ADAM J. DAIGNEAULT, PhD

5755 Nutting Hall, Rm 219
Orono, ME 04469, USA

Email: Adam.Daigneault@maine.edu
Phone: +1 207 581 2805

EDUCATION

The Ohio State University Columbus, OH

- Ph D., Natural Resource and Environmental Economics August 2006
  - Dissertation: "Fire, Carbon, Timber, and Trees: Three Essays in Natural Resource Economics"
- M.A., Economics September 2004
- Certificate of Graduate Interdisciplinary Specialization in Survey Research September 2004

Denison University Granville, OH

- B.A., *magna cum laude*, Economics and Environmental Studies May 2001
  - Honors Thesis: "Cuba, An Ecological Footprint: Analyzing the 'Special Period,' 1989-1999"

PROFESSIONAL EXPERIENCE

2021-present, E.L. Giddings Chair and Associate Professor, UMaine School of Forest Resources
2022-present, Associate Director, UMaine Center for Research on Sustainable Forests
2016-2021, Assistant Professor, University of Maine School of Forest Resources
2010-2016, Senior Economist and Research Area Leader, Landcare Research New Zealand
2009-2010, Fellow, Deshpande Foundation & The Energy and Resources Institute (TERI)
2008-2009, Economist, U.S. EPA Office of Air and Radiation, Climate Change Division
2006-2008, Post-Doctoral Research Economist, U.S. EPA National Center for Env Economics
2005, Research Economist, USDA Forest Service Pacific Northwest Research Station
2002-2006, Research Assistant, The Ohio State University

HONORS AND AWARDS

Peirce-Webber Award for Outstanding Teacher in Forest Resources	2023
Peirce-Webber Award for Outstanding Researcher in Forest Resources	2021
NZ Association of Economists Economic Policy Prize, Best Paper	2014
Landcare Research Distinguished Service Award	2013
NZ Assoc. of Ag. and Resource Economists Society, Best Paper	2011
NZ Association of Economists Economic Policy Prize, Runner Up	2011
EPA Gold Medal: Economic Impacts of U.S. Climate Change Legislation	2009
EPA Bronze Medal: Economic Impacts of Increased Biofuels Production	2007
EPA Bronze Medal: Economic Impacts of Phosphate Mining	2007
The Ohio State University Distinguished University Fellowship	2005 - 2006
Ohio Agricultural Research and Development Center Director's Associateship	2003 - 2004
The Ohio State University Distinguished University Fellowship	2002 - 2003
Denison University Heritage Academic Scholarship	1997 - 2001
Park National Bank Scholarship for Excellence in Economics	2000 - 2001
Environmental Studies Program Melon Student Internship Grant	Summer 2000

JOURNAL PUBLICATIONS

Daigneault, A., Simons-Legaard, E., Weiskittel, A. Can carbon, timber, and biodiversity outcomes be simultaneously optimized across extensive, complex, managed forests? A landscape-level application of Maine, USA. *Forest Policy and Economics* 161:103178. https://doi.org/10.1016/j.forpol.2024.103178

Louis, L.T., **Daigneault, A.** Kizha, A.R., 2024. Constraints and opportunities in harvesting small-diameter trees: Perspectives of foresters and loggers in the Northeastern United States. *International Journal of Forest Engineering*. https://doi.org/10.1080/14942119.2023.2299158

Zhao, J. **A. Daigneault**, A. Wesikittel, X. Wei. 2023. Climate and socioeconomic impacts on Maine's forests under alternative future pathways. *Ecological Economics* 214: 107979. https://doi.org/10.1016/j.ecolecon.2023.107979

Dymond, J., **A. Daigneault**, O. Burge, C. Tanner, F. Carswell, S. Greenhalgh, A., Ausseil, N. Mason, B. Clarkson. 2023. Searching for Balance between Hill Country Pastoral Farming and Nature. *Land* 12(8): 1482. https://doi.org/10.3390/land12081482

Favero, A., M. Lucas, J. Yoo, **A. Daigneault**, J.S. Baker. 2023. Temperature and energy security: will forest biomass help in the future?. *Climate Change Economics*, 2350018. https://doi.org/10.1142/S2010007823500185

Walsh, P., T. Soliman, **A. Daigneault**. 2023. Tradeoffs Between Indigenous Forest and Exotic Production Forest in New Zealand. *Journal of Agricultural and Resource Economics Review*. https://doi.org/10.1017/age.2023.7

Favero, A., J.S. Baker, B. Sohngen, **A. Daigneault**. 2023. Economic factors influence net carbon emissions of forest bioenergy expansion. *Communications Earth and Environment* 4, 41. https://doi.org/10.1038/s43247-023-00698-5

Al Abri, I., K. Grogan, **A. Daigneault**. 2023. Optimal Forest Management in the Presence of Fire Risk and Fuel Biomass in the Southeastern United States. *European Journal of Forest Research* 142: 395-413. https://doi.org/10.1007/s10342-023-01530-7

Wei, X. J. Zhao, D. Hayes, **A. Daigneault**, H. Zhu. 2023. A life cycle and product type based estimator for quantifying the carbon stored in wood products. *Carbon Balance and Management* 18(1). https://doi.org/10.1186/s13021-022-00220-y

Favero, A., **A. Daigneault**, B. Sohngen, J.S. Baker. 2023. A system wide assessment of forest biomass sustainability. *GCB Bioenergy* 15:154-165. https://doi.org/10.1111/gcbb.13013

Sherman, G., **A. Daigneault**. 2023. Evaluation of Maine resident perceptions on community resilience, conservation, and natural resource industries. *Society and Natural Resources* 36(3): 211-231. https://doi.org/10.1080/08941920.2022.2150798

Daigneault A., J.S. Baker, J. Guo, P. Lauri, A. Favero, N. Forsell, C. Johnston, S. Ohrel, B. Sohngen. 2022. How the future of the global forest sink depends on timber demand, forest management, and carbon policies. *Global Environmental Change* 76: 102582. https://doi.org/10.1016/j.gloenvcha.2022.102582

Galik, C., J.S. Baker, **A. Daigneault**, G. Latta. 2022. Crediting temporary forest carbon: Retrospective and empirical perspectives on accounting options. *Frontiers in Forests and Global Change*, 162.

