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(full CV available upon request)

1. Overview

My professorial career started at Lakehead University's School of Forestry during 1988-98, and continued at Dalhousie's School for Resource and Environmental Studies from 1998 to the present. I was Director of the School during 1998-2004, 2009-2012, and 2017-2018. I retired from active duty in July 2019.

Please Note: due to my retirement in June 2019, *I have stopped taking on new students to supervise.*

2. My Hobbies

- * Choral singing (baritone; mostly early music)
- * Brewing at home (kit and fruit wines, and mead)
- * Photography (novice level; trees mainly)
- * Bicycling in Europe and Canada
- * Growing trees in the city
- * Home renovations

3. Research Interests

My interests are wide-ranging, and cover both biophysical and socio-political areas including: forest ecology; environmental assessment, particularly impact prediction and monitoring; cumulative effects assessment; natural resources decision-making; land-use and forest planning; biodiversity assessment modelling; forest management and policy; climate change and forests; conflict resolution and public participation;

forest sustainability; criteria and indicators of sustainable forest management; conservation of old-growth forests; European forests; forests in protected areas; urban forests; forest futures using scenario analysis.

4. Continuing Research Activities

Urban Forests

Since 2010 I have taken annual research contracts with the Halifax Regional Municipality to assist in preparation of and support for the city's first-ever urban forest master plan (UFMP - see <http://www.halifax.ca/RealPropertyPlanning/UFMP>). The plan was approved by HRM Council in September 2012. We are now supporting the implementation process for the UFMP with research, monitoring, and public-engagement activities.

Recent and current thesis projects on urban forests include: (a) optimal street-tree spacing; (b) priority-setting for citizen tree-planting events in city parks; and (c) canopy improvements in urban cemeteries.

Forest Management

My ongoing studies associated with timber-producing forests revolve around movement of dissolved organic carbon into water-supply lakes. Both are being implemented by PhD students.

While not strictly research, I am involved with the provincial Department of Lands and Forestry on various sustainability files, including biodiversity, old forests, and the impending spruce-budworm outbreak.

5. Graduate Thesis Supervision

I have supervised more than a hundred undergraduate, master's, and PhD theses during my career.

Theses Recently Completed under My Supervision/Co-supervision

Julie Bailey - Incorporating Sustainable Energy Decisions in Agriculture (PhD completed Dec 2018)

Mirabai Alexander - A Change Can Do You Good? The Adaptability of Three Forest Birds to the Moose-browsed Grassland of Cape Breton Highlands National Park (MES completed August 2018)

Xin Liu - GIS-based Multi-criteria Decision Analysis (Mcdca) for Prioritizing Tree-planting Sites in Halifax Urban Parks (MES completed August 2018)

Jie Ma - Scholar and Practitioner Views on Science in Environmental Assessment (MES completed April 2018)

Bimal Aryal - Economic and Biophysical Implications of Alternative Street-tree Spacings in Halifax, Canada (MES completed December 2017)

Andy Kekacs - Gifts to a Future World: Conversations with Woodland Owners in Nova Scotia (MES completed August 2017)

Aaron Mackinnon - Implementing Science in Environmental Assessment: A Review of Theory (MES completed April 2017)

6. Selected Recent Publications

Book

Mackinnon, A.J., P.N. Duinker, and T.R. Walker. 2018. *The Application of Science in Environmental Impact Assessment*. Routledge Focus on Environment and Sustainability, Taylor & Francis Group, London, UK. 142 pp.

Refereed Journal Papers and Book Chapters

Thompson, K., K. Sherren, and P.N. Duinker. 2019. A framework for the use of ecosystem services concepts in Canadian municipal plans.

Ecosystem Services 38: online.

