DR. JOHN R. BOYCE

Professor of Economics University of Calgary

1. CONTACT INFORMATION

- (a) Postal Address: Department of Economics, University of Calgary, 2500 University Dr. N.W., Calgary, Alberta T2N 1N4, Canada
- (b) Email Address: boyce@ucalgary.ca
- (c) Telephone: (Office) (403) 220 5860, Facsimile: (403) 282-5262
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- (e) Office: 412, Social Sciences Building

2. EDUCATION

- (a) B.Sc.: Montana State University, Economics, 1982.
- (b) Ph.D.: University of California, Davis, Agricultural Economics, 1990.

3. EMPLOYMENT

- (a) Professor of Economics, Department of Economics, University of Calgary, 2003 to present.
- (b) Associate Professor, Department of Economics, University of Calgary, 1999 to 2002.
- (c) Senior Lecturer, Department of Economics, University of Auckland, New Zealand, 1997 to 1999.
- (d) Visiting Lecturer, Department of Agricultural Economics, University of Western Australia, Australia, 1996.
- (e) Associate Professor, Department of Economics, University of Alaska, Fairbanks, 1995-1996.
- (f) Assistant Professor, Department of Economics, University of Alaska, Fairbanks, 1988-1995.

4. RESEARCH

(a) RESEARCH AREAS

- i. Primary Fields: Natural Resource / Energy / Environmental Economics
- ii. Secondary Fields: Industrial Organization and Political Economy

(b) REFEREED PUBLICATIONS

- i. John R. Boyce, David M. Bruner, and Michael R. McKee (forthcoming), "Be My Guinea Pig: Information Spillovers in a One-Armed Bandit Game," *Managerial and Decision Economics*.
- ii. John R. Boyce (2014), "The Effect of Monopsony Power on Prorationing and Unitization Regulation of the Common Pool," *Natural Resource Modeling*, 27 (August): 429-465.
- iii. Rui Wan and John R. Boyce (2014), "Non-renewable resource Stackelberg Games," Resource and Energy Economics, 37 (August): 102-121.
- iv. John R. Boyce (2013), "Prediction and Inference in the Hubbert-Deffeyes Peak Oil Model," *The Energy Journal*, 34 (2).
- v. John R. Boyce and David M. Bruner (2012), "Property Rights Out of Anarchy? The Demsetz Hypothesis in a Game of Conflict," *Economics of Governance*, 13 (2): 95-120.
- vi. John R. Boyce and Linda Nostbakken (2011), "Exploration and Development of U.S. Oil and Gas Fields, 1955-2002." *Journal of Economic Dynamics and Control*, 35 (June): 891-908.
- vii. John R. Boyce and J. C. Herbert Emery (2011), "Is a Negative Correlation Between Resource Abundance and Growth Sufficient Evidence that There Is a 'Resource Curse'?" Resources Policy, 36 (March 2011): 1-13.
- viii. Diane P. Bischak and John R. Boyce (2010), "Learning by Doing, Knowledge Spillovers, and Technological and Organizational Change in High-Altitude Mountaineering." *Journal of Sports Economics*, 11 (5): 496-532.
- ix. John R. Boyce (2010), "Putting the Foxes in Charge of the Hen-House: The Political Economy of Harvest Quota Allocations." *Environmental and Resource Economics*, 46 (4): 475-493.
- x. John R. Boyce and Lucia Vojtasak (2008), "An 'Oil'igopoly Theory of Exploration." Resource and Energy Economics, 30: 428-454.
- xi. John R. Boyce and Aidan Hollis (2007), "Preliminary Injunctions and Damage Rules in Patent Law." Journal of Economics and Management Strategy, 16 (2): 385-405.
- xii. John R. Boyce and Aidan Hollis (2005), "Governance of Electricity Transmission." *Energy Economics*, 27 (February): 237-55.
- xiii. John R. Boyce, "Instrument Choice in a Fishery." Journal of Environmental Economics and Management, 47 (January 2004): 183-206.
- xiv. John R. Boyce (2002), "Exploration Can Cause Declining Exhaustible Resource Prices." Energy Economics, 25: 339-43.
- xv. John R. Boyce and Diane P. Bischak (2002), "The Role of Political Parties in the Organization of the Congress: Theory and Evidence." *Journal of Law, Economics, and Organization*, 18 (Spring): 1-38.
- xvi. John R. Boyce (2000), "Comment: The Efficiency of ITQs in the Presence of Production Externalities." *Marine Resource Economics*, 15 (Fall): 233-43.
- xvii. John R. Boyce (2000), "Interest Group Competition over Policy Outcomes: Dynamics, Strategic Behavior, and Social Costs." *Public Choice*, 102 (March): 313-39.
- xviii. John R. Boyce and Mats A. N. Nilsson (1999), "Interest Group Competition and the Alaska Native Claims Act." *Natural Resource Journal*, 39 (October): 755-98.
- xix. Gregory E. Goering and John R. Boyce (1999), "Emissions Taxation in Durable Goods Oligopoly." *Journal of Industrial Economics*, 47 (March): 125-43.
- xx. John R. Boyce (1998), "Rent-Seeking in Natural Resource Quota Allocations." *Public Choice*, 96 (September): 271-94.
- xxi. John R. Boyce and Gregory E. Goering (1997), "Optimal Taxation of a Polluting Durable Goods Monopolist." *Public Finance Quarterly*, 25 (September): 522-41.
- xxii. John R. Boyce (1996), "An Economic Analysis of the Fisheries Bycatch Problem." *Journal of Environmental Economics and Management*, 31 (November): 314-36.