Zhao, J., **A. Daigneault**, A. Weiskittel. 2022. Estimating regional timber supply and forest carbon sequestration under shared socioeconomic pathways: A case study of Maine, USA. *PLOS Climate*, *1*(5):e0000018.

Li, L., X. Wei, J. Zhao, D. Hayes, **A. Daigneault**, A. Weiskittel, A.R. Kizha, S.R. O'Neill. 2022. Technological advancement expands carbon storage in harvested wood products in Maine, USA. *Biomass and Bioenergy* 161: 106457.

George, A., A. Kizha, **A. Daigneault**. 2022. Is Forest Certification Working on the Ground? Forest Managers Perspectives from the Northeast U.S.? *Trees, Forest, People* 7: 100197.

Louis, L.T., A. Kizha, **A. Daigneault**, H. Han, A. Weiskittel. 2022. Factors Affecting Operational Cost and Productivity of Ground-Based Timber Harvesting Machines: a Meta-analysis. *Current Forestry Reports* 8: 38-54.

Lambie, S., S. Awatere, **A. Daigneault**, M. Kirschbaum, M. Marden, T. Soliman, R. Spiekermann, P. Walsh. 2021. Trade-offs between environmental and economic factors in conversion from exotic pine production to natural regeneration on erosion prone land. *New Zealand Journal of Forestry Science* 51.

Clements, R.S., S. Birthisel, **A. Daigneault**, E. Gallandt, D. Johnson, T. Wentworth, M. Niles. 2021. Climate Change in the Context of Whole-Farm Systems: Opportunities for Improved Outreach. *Climatic Change* 166(3): 1-20.

Daigneault, A., and A. Favero. 2021. Global forest management, carbon sequestration and bioenergy supply under alternative shared socioeconomic pathways. *Land Use Policy* 103: 105302.

Daigneault, A., A. Strong, S. Meyer. 2021. Economic and Ecosystem Benefits of Conserving Forested Watersheds. *Ecosystem Services* 48: 101238. https://doi.org/10.1016/j.ecoser.2020.101238

Ignatiadis, M, **A. Daigneault**, C. Sponarski, and J. Reed. 2021. Operationalizing Sense of Place to Evaluate Potential Conflicts in Natural Resource-Dependent Rural Economies. *Journal of Environmental Policy and Planning* 23(4): 446-466.

Cook-Patton, S.C., T. Gopalakrishna, **A. Daigneault**, S.M. Leavitt, J. Platt, S.M. Scull, O. Amarjargal, P.W. Ellis, B.W. Griscom, J.L. McGuire, S.M. Yeo, J.E. Fargione. 2020. Lower cost and more feasible options to restore forest cover in the contiguous United States for climate mitigation. *One Earth* 3(6): 739-752

Austin, K.G., J. Baker, B. Sohngen, C. Wade, **A. Daigneault**, S. Ohrel, S. Ragnauth, A. Bean. 2020. How much will global forest carbon sequestration cost?. *Nature Communications* 11 5946. https://doi.org/10.1038/s41467-020-19578-z.

Roy, S.G., **A. Daigneault**, J. Zydlewski, A. Truhlar, S. Smith, S. Jain, D. Hart. 2020. Coordinated river infrastructure decisions enhance social-ecological resilience. *Environmental Research Letters* 15 104054. https://doi.org/10.1088/1748-9326/abad58.

Daigneault, A., B. Sohngen, R. Sedjo. 2020. Carbon and Market Effects of US Forest Taxation Policy. *Ecological Economics* 178: 106803.

Zhao, J. **A. Daigneault**, A. Weiskittel. 2020. Forest Landowner Harvest Decisions in a New Era of Conservation Stewardship. *Forest Policy and Economics*. 118: 102251. https://doi.org/10.1016/j.forpol.2020.102251.

Favero, A., **A. Daigneault**, and B. Sohngen. 2020. Forests: Carbon Sequestration, Biomass Energy, or Both? *Science Advances*, 6(13): eaay6792.

Gawith, D., I. Hodge, F. Morgan, and **A. Daigneault**. 2020. Climate change costs more than we think because people adapt less than we assume. *Ecological Economics* 173: 106636.

Fernandez, M. and **A. Daigneault** 2020. A double win: new pathways to reduce greenhouse gas emissions and improve water quality in New Zealand. *Environmental Research Letters* 15 074004. https://doi.org/10.1088/1748-9326/ab8255

Carroll, J. **A. Daigneault.** 2019. Achieving Ambitious Climate Targets: Is it Economical for New Zealand to Invest in Agricultural GHG mitigation? *Environmental Research Letters* 14 124064. https://doi.org/10.1088/1748-9326/ab542a

Daigneault, A. 2019. A Shared Socio-economic Pathway Approach to Assessing the Future of the New Zealand Forest Sector. *Journal of Forest Economics* 34:233-262.

Daigneault. A. C. Johnston, A. Korosuo, J. Baker, N. Forsell, J. Prestemon and R. Abt. 2019. Developing Detailed Shared Socioeconomic Pathway (SSP) Narratives for the Global Forest Sector. *Journal of Forest Economics* 34:7-45.

