

Brian Roach

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Education

Ph.D. - University of California, Davis, 1995. Major in Environmental Policy Analysis

M.S. - Pennsylvania State University, 1990. Major in Agricultural Economics.

B.S. - Delaware Valley College of Science and Agriculture, 1987. Major in Agronomy, minor in Business Administration.

Professional Experience

May 2001 – Present: Senior Research Associate, Tufts University

As I researcher with the Global Development and Environment Institute, I have mainly worked on economics educational materials. I have recently co-authored four college textbooks, including an environmental economics text and a microeconomic principles text. I have also written instructor's manuals for these texts. I have written on diverse policy topics including oil spill policy, the role of corporations in the global economy, tax policy, climate change, and Social Security. I have also taught several courses as described below, from the undergraduate to the Ph.D. level.

January 2010 – Present: Adjunct Instructor, Brandeis University

I teach two Master's level courses in the International Sustainable Development program – *Environmental Economics and Policy* and *Economics for Development Practitioners*.

January 2001 – Present: Private consultant for Energy and Water Economics, Franklin, TN.

I have worked on several projects, primarily concerning water management issues related to recreational tourism and residential demand. One study focused on the management of a Corps of Engineer reservoir in Georgia. Another project studied the implications of water management in Nebraska on recreation, agriculture, and municipalities. I also estimated residential and commercial water demand models

Professional Experience (Continued)

in the Central California area, and conducted an analysis of residential water supply in the Tampa, FL area.

July 2006 – December 2006: Visiting Associate Professor, Brown University

I taught an undergraduate course, *Environmental Economics and Policy*, at Brown University during the Fall 2006 semester.

July 1999 – May 2001: Instructor, University of Maine

As an instructor, I taught three different courses, including both Internet and classroom courses. I taught *Introduction to Natural Resources*, an introductory course that surveys various environmental issues. I also taught *Modern Economic Problems*, an introductory microeconomics/macroeconomics course. Finally, I taught *The Consumer Society*, an interdisciplinary upper-division course studying the impact of consumer behavior on our economy, environment, and culture.

May 1997 – June 1999: Research Assistant Professor, University of Maine.

I worked on various economic analyses of natural resources including the impact of water levels on whitewater rafting tourism and the effect of fishery regulations on angler site choice. I conducted a public opinion survey asking questions about wildlife management. Another project elicited views on forest management regulations and public land acquisition. In continuing work, I estimated recreation demand models for the Corps of Engineers using data from Oregon. I also taught an undergraduate class twice, *Introduction to Natural Resources*.

May 1995 - May 1997: Post-Doctoral Researcher, University of California - Davis.

This work for the Army Corps of Engineers involved several projects, including extensions of my doctoral research on reservoir recreation and an analysis of water-based recreation benefits in the Southeastern United States. The work also included the first part of a project to estimate recreation demand models for reservoirs and rivers in the Willamette Valley, Oregon.

Jan. 1992 - May 1995: Post-Graduate Researcher at the University of California, Davis.

My research included an analysis of the economics benefits of Corps of Engineers' recreation sites under various management scenarios. The study focused on the impact of water levels, recreational facilities, and visitor fees on reservoir visitation and economic benefits. In a project for the Bureau of Land Management, I conducted a cost-benefit analysis of wildlife/livestock tradeoffs on public land in Northern California.

Teaching Experience

Environmental Economics and Policy (undergraduate level):

Tufts University, Talloires, France
Summer 2004, Summer 2005, Summer 2006, Summer 2008, Summer 2009; Summer
2011; Summer 2012; Summer 2014

Brown University
Fall 2006

Environmental Economics and Policy (Master's level):

Brandeis University
Spring 2010, Spring 2011; Spring 2012; Spring 2013; Spring 2014; Spring 2015

Economics for Development Practitioners (Master's level)

Brandeis University
Fall 2013; Fall 2014

Economics for Policy and Planning (Master's level):

Tufts University, Medford, MA
Fall 2009, Fall 2010, Summer 2011; Spring 2012; Spring 2015

Water Economics and Policy (Ph.D. level)

Tufts University, Medford, MA
Fall 2011; Fall 2012; Spring 2014

The Consumer Society (undergraduate level):

University of Maine, Orono, ME
Spring 2000

Tufts University, Medford, MA
Fall 2007, Spring 2009, Spring 2010

Introduction to Natural Resources (undergraduate level):

University of Maine, Orono, ME
Spring 1998, Spring 1999, Spring 2000, Summer 2000, Fall 2000, Spring 2001, Summer
2001

