

Patrick Withey

Curriculum Vitae

Contact: St Francis Xavier University
Department of Economics
PO BOX 5000
Antigonish, NS, B2G 2W5
Canada

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Citizenship: Canadian

EDUCATION

- 2008-
2012 **Ph.D. - University of Victoria**
 Department of Economics (Environmental and Natural Resource Economics)
 Supervisor: Dr. G. Cornelis van Kooten
 Dissertation: "The Impact of Climate Change on Wetlands in Western Canada"
- 2007 **M.A. - Memorial University**
 Master of Arts in Environmental Economics
 Supervisor: Dr. Michael Wernerheim
- 2005 **B.A. (Distinction) - Concordia University**
 Bachelor of Arts (Major Economics, Minor Political Science)

RESEARCH AND TEACHING FIELDS

Environmental Economics, Natural Resource Economics, Agricultural Economics, Applied Econometrics

ACADEMIC WORK EXPERIENCE

- 2017- Associate Professor, Department of Economics, St. Francis Xavier University
- 2017
-2018 Chair, Department of Economics, St. Francis Xavier University
- 2012 Assistant Professor, Department of Economics, St. Francis Xavier University
-2017
- 2011 Sessional Instructor, Department of Economics, University of Victoria
- 2010- Research Assistant, University of Victoria
2011

TEACHING

Instructor, St. Francis Xavier University

- ECON 101: Introductory Microeconomics, Fall 2012, 2015, 2016
- ECON 102: Introductory Macroeconomics, Winter 2013
- ECON 201: Intermediate Microeconomics, Fall 2013, 2014, 2017
- ECON 281: Environmental Economics, Fall 2012, 2013, 2014, 2016, 2017
- ECON 241: Canadian Economic Policy and Problems, Fall 2012, Winter 2015
- ECON 291: Economics of Leisure, Recreation and Sports: Winter 2017
- ECON 381: Natural Resource Economics, Winter 2013, 2014, 2015, 2017
- ECON 491: Energy Economics, Winter 2014
- ECON 493: Seminar, Fall 2015

Instructor, University of Victoria

- ECON 204: Intermediate Macroeconomics, Winter and Summer 2011

Teaching Assistant, University of Victoria

- ECON 501: Macroeconomic Analysis
- ECON 381: Environmental Economics
- ECON 204: Intermediate Macroeconomics
- ECON 103/104: Principals of Microeconomics and Macroeconomics

WORK EXPERIENCE (Outside Universities)

- 2012 Natural Resources Canada, Pacific Forestry Centre
- 2010 Office of the Auditor General of British Columbia
- 2009 Government of British Columbia
- 2007- Government of Newfoundland and Labrador
2008

CONTRACTS, GRANTS, HONOURS AND AWARDS

- 2017 Natural Resources Canada Research Grant. Co-Principal Investigator. Gas Seepage Project.
- 2017 St. Francis Xavier University, University Research/Publication/Teaching Awards
- 2017 St. Francis Xavier University, UCR Research Grant
- 2016 St. Francis Xavier University, University Research/Publication/Teaching Awards
- 2016 SSHRC Institutional Grant (SIG). Optimal Forest Management in the Pacific North West: Accounting for Risk in the Context of Climate Change. (\$3000)
- 2015 Memorial University of Newfoundland's Collaborative Applied Research in Economics. Economic and Environmental Impact of the 2014-2015 Oil Price Shock in NL and AB, Canada, with Jon Rosborough and Van Lantz (\$25, 500)
- 2015 St. Francis Xavier University, University Research/Publication/Teaching Awards
- 2015 St. Francis Xavier University, UCR Research Grant
- 2014 SSHRC Insight Development Grant. Principal Investigator (with Van Lantz). Estimating the market and non-market economic impacts of climate-change induced sea-level rise in Canada (\$42,000)
- 2014 St. Francis Xavier University, University Research/Publication/Teaching Awards
- 2014 Natural Resources Canada Research Contract. Principal Investigator. Large Economics Study Atlantic Coastal Infrastructure and Property. (\$89, 000)
- 2014 Canadian Agricultural Economics Society Outstanding Ph.D. Thesis Award. Honourable Mention.
- 2013 St. Francis Xavier University, University Research/Publication/Teaching Awards
- 2013 St. Francis Xavier University, UCR Research Grant
- 2012 St. Francis Xavier University, Research Start up Grant
- 2011 Phillips, Hager and North Doctoral Scholarship for Research in Environmental and Resource Economics (\$10, 000)
- 2010 Phillips, Hager and North Doctoral Scholarship for Research in Environmental and Resource Economics (\$5,640)
- 2010-2011 ERCA Network Grant
(Ph.D. dissertation funding, \$27,000)