Ausseil, A., **A. Daigneault**, B. Frame, E. Texiera. 2019. Towards an integrated assessment of climate and socio-economic change impacts and implications in New Zealand. *Environmental Modelling and Software* 119:1-20.

Gunukula, S., **A. Daigneault**, A.A. Boateng, C.A. Mullen, W.J. DeSisto, M.C. Wheeler. 2019. Influence of Upstream, Distributed Biomass-Densifying Technologies on the Economics of Biofuel Production. *Fuel*, 249:326-333.

Brown, P., **A. Daigneault** and J. Dawson. 2019. Age and Decision Making in New Zealand Agriculture. *Journal of Environmental Management.* 231:110-120.

Greenhalgh S., **A. Daigneault**, O. Samarasinghe. 2018. Allocation – The dilemma at the heart of setting water quality limits. *The Journal (official publication of the New Zealand Institute of Primary Industry Management Incorporated)* 22(4): 25-33.

Monge, J. **A. Daigneault**, L. Dowling, D. Harrison, and A. Ausseil. 2018. Implications from payments for forest ecosystem services on land-use decision-making under uncertain climate change: The case of erosion prevention on the East Coast of New Zealand. *Ecosystem Services*, 33(B):199-212.

Frame, B., A. Reisinger, A. Ausseil, **A. Daigneault** and J. Lawrence. 2018. Adapting shared climate policy assumptions for national and local scenarios. *Climate Risk Management*, 21:39-51.

Fernandez M., and **A. Daigneault.** 2018. The Paris Agreement and its Economic Impact on New Zealand. *Climate Change Economics*, 9(03), p.1850005.

Teixeira, E, J. de Ruiter, A. Ausseil, **A. Daigneault**, P. Johnstone, A. Holmes, A. Tait and F. Ewert. 2018. Adapting crop rotations to climate change in regional impact modelling assessments. *Science of the Total Environment* 616:785-795.

Daigneault A., S. Greenhalgh, and O. Samarasinghe. 2018. Economic impacts of multiple agro-environmental policies on regional New Zealand land use. *Environmental and Resource Economics* 69(4): 763-785.

Brown P., **A. Daigneault**, E. Tjernstrom, and W. Zou. 2018. Natural Disasters, Social Protection, and Risk Perceptions. *World Development* 104:310–325.

Fernandez M., and **A. Daigneault.** 2017. Erosion Mitigation in the Waikato District, New Zealand: Economic Implications for Agriculture. *Agricultural Economics* 48(3): 341-361.

Daigneault, A., F. Eppink, and W. Lee. 2017. A national riparian restoration programme in New Zealand: is it value for money? *Journal of Environmental Management* 187:166-177.

Daigneault A., S. Greenhalgh, and O. Samarasinghe. 2017. Sharing the Pie: The dilemma of allocating nutrient leaching between sources. *Ecological Economics* 131:449-459.

Brown, P., **A. Daigneault**, and D. Gawith. 2017. Economic Impacts of Climate Change on Flooding in Fiji. *Climate and Development* 9(6): 493-504.

Daigneault, A., B. Sohngen, and S.J. Kim. 2016. Estimating welfare effects from supply shocks with dynamic factor demand models. *Forest Policy and Economics* 73: 41-51.

Fernandez M., and **A. Daigneault**. 2016a. The Paris Agreement and its impact on cattle and food sectors of New Zealand. *New Zealand Journal of Agricultural Research* 59(4), 436-443.

Fernandez M., and **A. Daigneault**. 2016b. Emissions trading and the economic impact of the Paris Agreement on New Zealand. *Compendium: Cuadernos de Economía y Administración* 3(5): 92–104.

Gawith D., **A. Daigneault** and P. Brown. 2016. Does community resilience mitigate loss and damage from climate-related disasters? Evidence based on survey data. *Journal of Environmental Planning and Management* 59(12): 2102-2123.

Daigneault, A, P. Brown, and D. Gawith. 2016. Dredging versus hedging: comparing hard infrastructure to ecosystem-based adaptation to flooding. *Ecological Economics* 122: 25–35.

Stephens, T., S. Greenhalgh, M. Brown, and **A. Daigneault**. 2016. Enhancing the tax system to halt the decline of nature in New Zealand. *Policy Quarterly*. 12(1): 26-34.

Brown, P., and A. **Daigneault.** 2015. Managing the invasive small Indian mongoose in Fiji. *Agricultural and Resource Economics Review* 44(3): 275–290.

Morgan, F., P. Brown, and **A. Daigneault.** 2015. Simulation vs. definition: differing approaches to setting probabilities for agent behaviour. *Land* 4(4): 914–937.

Morgan, F., and **A. Daigneault**. 2015. Estimating Impacts of Climate Change Policy on Land Use: An Agent Based Modelling Approach. *PLOS One*. DOI:10.1371/journal.pone.0127317

Brown, P., and **A. Daigneault**. 2014. Cost–benefit analysis of managing the Papuana uninodis (Coleoptera: Scarabaeidae) Taro Beetle in Fiji. *Journal of Economic Entomology* 107(5): 1866-1877.

Norbury, G., A. Hutcheon, J. Reardon, and **A. Daigneault**. 2014. Pest fencing or pest trapping: a bio-economic analysis of cost-effectiveness. *Austral Ecology* 39(7):795-807.

Brown, P., and **A. Daigneault**. 2014. Cost–benefit analysis of managing the invasive African tulip tree *Spathodea campanulata* in the Pacific. *Environmental Science & Policy* 39: 65-76.

Daigneault, A., S. Greenhalgh, and O. Samarasinghe. 2014, A response to Doole and Marsh (2013) article: methodological limitations in the evaluation of policies to reduce nitrate leaching from New Zealand agriculture. *Australian Journal of Agricultural and Resource Economics* 58: 281–290.