- xxiii. R. Craig Layman, John R. Boyce, and Keith R. Criddle (1996), "An Economic Analysis of the Recreational King Salmon Fishery on the Gulkana River, Alaska." *Land Economics*, 72 (February): 113-28.
- xxiv. Gregory E. Goering and John R. Boyce (1996), "Tax Incentives of a Durable Goods Monopolist." *Journal of Regulatory Economics*, 9 (January): 83-94.
- xxv. John R. Boyce (1995), "Optimal Capital Accumulation in a Fishery: A Nonlinear Irreversible Investment Model." *Journal of Environmental Economics and Management*, 28 (May): 324-39.
- xxvi. John R. Boyce (1994), "Allocation of Goods by Lottery." *Economic Inquiry*, 32 (July): 457-76.
- xxvii. John R. Boyce, Mark L. Herrmann, Diane P. Bischak, and Joshua A. Greenberg (1993), "The Alaska Salmon Enhancement Program: A Cost/Benefit Analysis." *Marine Resource Economics*, 8 (Winter): 293-312.
- xxviii. John R. Boyce (1993), "Using Participation Rates to Estimate Fishing Costs in a Commercial Fishery." *Marine Resource Economics*, 8 (Winter): 367-94.
- xxix. Gregory E. Goering, John R. Boyce, and James M. Collins (1993), "R & D and Product Obsolescence." *Review of Industrial Organization*, 8 (October): 609-21.
- xxx. John R. Boyce (1992), "Individual Transferable Quotas and Production Externalities in a Fishery." *Natural Resource Modeling*, 6 (Fall): 385-408.

(c) CHAPTERS PUBLISHED IN BOOKS OR PROCEEDINGS

- i. John R. Boyce, "Externality Regulation in Oil and Gas," (2013) in Jason Shogren, Ed., Encyclopedia of Energy, Natural Resource and Environmental Economics, Elsevier: Amsterdam.
- ii. John R. Boyce, "Individual Transferable Quotas and Production Externalities in a Fishery," in *Fisheries Economics: Volume I*, Lee G. anderson, editor, International Library of Environmental Economics and Policy, (November 2000).
- iii. John R. Boyce, "An Economic Analysis of the Fisheries Bycatch Problem," in *Fisheries Economics: Volume I*, Lee G. anderson, editor, International Library of Environmental Economics and Policy, (November 2000).
- iv. John R. Boyce and Daniel W. McCollum, "A Market Test of the Contingent Valuation Method: The Case of Bison Hunting Permits in Alaska," in *Benefits and Costs Transfer in Natural Resource Planning*, Proceedings of the Sixth Annual W-133 Meetings, Lake Tahoe, California, March 1993, pp. 1-26, edited by J. Bergstrom, September 1993.

(d) CURRENT RESEARCH

- i. John R. Boyce (2014), "Recycling Exhaustible Resources," (revision requested).
- ii. John R. Boyce, Daniel V. Gordon, and Sjak Smulders (2010), "Directed Technical Change and Resource Commodities Price Growth," (in progress).
- iii. John R. Boyce, Jeffrey R. Church, and Lucia Vojtassak (2010), "Capacity Constraints in Durable Goods Monopoly: Coase and Hotelling," (in progress).
- iv. David M. Bruner and John R. Boyce (2012), "Conflict in the Lab," (under review).
- v. John R. Boyce (2012), "Biased Technological Change and the Relative Scarcity of Natural Resources," (under revision).
- vi. Naima Farah and John R. Boyce (2013), "The Effect of Mammoth Ivory on Elephant Poaching," (in progress).
- vii. Xiaoli Zheng and John R. Boyce (2014), "Adjustment Costs and the Holding of Proved Reserves," (in progress).
- viii. Younes Ahmadi and John R. Boyce (2014), "Biased Technological Change and the Prevention of a Global Warming Induced Environmental Disaster," (in progress).