- 2008-2011 University of Victoria Ph.D. Fellowship (\$10,000 per annum)
- 2006 Memorial University Graduate Fellowship (\$3,000)
- 2004 Concordia University Arts and Science Scholar

PEER REVIEWED PUBLISHED RESEARCH PAPERS

- Withey, P. and G.C. van Kooten, 2011. The Effect of Climate Change on Optimal Wetlands and Waterfowl Management in Western Canada. *Ecological Economics*, 70 (2011): 798–805.
- Van Kooten, G.C., P. Withey and L. Wong, 2011. Bioeconomic Modeling of Wetlands and Waterfowl in Western Canada: Accounting for Amenity Values. *Canadian Journal of Agricultural Economics*, 59(2): 167-183.
- Withey, P. and G.C. van Kooten, 2013. The Effect of Climate Change on Wetlands and Waterfowl in Western Canada: Incorporating Cropping Decisions into a Bioeconomic Model. *Natural Resource Modeling* 26(3): 305-330.
- Withey, P. and G.C. van Kooten, 2014. Wetlands Retention and Optimal Management of Waterfowl Habitat as Climate Changes. *Journal of Agricultural and Resource Economics*, 39(1): 1-18
- Withey, P., 2014. Energy Use, Income and Carbon Dioxide Emissions: Direct and Multi-Horizon Causality in Canada. *International Journal of Energy Economics and Policy*, 4(2): 178-188.
- Withey, P., V. Lantz and T.O. Ochuodho, 2015. Economic Costs and Impacts of Climate-Induced Sea-Level Rise and Storm Surge in Canadian Coastal Provinces: a CGE Approach. *Applied Economics* 48(1), 59-71.
- Corbett, L.J., P. Withey, V.A. Lantz and T. O. Ochuodho, 2015. The Economic Impact of the Mountain Pine Beetle Infestation in British Columbia: provincial estimates from a CGE analysis. *Forestry* 89(1):100–105.
- Ochuodho, T.O., C.M.T. Johnston and P. Withey. (2017) Assessing Economic Impacts of Internet Adoption through Reduced Pulp and Paper Demand. *Canadian Journal of Forest Research* 47.10: 1381-1391.
- Millard, R., P. Withey, V. Lantz & T.O. Ochuodho (2017). The General Equilibrium Costs and Impacts of Oil Price Shocks in Newfoundland and Labrador. *Energy Economics*. 68: 192-198.
- Johnston, C. M. T. and P. Withey (2017). Managing Forests for Carbon and Timber: A Markov Decision Model of Uneven-aged Forest Management with Risk. *Ecological Economics*, 138, 31-39.

OTHER PUBLICATIONS

Withey, P., and B. Stennes, 2013. A Critical Review of Ecosystem Valuation of Non-Timber Forest Products. *Natural Resources Canada Information Report*.

Withey, P and J. Rosborough, 2015.. Cost-Benefit Analysis Methodology and Results. In Parnham, H. and S. Arnold (eds) (2015). Using cost-benefit analysis to evaluate climate change adaptation options in Atlantic Canada. Submitted to Climate Change Impacts and Adaptation Division, Natural Resources Canada 90p + appendices.

WORKING PAPERS

Withey, P., G.C. van Kooten and C.M.T. Johnston. The Economic and Environmental Impact of Renewable Electricity Generation in Nova Scotia.

Lantz, VA, T. Ochuodho, P. Withey, M.N. Patriquin, J. Wilson and M. Kennedy. Economic impacts of conservation area strategies in southern Alberta, Canada: a CGE model analysis.

Withey, P., D. Sullivan and V. Lantz. Estimating the willingness to pay for protection from coastal storms in Halifax, Canada: A CVM approach.

WORKS IN PROGRESS

Withey, P., G. Zaparialla, J. Rosborough and C.M.T. Johnston. Modeling the impact of climate change on forest growth using non-linear matrix growth models.

Gallant, K., P. Withey and D. Risk. Valuing Wetlands in Nova Scotia, Canada.

Withey, P. and C.M.T. Johnston. Managing Forest for Carbon and Timber: A Markov Decision Process Model Including Harvested Wood Products.