Funk J., C. Field, S. Kerr, and **A. Daigneault.** 2014. Modeling the impact of carbon farming on land use in a New Zealand landscape. *Environmental Science & Policy* 37: 1-10.

Daigneault, A., B. Sohngen, and R. Sedjo. 2012. An economic approach to assess the forest carbon implications of biomass energy. *Environmental Science and Technology* 46(11): 5664–5671.

Greenhalgh, S., **A. Daigneault**, O. Samarasinghe, and R. Sinclair. 2012. Capitalizing on Water and Climate Policies in the New Zealand Agricultural and Forestry Sectors. *The International Journal of Climate Change: Impacts and Responses* 3(2): 15-32.

Baker, J., B. McCarl, B. Murray, S. Rose, R. Alig, D. Adams, G. Latta, R. Beach, and **A. Daigneault**. 2010. Net Farm income and land use under a U.S. greenhouse gas cap and trade. *Policy Issues* P17, April 2010: 1-5.

Daigneault, A., M. Miranda, and B. Sohngen. 2010. Optimal forest rotation with environmental values and endogenous fire risk. *Land Economics* 86(1): 155-172.

Newbold, S. and **A. Daigneault**. 2009. Climate response uncertainty and the expected benefits of greenhouse gas emissions reductions. *Environmental and Resource Economics* 44(3): 351-377.

Daigneault, A., B. Sohngen, and R. Sedjo. 2008. Exchange rates and the competitiveness of the U.S. timber sector in a global economy. *Forest Policy and Economics* 10(3): 108-116.

Kelch, D., F. Lichtkoppler, B. Sohngen, and **A. Daigneault**. 2006. The Value of Steelhead (*Onchorhynchus mykiss)* Angling in Lake Erie Tributaries. *Journal of Great Lakes Research*. 32:424-433.

SELECT REPORTS & OTHER PEER REVIEWED PUBLICATIONS

Daigneault, A., Weiskittel, A., Daigle, K., Garlick, S., Hamshaw, K., Lavallee, A., Niles, M., Weiskittel, A., Whitehouse, C., and Woodall, C., 2023. "A Resilience Indicators Approach to Ensuring Equitable, Objective, and Continued Investment in Northern Border Communities." Final Report prepared for the Northern Border Regional Commission. March 2023. Available here

Walker, T., **Daigneault, A.** et al. 2023. Can Northern Maine's Commercial Forests Store More Carbon Without Reducing Harvest? Report prepared for the Forest Carbon for Commercial Landowners (FCCL) Initiative. March 2023. Available here.

Daigneault, A., Hayes, D.J., Fernandez, I.J., & Weiskittel, A.R. 2022. "Forest Carbon Accounting and Modeling Framework Alternatives: An Inventory, Assessment, and Application Guide for Eastern US State Policy Agencies." Report prepared for USDA Forest Service. Available here.

Daigneault, A., Simons-Legaard, E., Birthisel, S., Carroll, J., Fernandez, I.J., & Weiskittel, A. 2021 "Maine Forestry and Agriculture Natural Climate Solutions Mitigation Potential." University of Maine Center for Research on Sustainable Forests Final Report, August 2021. Available here.

Arnold, S., …, **Daigneault, A.**, et al. 2020. "Scientific Assessment of Climate Change and Its Effects in Maine." Maine Climate Council Science and Technology Subcommittee Technical Report. Available here.

Lichko, L.,[#] Crandall, M., Johnson, T., & **Daigneault, A**. 2019."Valuing the Economic Benefits of Conservation Land in Downeast Maine." Technical Report prepared for the Downeast Conservation Network. Available here.

Daigneault, A. & Strong, A. 2019. "An Economic Case for the Sebago Watershed Water & Forest Conservation Fund." University of Maine Mitchell Center for Sustainability Solutions Report prepared for The Nature Conservancy and Highstead Conservation. March 2019. Available here.

Abello, T. **Daigneault, A**. et al. 2018. "Review of the Maine Tree Growth Tax Law: Report to the 128th Legislature Committee on Taxation." Available here.

Buncle, A., Daigneault, A. et al. 2018. "Cost-Benefit Analysis for Natural Resource Management In The Pacifica Guide: Second Edition." Technical Report for the Pacific Cost-Benefit Analysis Partnership. Available here.

Daigneault A., Eppink F., Gawith D., Craig H. 2017. "Estimate of the economic damage from the September 2015 flood in Freetown, Bo, and Pujehun (Sierra Leone)". Landcare Research Contract Report LC2751 for Sierra Leone Environmental Protection Agency. 136p.

Rutledge D.T., Ausseil A-G., Baisden T., Bodeker G., Booker D., Cameron MP., Collins DBG., **Daigneault A.**, Fernandez M., Frame B., Keller E., Kremser S., Kirschbaum MUF., Lewis J., Mullan B., Reisinger A., Sood A., Stuart S., Tait A., Teixeira E., Timar L., Zammit C..

2017. “Identifying Feedbacks, Understanding Cumulative Impacts and Recognising Limits: A National Integrated Assessment. Synthesis Report RA3. Climate Changes, Impacts and Implications (CCII) for New Zealand to 2100.” CCII report for MBIE contract C01X1225. 84pp.

Daigneault A. 2016. “Economic modelling of Hurunui Catchment nitrogen allocation under counter-factual policy assumptions.” Landcare Research Contract Report LC2484 prepared for New Zealand (NZ) Ministry for Primary Industries. 20 p.

Daigneault A., Wright W., Samarasinghe O. 2015. “Economic analysis of land use opportunities in Maniapoto rohe.” Landcare Research Contract Report LC2415 prepared for Maniapoto Māori Trust Board. 62 p.