- ix. John R. Boyce (2014), "Why no balanced growth path exists when R&D can be targeted towards reducing extraction costs for exhaustible resources," (in progress).
- x. John R. Boyce, Victor Song, and David M. Bruner (2014), "Strategic Public Goods Provision," (in progress).

(e) OTHER RESEARCH

 John R. Boyce and Jennifer L. Winter (2010), "Plucking the Goose: Optimal Royalties for Oil and Gas."

5. TEACHING

(a) GRADUATE STUDENT SUPERVISION

i. University of Calgary

Doctoral Students:

- A. Xiaoli Zheng (Ph.D. student, University of Calgary), supervisor
- B. Naima Farah (Ph.D. student, University of Calgary), supervisor
- C. Sisi Fu (Ph.D. candidate, University of Calgary), supervisior
- D. Rui Wan, Ph.D. 2014, (Assistant Professor, Business School, Nanjing University), committee member
- E. Jennifer L. Winter, Ph.D. 2011 (Economist in *School of Public Policy*, University of Calgary), supervisor
- F. David Bruner, Ph.D. 2008 (Associate Professor, Appalachian State University, North Carolina, U.S.A.), co-supervisor, with Mike McKee
- G. Lucia Vojtassak, Ph.D. 2006 (Sessional lecturer, University of Calgary), supervisor

M.A. Students:

Helen Hou, M.A., 2001 (supervisor); Serenity Blumer, M.A., 2003 (supervisor); Yibing Wang, M.A., 2003 (supervisor); Megan Sartore (nee Luyendyk), M.A., 2004 (supervisor); Runtao Li, M.A., 2004 (supervisor); Laura Weir, M.A., 2007 (supervisor), Charles Tamblyn, M.A., 2008 (supervisor).

ii. University of Auckland

 $M.A.\ Students:$

Hylton Millar, M.S., 1997 (supervisor).

iii. University of Alaska, Fairbanks

M.A. Students:

Jin Yeufeng, M.S., 1996 (supervisor). Gianna Splitstoser, M.S., 1996 (supervisor); Sun Ying Qui, M.S., 1995 (supervisor); Craig Layman, M.S., 1994 (supervisor); Mats Nilsson, M.S., 1994 (supervisor); Kristina Kushnir, M.S., 1994 (supervisor); Xiaohong Yu, M.S., 1992 (supervisor).

(b) COURSES TAUGHT

i. University of Calgary, Fall 1999 to Present

Economics 301: Intermediate Microeconomics,

Economics 387: Mathematical Economics I,

Economics 405: Political Economy,

Economics 427: Energy Policy,

Economics 475: Natural Resource Economics,

Economics 529: Microeconomics,

Economics 557: Honors Microeconomic Theory,

Economics 575: Natural Resources,

Economics 675: Natural Resource Economics

ii. University of Auckland, Spring 1997-Winter 1999

Economics 101: Principles of Microeconomics,

Economics 201: Intermediate Microeconomics,

Economics 361: Public Economics,

Economics 373: Environmental Economics, Economics 775: Environmental Economics.

iii. University of Alaska 1988-1996

Economics 100: Introduction to Political Economy,

Economics 235: Introduction to Natural Resource Economics,

Economics 434: Environmental Economics,

Economics 436: Energy Economics,

Economics 611: Microeconomics for M.B.A.s, Economics 623: Mathematical Economics, Economics 675: Natural Resource Economics

6. SERVICE

(a) PEER REVIEW

American Journal of Agricultural Economics, Environment and Development Economics, Environmental and Resource Economics, European Economic Review, International Journal of Industrial Organization, Journal of Economic Dynamics and Control, Journal of Economic Growth, Journal of Environmental Economics and Management, Journal of Public Economics, Land Economics, Macrodynamics, Marine Resource Economics, Public Finance Quarterly, Resource and Energy Economics, Energy Journal, Natural Resource Modeling

(b) ECONOMICS DEPARTMENT SERVICE

Graduate Coordinator, University of Calgary 2005-2007. Graduate Coordinator, University of Alaska, 1993-1996.