Modern Economic Problems (undergraduate level):

University of Maine, Orono, ME
Fall 2000

Selected Publications and Papers

- Abdalla, Charles W., Brian A. Roach, and Donald J. Epp. "Valuing Environmental Quality Changes Using Averting Expenditures: An Application to Groundwater Contamination." *Land Economics* 68(2): 163-169, May 1992.
- Ackerman, Frank, Elizabeth A. Stanton, Brian Roach, and Anne-Sofie Andersson. "Implications of REACH for Developing Countries." *European Environment*, vol. 18:16-29 (2008).
- Goodwin, Neva R., Jonathan Harris, Julie Nelson, Brian Roach, and Mariano Torras. *Microeconomics in Context, Third Edition*. M.E. Sharpe, 2014.
- Goodwin, Neva R., Jonathan Harris, Julie Nelson, Brian Roach, and Mariano Torras. *Macroeconomics in Context, Second Edition*. M.E. Sharpe, 2014.
- Goodwin, Neva R., Jonathan Harris, Julie Nelson, Brian Roach, and Mariano Torras. *Principles of Economics in Context, First Edition*. M.E. Sharpe, 2014.
- Harris, Jonathan M., and Brian Roach. *Environmental and Natural Resource Economics: A Contemporary Approach, Third Edition*. M.E. Sharpe, 2013.
- Loomis, John, Brian Roach, Frank Ward, and Richard Ready. "Testing Transferability of Recreation Demand Models Across Regions: A Study of Corps of Engineer Reservoirs." *Water Resources Research*, vol. 31(3): 721-730, March 1995.
- Roach, Brian. Instructors Resource Manual for *Environmental and Natural Resource Economics: A Contemporary Approach, Third Edition* (Jonathan Harris and Brian Roach). M.E. Sharpe, 2013.
- Roach, Brian. "Progressive and Regressive Taxation in the United States: Who's Really Paying (and Not Paying) their Fair Share?" Global Development and Environment Working Paper #10-07, Tufts University, December 2010.
- Roach, Brian. "Policies for Funding a Response to Climate Change." Book chapter in *Twenty-First Century Macroeconomics: Responding to the Climate Challenge*, edited by Jonathan Harris and Neva R. Goodwin: Edward Elgar Publishing, 2009.
- Roach, Brian. "Alternative Mechanisms for Funding a Significant Increase in U.S. Climate Change Public R&D." Paper presented at the U.S. Society for Ecological Economics Conference, New York, NY, June 2007.
- Roach, Brian. "A Primer on Multinational Corporations." In *Leviathans: Multinational Corporations and the New Global History*, edited by Alfred Chandler and Bruce Mazlish, Cambridge: Cambridge University Press, 2004.

Selected Publications and Papers (Continued)

- Roach, Brian. "Read My Lips: More New Tax Cuts – The Distributional Impacts of Repealing Dividend Taxation" Global Development and Environment Working Paper #03-01, Tufts University, February 2003.
- Roach, Brian, Jonathan Harris, and Adrian Williamson. "The Gulf Oil Spill: Economics and Policy Issues," Global Development and Environment Institute, Teaching Module, September 2010.
- Roach, Brian and Frank Ackerman. "Securing Social Security: Sensitivity to Economic Assumptions and Analysis of Policy Options." Global Development and Environment Working Paper #05-03, Tufts University, May 2005.
- Roach, Brian, Kevin Boyle, Stephen Reiling, and John Bergstrom. "The Effect of Instream Flows on Whitewater Visitation and Consumer Surplus." *Rivers*, vol. 7(1): 11-20, 1999.
- Roach, Brian, Kevin Boyle, and Michael Welsh. "Testing Bid Design Effects in Multiple-Bounded Contingent Valuation." *Land Economics*, vol. 78(1):121-131, February 2002.
- Roach, Brian and John Loomis. "Economic Analysis of Deer Management Alternatives on Public Lands in Northern California." *Human Dimensions of Wildlife*, vol. 1(2):14-23, Summer 1996.
- Roach, Brian, and Julie Nelson. Instructor's Resource Manual for *Macroeconomics in Context, Second Edition*. Global Development and Environment Institute, Tufts University. 2014.
- Roach, Brian, Julie Nelson, and Neva Goodwin. Instructor's Resource Manual for *Microeconomics in Context, Third Edition*. Global Development and Environment Institute, Tufts University. 2014.
- Roach, Brian, Joan Trial, and Kevin Boyle. "Comparing 1994 Angler Catch and Harvest Rates from On-site and Mail Surveys on Selected Maine Lakes." *North American Journal of Fisheries Management*, vol. 19(1), February 1999.
- Roach, Brian, Jonathan Rubin, and Charles Morris. "Measuring Maine's Marine Economy." *Maine Policy Review*, vol. 8(2): 56-62, Fall 1999.
- Roach, Brian, and William W. Wade. "Policy Evaluation of Natural Resource Injuries using Habitat Equivalency Analysis." *Ecological Economics*, 58:421-433, 2006.
- Ward, Frank A., Brian A. Roach, and Jim Henderson. "Incremental Values of Water in Recreation: Evidence from the California Drought." *Water Resources Research*, vol. 32(4): 1075-1081, April 1996.