Daigneault A, Samarasinghe, O. 2015. “Whangarei Harbour sediment and E.coli study: Catchment economic modelling.” Landcare Research Contract Report LC2421 prepared for NZ Ministry for Primary Industries. 97 p.

Awatere S, **Daigneault A.**, Hainsworth S., Fenemor A., Tahi M. 2015. “Land-Use Options for Mākirikiri Aggregated Trust lands under a kaitiakitanga framework.” Landcare Research Contract Report LC2135 for NZ Ministry for Primary Industries.

Daigneault A. 2015. “Modelling the economic impact of New Zealand’s post-2020 climate change contribution.” Landcare Research Contract Report LC2208 prepared for Ministry for Primary Industries and Ministry for the Environment. 41 p.

Daigneault A, Fernandez M. 2015. “Impact of New Zealand's post-2020 Climate Change Contribution: An economic modelling assessment.” Landcare Research Contract Report LC2185 prepared for NZ Ministry for the Environment. 80 p.

Daigneault A, Fernandez M, Wright W. 2015. “Economic modelling of New Zealand’s INDC for the post-2020 Climate Change Agreement: quality report.” Landcare Research Contract Report LC2106 prepared for NZ Ministry for the Environment. 59 p.

Fernandez M, **Daigneault A** 2015. “The climate mitigation, adaptation and trade in dynamic general equilibrium (CliMAT-DGE) model”. Landcare Research Contract Report LC2156 prepared for NZ Ministry for the Environment. 59p.

Daigneault, A. Fernandez M. 2014. “MfE GHG emissions reduction policy scenarios.” Landcare Research Contract Report LC1966 for the NZ Ministry for the Environment. 167p.

Brown P, **Daigneault A**, Gawith D, Aalbersberg W, Comley J, Fong P, Morgan F. 2014. “Evaluating ecosystem-based adaptation for disaster risk reduction in Fiji.” Landcare Research contract report LC1227 for the Climate and Development Knowledge Network. 161p.

Daigneault A, Samarasinghe O, Lilburne L. 2014. “Modelling economic impacts of nutrient allocation policies in Canterbury: Selwyn Catchment.” Landcare Research Contract Report LC1491 for the NZ Ministry for the Environment.

Buncle A, **Daigneault A**, Holland P, Fink A, Hook S, Manley M. 2013. **“**Cost-benefit analysis for natural resource management in the Pacific.” Suva, Fiji: Secretariat of the Pacific Community. http://www.undp-alm.org/sites/default/files/downloads/cost-benefit_analysis_for_natural_resource_management_in_the_pacific-a_guide.pdf

Daigneault A, Samarasinghe O, Lilburne L 2013. “Modelling economic impacts of nutrient allocation policies in Canterbury: Hinds Catchment.” Landcare Research Contract Report LC1490 for the NZ Ministry for the Environment.

Lennox J, **Daigneault A**, Jhunjhnuwala, K, Turner J, Reisinger A. 2013. "Integrated Assessment of Trade-Related Impacts of Global Climate Change Policies." Landcare Research Contract Report, prepared for the NZ Ministry for Primary Industries.107p.

Daigneault A, Brown P, Greenhalgh S, Boudjelas S, Mather J, Nagle W, Aalbersberg B 2013. "Valuing the impact of selected invasive species in the Polynesia-Micronesia hotspot." Landcare Research contract report ; LC1227. Landcare Research New Zealand Ltd. 239 p. http://www.landcareresearch.co.nz/publications/researchpubs/CEPF-valuing-invasives.pdf

Daigneault et al. 2012. "Sustainable Land Management and Climate Change - Catchment Analysis of Climate Change." MPI SLMACC Contract C09X0904. Landcare Research Contract Report, prepared for the NZ Ministry for Primary Industries (MPI).175p.

Daigneault A, McDonald H, Elliott S, Howard-Williams C, Greenhalgh S, Guysev M, Kerr S, Lennox J, Lilburne L, Morgenstern U, Norton N, Quinn J, Rutherford K, Snelder T, Wilcock B. 2012. Evaluation of the impact of different policy options for managing to water quality limits: main report. MPI Technical Paper No: 2012/46. Landcare Research. 127p.

Lennox, J. and **A. Daigneault**. 2011. Quantitative economic analysis of water policies and developments in New Zealand's regions and catchments. In: *Old Problems, New Solutions*. Russel, S. B. Frame, and J. Lennox, eds. Lincoln, NZ: Manaaki Whenua Press. 59-69.

Adams, D., R. Haynes, and **A. Daigneault**. 2006. *Estimated timber harvest by U.S. region and ownership, 1950-2002.* Gen. Tech. Rep. PNW-GTR-659. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 64 p.

SELECT PRESENTATIONS

7th International Faustmann Symposium, Christchurch, New Zealand. April 1-2, 2023. "A Global Approach to Estimating Regional Forest Carbon Leakage"

2023 Australasian Agricultural and Resource Economics Society Annual Meetings, Christchurch, New Zealand. February 7-10, 2023. "A Global Approach to Estimating Regional Forest Carbon Leakage"

2022 Northeastern Agricultural and Resource Economics Association Annual Meetings, Mystic, CT. June 12-15, 2022. "Tradeoffs Between Indigenous Forest and Exotic Production Forest in New Zealand"

2020 Agricultural and Applied Economics Association Annual Meetings, Virtual, August 11-12, 2020. "A forest model inter-comparison project (For-MIP) to assess the future of global forests under climate, policy and technological stressors"

2019 Agricultural and Applied Economics Association Annual Meetings, Atlanta, GA. July 21-23, 2019. "Global forest management and carbon sequestration futures under alternative shared socioeconomic pathways"

