities". *Review of Economic Studies*, 41, 477-491.
- Weitzman, Martin L. (1976a). "On the Welfare Significance of National Product in a Dynamic Economy". *Quarterly Journal of Economics*, 90, 156-162.
- Weitzman, Martin L. (1976b). "The Optimal Development of Resource Pools". *Journal of Economic Theory*, 12, 351-364.
- Weitzman, Martin L. (1992). "On Diversity". *Quarterly Journal of Economics*, 107, 363-405.
- Weitzman, Martin L. (1993). "What to Preserve? An Application of Diversity Theory to Crane Conservation". *Quarterly Journal of Economics*, 108(1), 157-183.
- Weitzman, Martin L. (1994). "On the 'Environmental' Discount Rate." *Journal of Environmental Economics and Management*, 26, 200-209.
- Weitzman, Martin L. (1998). "Why the Far-Distant Future Should Be Discounted at its Lowest Possible Rate." *Journal of Environmental Economics and Management* 36, pp. 201-208.
- Weitzman, Martin L. (1999). "On the Pure theory of Dynamic Welfare Comparisons." Working Paper, Department of Economics, Harvard University, February 3, 1999.
- Weitzman, Martin L., and Karl-Gustaf Lofgren. (1997). "On the Welfare Significance of Green Accounting as Taught by Parable." *Journal of Environmental Economics and Management* 32, pp. 139-153.
- Weyant, John P. (1993). "Costs of Reducing Global Carbon Emissions." *Journal of Economic Perspectives* 7(4), 27-46.
- Wheeler, Michael. (1994). "Negotiating NIMBYs: Learning from the Failure of the Massachusetts Siting Law". *Yale Journal on Regulation*, 11, 241-291.
- White, L.J. (1982). "U.S. Automotive Emissions Controls: How Well Are They Working?". *American Economic Review*, 72, 332-335.
- Wiggins, Steven N., and Gary D. Libecap. (1985). "Oil Field Unitization: Contractual Failure in the Presence of Imperfect Information". *AER*, 75(3), 368-385.
- Wilen, J.A. (1988). "Limited Entry Licensing". *Marine Resource Economics*, 5(4), 313-324.

- Williams, B.K. (1989). "Review of Dynamic Optimization Methods in Renewable Natural Resource Management". *Natural Resource Modeling*, 3, 137-216.
- Willig, Robert D. (1976). "Consumer's Surplus Without Apology". *American Economic Review*, 66(4), 589-597.
- Wilson, James A. (1982). "The Economic Management of Multispecies Fisheries". *Land Economics*, 58, 417-434.
- Wilson, R. (1982). "Risk Measurement of Public Projects". In R. C. Lind (Ed.), *Discounting for Time and Risk in Energy Policy*. Baltimore: Resources for the Future.
- Wolak, Frank and Charles Kolstad. (1991). "A Model of Homogeneous Input Demand Under Price Uncertainty." *American Economic Review*, 81, 514-538.
- Wolfson, Dirk J., and Carl C. Koopmans. (1996). "Regulatory taxation of fossil fuels: Theory and policy". *Ecological Economics*, 19, 55-65.
- Woodward, Richard T., and Richard C. Bishop. (1997). "How to Decide When Experts Disagree: Uncertainty-Based Choice Rules for Environmental Policy." *Land Economics*, 73, 492-507.
- Wu, J., and K. Segerson. (1995). "The Impact of Policies and Land Characteristics on Potential Groundwater Pollution in Wisconsin." *American Journal of Agricultural Economics*, 77, 1033-47.
- Yohe, Gary W. (1976). "Substitution and the Control of Pollution: A Comparison of Effluent Charges and Quantity Standards Under Uncertainty." *Journal of Environmental Economics and Management* 3, pp. 312-324.
- Young, Robert A., and Robert H. Haveman. (1985). "Economics of Water Resources: A Survey". In A. V. Kneese and J. L. Sweeney (Eds.), *Handbook of Natural Resource and Energy Economics* (Vol. 2,). Amsterdam: North Holland.
- Zeckhauser, Richard J. (1981). "Preferred Policies when There is a Concern for Probability of Adoption". *Journal of Environmental Economics and Management*, 8, 215-237.
- Zilberman, David *et al.* (1991). "The Economics of Pesticide Use and Regulation". *Science*, 253, 518-522.
- Zinkham, F. C. (1991). "Option pricing and timberland's land-use conversion option." *Land Economics*, 67:317-325.
- Zweifel, Peter, and Jean-Robert Tyran. (1994). "Environmental impairment liability as an instrument of environmental policy". *Ecological Economics*, 11, 43-56.
- Zylicz, Tomasz. (1995). "Cost-Effectiveness of Air Pollution Abatement in Poland." *Environmental and Resource Economics*, 5, 131-149.