Technical Reports

- Abdalla, Charles W., Donald J. Epp, and Brian A. Roach. "Valuing Changes in Drinking Water Quality Using Averting Expenditures." Final Report to U.S. Environmental Protection Agency under Cooperative Agreement No. CR-815412-01-0, February 1990.
- Boyle, Kevin J., Brian Roach, and Henry Hilton. "Maine Residents' Opinions on Wildlife Management, Funding, and Policy Issues". Department of Resource Economics and Policy Staff Paper, REP 484, 1999.
- Boyle, Kevin J., Brian Roach, and David G. Waddington. "1996 Net Economic Values for Bass, Trout and Walleye Fishing, Deer, Elk and Moose Hunting, and Wildlife Watching." Addendum to the 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. U.S. Fish and Wildlife Service Report 96-2, August 1998.
- International Chemical Secretariat. "Implications of REACH for Developing Countries," Report commissioned by the European Parliament, March 2006.
- McMahon, George F., William W. Wade, Brian Roach, Michael C. Farmer, and Augustine J. Fredrich. "Lake Lanier National Economic Development Update: Evaluation of Water Supply, Hydropower and Recreation Benefits." Report to the Atlanta Regional Commission, November 2001.
- Roach, Brian. "A Travel Cost Analysis of Waterfowl Hunting in the Central Valley of California." Final report prepared for the U.S. Bureau of Reclamation, Sacramento, CA under contract number 1425-96-PG-20-08020, October 1996.
- Roach, Brian. "Application of the Boater Regional Recreation Demand Model to Reservoir Sites in the Alabama-Coosa-Tallapoosa and Apalachicola-Chattahoochee-Flint River Basins." Final report prepared for U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, June 1996.
- Roach, Brian. "A Bioeconomic Analysis of Elk and Cattle Management Alternatives within the San Pedro Parks Wilderness Area, New Mexico." Final report prepared for Forest Guardians, Santa Fe, NM, November 1995.
- Roach, Brian and John Loomis. "A Travel Cost Analysis of Angler Benefits by Target Species Along Four California Rivers." Final report prepared for Jones and Stokes, Associates, Sacramento, CA, December 1995.
- Roach, Brian and John Loomis. "Economics Benefits, Costs, and Regional Economic Effects of Deer and Livestock Management in the East Lassen Deer Herd Management Area." Final Report to the California Department of Forestry and Fire Protection under Interagency Agreement No. 8CA17257, March 1993.

Technical Reports (Continued)

Roach, Brian, Rachel Massey, and Frank Ackerman. "Options for Diverting PVC from Incineration in Maine." Global Development and Environment research report, September 2004.

Roach, Brian, William W. Wade, Jason R. Plater, and Marvin Feldman. "Forecasting Environmental and Social Externalities Associated with OCS Oil and Gas Development: The Offshore Environmental Cost Model." Final report to the U.S. Minerals Management Service under MMS contract number 1435-01-99-CT-30996, April 2001.

Wade, William W., and Brian Roach. "Demand Estimates, Price Elasticities, and the Effect of WSIP Price Increase on Future Single-Family Residential Water Use." Report to the Bay Area Water Supply and Conservation Agency. August 2007.

Ward, Frank A., Brian A. Roach, John B. Loomis, Richard C. Ready, and Jim Henderson. "Regional Recreation Demand Models for Large Reservoirs: Database Development, Model Estimation, and Management Applications." Final report to the U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS under cooperative agreement 91-COOP-1-6447, March 1995.

Ward, Frank A. and Brian A. Roach. "Recreation Economic Benefits Analysis for Missouri River Mainstream and Reservoir Projects." Final report prepared for the U.S. Army Corps of Engineers, Missouri River Division, Omaha, NE under cooperative agreement 91-COOP-1-6447, January 1994.