2019 Northeastern Agricultural and Resource Economics Association Annual Meetings, Portsmouth, NH. June 11-12, 2019. "The value of ecosystem services and forest conservation in the Sebago Lake watershed"

2019 International Society of Forest Resource Economists Meeting. Columbus, OH. May 14-15, 2019. "An overview of global forest sector pathways in an SSP context"

2018 Society of American Foresters National Convention, Portland, OR. October 3-7, 2018. "The future of global forestry under alternative shared socioeconomic pathways"

2018 Agricultural and Applied Economics Association Annual Meetings, Washington DC. August 5-7, 2018. "Global forest management and carbon sequestration futures under alternative shared socioeconomic pathways"

6th World Congress of Environmental and Resource Economists, Gothenburg, Sweden. June 28, 2018. "How tax reform can affect investments in natural resources and public goods"

Fall 2017 Maine Society of American Foresters Meeting. Portland, ME. October 6, 2017. "State forest property tax policies: a review"

2017 Global Trade Analysis Partnership (GTAP) Conference, West Lafayette, Indiana. June 7-9, 2017. "Shared socio-economic pathway approach to assessing the future of the global forest sector"

2017 IIASA Forest Sector Modelling Conference. Vienna, Austria. March 8, 2017. "An overview of the New Zealand forest & agriculture modelling system"

2016 Agricultural and Applied Economics Association Annual Meetings, Boston, Massachusetts. July 29-31, 2016. "Equally slicing the pie: water quality policy and allocation"

2016 Australian Agricultural and Resource Economics Society Annual Meetings, Canberra, Australia. February 2-5, 2016. "Economic costs and environmental benefits of national riparian restoration for NZ"

2015 Australian Agricultural and Resource Economics Society Annual Meetings, Rotorua, New Zealand. February 10-13, 2015. "Linkage of a spatially explicit agent-based model to a partial equilibrium model of agriculture"

2014 New Zealand Association of Economists Annual Meetings, Auckland. July 2-4, 2014. "Agro-environmental policy impacts on regional land use in New Zealand" *Winner of NZAE New Zealand Policy Paper Prize*

2014 Australian Agricultural and Resource Economics Society Annual Meetings, Port Macquarie, Australia. February 4-7, 2014. "Costs and Benefits of Ecosystem-based Adaptation for Flood Risk Reduction in Fiji"

2014 Australian Agricultural and Resource Economics Society Annual Meetings, Port Macquarie, Australia. February 4-7, 2014. "Agro-environmental policy impacts on regional economics and ecosystem services in New Zealand"

GREENHOUSE 2013 Conference, Adelaide, Australia, October 8-11, 2013. "Estimating the regional economic impacts of climate change and policy responses on agricultural and forestry productivity"

2013 Agricultural and Applied Economics Association Annual Meetings, Washington DC, USA August 4-6, 2013. "Economic and environmental impacts of implementing multiple agro-environmental policies in New Zealand"

2013 Australian Agricultural and Resource Economics Society Annual Meetings, Sydney, Australia. February 5-8, 2013. "Invasive species management in the Pacific using survey data and benefit-cost analysis"

2013 Australian Agricultural and Resource Economics Society Annual Meetings, Sydney, Australia. February 5-8, 2013. "Economic and environmental impacts of nutrient reduction policies and their design at the catchment-level"

2012 EcoSummit for Ecological Sustainability, Columbus, Ohio, USA October 1-5, 2012. "Economic and environmental impacts of implementing multiple agro-environmental policies in New Zealand"

2012 Agricultural and Applied Economics Association Annual Meetings, Seattle, USA August 12-14, 2012. "Modeling forestry in dynamic general equilibrium: a climate change policy analysis"

2012 Agricultural and Applied Economics Association Annual Meetings, Seattle, USA August 12-14, 2012. "Estimating impacts of climate change policy on land use: an agent based modeling approach"

2012 Australian Agricultural and Resource Economics Society Annual Meetings, Fremantle, Australia. February 7-10, 2012. "Role of global forests in climate change mitigation: a focus on the Australia and New Zealand forest sector"

2011 Agricultural and Applied Economics Association Annual Meetings, Pittsburgh, USA. July 24-26, 2011. "Estimating Co-benefits of agricultural climate policy in New Zealand: A catchment-level analysis"

2011 New Zealand Association of Economists Annual Meeting, Wellington, New Zealand. June 29-30, 2011. "Estimating co-benefits of New Zealand agricultural climate policy" *Runner-up of NZAE New Zealand Policy Paper Prize*

2009 National Conference on Forestry Solutions, Shimla, HP, India, November 19-21, 2009. "Role of global forests in climate change mitigation"

2009 International Association of Research Universities Climate Change Congress, Copenhagen, Denmark, March 10-12, 2009. **"**Implications of offset eligibility provisions on GHG mitigation for U.S. forestry and agriculture carbon sinks"

2007 American Agricultural Economics Association Annual Meeting, Portland, OR, July 29-31, 2007. "Optimal forest rotations with environmental values and endogenous fire risk"

2005 American Agricultural Economics Association Annual Meeting, Providence, RI, July 24-27, 2005. "Exchange Rates and the Competitiveness of the U.S. Timber Sector in a Global Economy"

MANUSCRIPTS UNDER REVIEW

Daigneault, A., Sohngen, B., Belair, E., Ellis, P.W. A Global Assessment of Regional Forest Carbon Leakage. Under review at *Nature* (submitted November 2023). Preprint available at: https://www.researchsquare.com/article/rs-3596881/v1

Foster, A.E., **Daigneault, A.**, Rahimzadeh-Bajgiran, P., Weiskittel, A.. Perceptions of Spruce Budworm Monitoring, Management, and Remote Sensing Technology in Maine's Forest Sector. Under review at *Maine Policy Review* (submitted November 2023)

Polyakov, M., Walsh, P.J., **Daigneault, A.**, Vale, S., Phillips, C., Smith, H. Cost-effectiveness of erosion mitigation to meet water clarity targets in the Manawatū-Whanganui Region of New Zealand. Under review at *Journal of Environmental Management* (submitted December 2023).