CONFERENCES AND PRESENTATIONS

Canadian Economics Association Annual Meeting

- June 2nd - June 5th, 2017, Antigonish, NS.
- Presented paper: "Managing Forests for Carbon and Timber: A Markov Decision Model of Uneven-aged Forest Management With Risk"

Memorial University Invited Seminar, Department of Economics

- March 1, 2017
- Presented paper: "Climate-Induced Sea-Level Rise and Storm Surge in Canada: Economic Impacts and Adaptation."

Canadian Economics Association Annual Meeting

- May 29th - May 31st, 2015, Toronto, ON
- Presented paper: "Economic costs of climate-induced sea-level rise and storm surge in Canadian coastal provinces: a CGE approach"

St. FX University Invited Seminar, Department of Earth Sciences

- February 18th, 2015
- Presented paper: "Modelling the Economic Impact of Climate Change and Adaptation in Atlantic Canada."

Joint Annual Meeting of the Canadian Agricultural Economics Society (CAES) and the Canadian Economics Association (CEA)

- May 29th –June 1st, 2014, Vancouver, BC
- Presented paper: "The Economic and Environmental Impact of Renewable Electricity Generation in Nova Scotia"

Canadian Economics Association Annual Meeting

- May 30th - June 2nd, 2013, Montreal, QC
- Presented paper: "Direct and Indirect Granger Causality between Energy, CO2 emissions and Income in Canada"

Mt. Allison University Invited Seminar, Department of Economics

- February 9th, 2013, Sackville, NB
- Presented paper: "The Impact of Climate Change on the Optimal Management of Wetlands and Waterfowl in Western Canada"."

St. Francis Xavier University Invited Seminar, Biology Department

- November 8th, 2012, Antigonish, NS
- Presented paper: "The Impact of Climate Change on the Optimal Management of Wetlands and Waterfowl in Western Canada".

Atlantic Canada Economic Association Annual Meeting

- October 19th-21st, 2012, Halifax, NS
- Presented paper: "Wetlands Retention and Optimal Management of Waterfowl Habitat under Climate Change".

Joint Annual Meeting of the Canadian Agricultural Economics Society (CAES) and the Western Agricultural Economics Association (WAEA)

- June 29th –July 1st, 2011, Banff, AB
- Presented paper: "Wasting Away: Wetlands Retention and Optimal Management of Waterfowl Habitat as Climate Changes"

Linking Environment and Agriculture Research Network (LEARN) and International Water and Resource Consortium (IWREC) Joint Workshop

- June 26th-28th, 2011, Banff, AB
- Presented paper: "The Effect of Climate Change on Wetlands and Waterfowl in Western Canada: Incorporating Cropping Decisions into a Bioeconomic Model."

University of Victoria Seminar

- March 2nd, 2011, Victoria, BC
- Presented paper: "The Effect of Climate Change on Wetlands in Western Canada"

Joint Annual Meeting of the Canadian Agricultural Economics Society (CAES) and the American Agricultural Economics Association (AAEA)

- July 25th – 27th, 2010, Denver, CO
- Presented paper: "Bioeconomic Modeling of Wetlands and Waterfowl in Western Canada: Accounting for Amenity Values"

Workshop on Wetlands Management, Economics and Policy

- January 2010, Victoria, BC
- Attended conference and session chair

UNDERGRADUATE HONOURS SUPERVISIONS

2012-2013:

Gabrielle Vasey (Math)
Turner Gunn (Aquatic Resources; Major Paper)
Mary Ellen Greenwood (Aquatic Resources; Major Paper)

2013-2014

Rachel Lynch (Economics)
Laura Corbett (Economics)
Sam Goucher (Economics)

2014-2015

Michael Staples (Economics)
Gabriella Zapparilla (Economics)
Deny Sullivan (Economics)
Robert Millard (Economics)
Tara Myden (Economics)
Brett Connell (Economics)

2016-2017:

Victoria Cullen (Aquatic Resources; Major Paper)
Nick Falconer (Aquatic Resources; Major Paper)

2017-2018:

Victoria Cullen (Economics)
Jamie Forsyth (Economics)
Ben Plazek (Economics)

EDITORIAL BOARDS

Forestry: An International Journal of Forest Research (2014-2017)

MEMBERSHIP

Canadian Agricultural Economics Society (CAES)

Canadian Economics Association

Canadian Resource and Environmental Economics Study Group

TECHNICAL SKILLS

Microsoft Office (Word, Power Point, Excel and Access)

Stata, EViews and Shazam statistical packages

GAMS and MATLAB mathematical modeling programs