TEACHING EXPERIENCE

2023-24 SFR 446/546, Forest Resource Policy (Spring 2024)
SFR 548, Quantitative Social Science for Natural Resources (Spring 2024)
SFR 444/544, Forest Resource Economics (Fall 2023)
2021-22 SFR 446/546, Forest Resource Policy (Spring 2022)
SFR 548, Quantitative Social Science for Natural Resources (Spring 2022)
SFR 444/544, Forest Resource Economics (Fall 2021)
2020-21 SFR 446/546, Forest Resource Policy (Spring 2021)
SFR 444/544, Forest Resource Economics (Fall 2020)
2019-20 SFR 446/546, Forest Resource Policy (Spring 2020)
SFR 611, Quantitative Social Science for Natural Resources (Spring 2020)
SFR 444/544, Forest Resource Economics (Fall 2019)
2018-19 SFR 544, Forest Resource Economics (Spring 2019)

SFR 446/546, Forest Resource Policy (Spring 2019)
SFR 521, Research Methods in Forest Resources (Fall 2018)

2017-18 SFR 446/617, Forest Resource Policy (Spring 2018)
SFR 521, Research Methods in Forest Resources (Fall 2017)
SFR 444/544, Forest Resource Economics (Fall 2017)

2016-17 SFR 446/617, Forest Resource Policy (Spring 2017)
SFR 521, Research Methods in Forest Resources (Fall 2016)

2015-16 Economic Analysis of Invasive Species Management in East Melanesia

2014-15 Economics of Invasive Species Management in Southeast Asia

2013-14 Cost-benefit Analysis of Invasive Species Management in the Caribbean

2012-13 Economic Analysis of Natural Resource Management in the Pacific Islands

RESEARCH GRANT AWARDS

$10,000,000 (PI: Songlin Fei, Purdue University). 2023-2027. "Promoting Economic Resilience and Sustainability of the Eastern US Forests (PERSEUS)" Funded by USDA AFRI Sustainable Agricultural Systems.

$1,522,080 (PI: Jesse Abrams, University of Georgia). 2023-2026. "Co-produced modeling of socio-environmental dynamics of financialized forestlands and alternative future scenarios" Funded by National Science Foundation Dynamics of Integrated Socio-Environmental Systems (DISES).

$135,000. (**PI: Adam Daigneault**). 2022-2026. "Harvest Choice and Timber Supply Analysis for Northern US Forests" Funded by the USDA Forest Service.

$91,800 (**PI: Adam Daigneault**). 2022-2026. "Moving the Middle: Empowering Land Managers to Act in Complex Rural Landscapes." Funded by NZ Ministry of Business, Innovation, and Employment.

$67,801. (**PI: Adam Daigneault**). 2022-2023. "Valuing the Economic Benefits of Maine's Great Ponds in the 21st Century." Funded by USGS Water Resources Research Institutes Sustainability Research Grant.

$23,792 (PI: Libin T. Louis, University of Maine Fort Kent). 2022-2024. "Timber harvesting intensity and soil carbon dynamics: implications and recommendations for policymakers and forestry stakeholders in the Northeastern United States." Funded by the Cooperative Forestry Research Unit.

$104,000. (**PI: Adam Daigneault**). 2021-2023. "Global Timber Model Forest Carbon Project Leakage Quantification." Funded by The Nature Conservancy.

$47,500 (**PI: Adam Daigneault**). 2021-2022. "Eastern US Carbon Modeling Inventory and Assessment." Funded by the USDA Forest Service.

$40,000 (**PI: Adam Daigneault**). 2021-2025. "Do behavioral information interventions increase landowner enrollment in preferential forest property tax programs?" Funded by the USDA Forest Service.

$173,790 (PI: Daniel Hayes, University of Maine). 2021-2024. "The State of the Northeastern Forest Carbon Cycle: high-resolution carbon accounting for the regional forest sector." Funded by the Northern States Research Cooperative.

$40,000 (**PI: Adam Daigneault**). 2021-2022. "Assessing the Implications of Conservation Land on Maine Municipal Budgets and Value." Funded by the Sewall Foundation and Broad Reach Fund.

$146,003 (**PI: Adam Daigneault**). 2021-2023. "Forest Carbon and Timber Potential for Northern Maine's Working Forests." Funded by New England Forestry Foundation, NCASI, and Cooperative Forestry Research Unit.

$105,130. (**PI: Adam Daigneault**). 2020-2024. "A Resilience Indicators Approach to Ensuring Equitable, Objective, and Continued Investment in Northern Border Communities." Funded by USDA Forest Service.

$132,174. (**PI: Adam Daigneault**). 2019-2021. "An Integrated Approach to Quantifying the GHG Mitigation Potential of Natural Climate Solutions from Maine's Working Lands." Funded by US Climate Alliance.

$25,000. (**PI: Adam Daigneault**). 2019-2021. "Maine's Natural Climate Solutions Initiative." Funded by Maine Farmland Trust.

$22,981. (**PI: Adam Daigneault**). 2019-2020. "A Maine Soil Health Initiative to Enhance Agricultural Sustainability and Mitigate Climate Change." Funded by Mitchell Center Sustainability Grant.

$35,243. (PI: Anil Raj Kizha, University of Maine). 2019-2021. "Identifying opportunities for improving small-diameter tree harvesting strategies, logistics and market diversification." Funded by the UMaine Cooperative Forestry Research Unit.

$25,000. (**PI: Adam Daigneault**) 2018-2019. "Developing Economic and Community Resilience Indicators for the Katahdin Region, Phase 2." Funded by The Nature Conservancy.

$26,205. (**PI: Adam Daigneault**). 2017-2018. "Developing Economic and Community Resilience Indicators for the Katahdin Region." Funded by Mitchell Center Sustainability Grant.

$499,907. (**UMaine PI: Adam Daigneault**; University of Vermont PI: Meredith Niles). 2018-2021. "Assessing Climate Perceptions and Developing Adaptation Resources for Small, Medium and Beginning Farms." Funded by USDA Agriculture and Food Research Initiative.

$2,998,314. (PI: Sandra De Urioste-Stone, University of Maine). 2018-2022. "Enhancing Conservation Science and Practice: An Interdisciplinary Program." Funded by NSF Research Traineeship (NRT) program.

$150,000. (PI: Sandra De Urioste-Stone, University of Maine). 2018-2020. "Fostering Climate Change Resilience: A Socio-Ecological Forest Systems Approach." Funded by USDA Agriculture and Food Research Initiative.

$179,654. (PI: Anil Raj Kizha, University of Maine). 2018-2021. "Small-diameter trees: Evaluating cost and value proposition of harvest from different silvicultural prescriptions". Funded by the USDA Agricultural Research Service.

$115,006. (PI: Sam Roy, University of Maine). 2018-2019. "Fishy business: identifying synergies between researchers and stakeholders for improved transportation infrastructure and ecological resilience through coordinated road culvert improvement" Funded by USGS Water Resources Research Institutes Sustainability Research Grant.

$41,908. (**PI: Adam Daigneault**). 2017-2018. "Developing Economic and Community Resilience Indicators for the Katahdin Region, Phase 1." Funded by The Nature Conservancy.

$399,999. (PI: Mehdi Tajvidi, University of Maine). 2017-2020. "Technical and Economic Feasibility Evaluation and Pilot-Scale Production of Composite Panels Made From Low-Cost Cellulose Nanomaterials and Wood Residues." Funded by the USDA Agricultural Research Service.

$400,000. (PI: Steve Shaler, University of Maine). 2017-2020. "Commercialization and Scaling Up of Mass Timber in Maine." Funded by the USDA Agricultural Research Service.

$150,000. (PI: Aaron Weiskettel, University of Maine). 2017-2018. "Benchmarking Maine's Forest Product Sector and Assessing Future Markets." Funded by the USDA NIFA.

$30,882. (**PI: Adam Daigneault**) 2017-2018. "An Integrated Approach to Realizing the Value of Maine's Forest Resources." Funded by the University of Maine Research Reinvestment Fund.

MANUSCRIPTS REVIEWED

Agricultural Systems, Australian Journal of Agricultural and Resource Economics, Carbon Balance and Management, Climate Policy, Climatic Change, Computers and Electronics in Agriculture, Ecological Economics, Ecosystem Services, Energy Policy, Energy Economics, Environmental Economics & Policy Studies, Environment, Development and Sustainability, Environmental & Resource Economics, Environmental Science and Technology, Environmental Science and Policy, Forest Policy and Economics, Forest Science, Forestry: An International Journal of Forest Research, Frontiers in Ecology and the Environment, Frontiers in Forests and Global Change, Global Change Biology, International Journal of Wildland Fire, Journal of Agricultural and Applied Economics, Journal of Agricultural and Resource Economics Review, Journal of Cleaner Production, Journal of Environmental Management, Journal of Forest Economics, Journal of Rural Studies, Journal of Sustainable Forestry, Land Use Policy, Management Science, Mitigation and Adaptation Strategies for Global Change, Management Science, Natural Hazards, Nature Climate Change, Nature Sustainability, Nordic Pulp and Paper Research Journal, One Earth, PLOS Climate, PLOS ONE, Renewable Agriculture and Food Systems, Resources, Conservation & Recycling, Scandinavian Journal of Forest Research, Science of the Total Environment, Sustainability, USDA Forest Service Publications, US Environmental Protection Agency Publications, Economic Report of the President

PROFESSIONAL SERVICE

Member, Maine Climate Council Science and Technical Subcommittee, 2019– Present

Member, Maine Climate Council Forest Carbon Subgroup, 2023– Present

Member, Maine Governor's Task Force on Maine Forest Carbon Program, 2021

Member, MESAF Policy Committee (Chair), 2018 – Present

NCAA Student-Athlete Faculty Liaison, University of Maine Women's and Men's Swimming and Diving Teams, 2017 – Present

Member, Libby Lecture on Natural Resource Policy Committee, 2018 – 2022 (Chair: 2022)

Member, SFR Advisory Peer Committee, 2023– Present

Member, SFR Multicultural, Diversity, Equity, and Inclusion Committee, 2020 – Present

Member, NSFA Undergraduate Student Advising Group, 2019 – 2020

Member, SFR Scholarships Committee, 2019 – Present

Member, SFR Peer Guidelines Review Committee, 2018 – 2020

Member, Tree Growth Tax Law Review for Maine State Legislature Taxation Com., 2017-2018

Mentor, SFR First Year Mentoring Program, 2018 – Present

Mentor, FBRI Research Experience for Undergraduates (REU), Summer 2018 & 2019

PROFESSIONAL AFFILIATIONS

American Agricultural Economics Association (AAEA)
Australasian Agricultural and Resource Economics Society (AARES)
Society of American Foresters (SAF)