Steenberg, J.W.N., P.N. Duinker, and S.A. Nitoslawski. 2019. Ecosystem-based management revisited: updating the concepts for urban forests. *Landscape and Urban Planning* 186:24-35. doi.org/10.1016/j.landurbplan.2019.02.006

Quinton, J. and P.N. Duinker. 2019. Beyond burial: Researching and managing cemeteries as urban green spaces, with examples from Canada. *Environmental Reviews*: accepted 2018-10-16. doi: 10.1139/er-2018-0060

Steenberg, J.W.N., P.N. Duinker, I.F. Creed, J.N. Serran, and C. Ouillet Dallaire. 2019. Alternative scenarios for the future of Canada's boreal region. *Environmental Reviews*: accepted. doi.org/10.1139/er-2018-0062

Yeung, A.C.Y., A. Paltsev, A. Daigle, P.N. Duinker, and I.F. Creed. 2019. Atmospheric change as a driver of change in the Canadian boreal zone. *Environmental Reviews*: accepted 2018-10-16 (doi: 10.1139/er-2018-0055)

Creed, I.F., P.N. Duinker, J.W.N. Steenberg, and J.N. Serran. 2019. Managing risks to Canada's boreal zone: transdisciplinary thinking in pursuit of energy security. *Environmental Reviews*: accepted (doi: 10.1139/er-2018-0070)

Ma, J., P.N. Duinker, and T.R. Walker. 2018. Scholar and practitioner views on science in environmental assessment. *Impact Assessment and Project Appraisal* 36(6):516-528. (doi: 10.1080/14615517.2018.1519978)

Keys, K., D. Burton, G. Price, and P.N. Duinker. 2018. Forest floor chemistry and mineral soil ion exposure after surface application of alkaline-treated biosolids under two white spruce (*Picea glauca*) plantations in Nova Scotia, Canada. *Forest Ecology and Management* 417:208-221. doi.org/10.1016/j.foreco.2018.02.040

Steenberg, J.W.N., P. Robinson, and P.N. Duinker. 2018. Counter-intuitive relationships between

housing renovation, socioeconomic status, and urban forest ecosystems. *Environment and Planning B: Urban Analytics and City Science*: published online 2018_01_12. doi/pdf/10.1177/2399808317752927.

Publicover, J.L., T.S.A. Wright, S. Baur, and P.N. Duinker. 2018. Engaging with environmental issues as a musician: career perspectives from the musicians of the Playlist for the Planet. *Popular Music and Society*: accepted. <http://dx.doi.org/10.1080/03007766.2018.1426367>.

Bond, A., F. Retief, B. Cave, A.L. Brown, M. Fundingsland, P.N. Duinker, and R. Verheem. 2018. A contribution to the conceptualisation of quality in impact assessment. *Environmental Impact Assessment Review* 68:49-58. DOI: 10.1016/j.eiar.2017.10.006

Publicover, J.L., T.S.A. Wright, S. Baur, and P.N. Duinker. 2017. Music as a tool for environmental education and advocacy: artistic perspectives from musicians of the Playlist for the Planet. *Environmental Education Research* 27:187-195. dx.doi.org/10.1080/13504622.2017.1365356

Nitoslawski, S., J.W.N. Steenberg, P.N. Duinker, and P.G. Bush. 2017. Assessing the influence of environmental attributes on urban forest species composition in suburban neighbourhoods. *Urban Forestry and Urban Greening* 27:187-195. doi.org/10.1016/j.ufug.2017.08.002

Ordóñez, C., T. Beckley, P.N. Duinker, and A.J. Sinclair. 2017. Public values associated with urban forests: synthesis of findings and lessons learned from emerging methods and cross-cultural case studies. *Urban Forestry and Urban Greening* 25:74-84. doi.org/10.1016/j.ufug.2017.05.002

Duinker, P.N., S. Lehvavirta, A. Busse Nielsen, and S. Toni. 2017. Urban Woodlands and Their Management. In press as Chapter 34 in "Routledge Handbook of Urban Forestry", edited by F. Ferrini, C. Konijnendijk van den Bosch, and

A. Fini.

MacLellan, L.K. and P.N. Duinker. 2017. The local trap and community forest policy in Nova Scotia: pitfalls and promise. Chapter 6 in: Bullock, R. (editor). *Growing Community Forests: Practice, Research, and Advocacy in Canada*. University of Manitoba Press, Winnipeg, MB.

Sinclair, A.J., M. Doelle, and P.N. Duinker. 2017. Looking up, down, and sideways: reconceiving cumulative effects assessment as a mindset. *Environmental Impact Assessment Review* 62:183-194. dx.doi.org/10.1016/j.eiar.2016.04.007

Nitoslawski, S.A., P.N. Duinker, and P.G. Bush. 2016. A review of drivers of tree diversity in suburban areas: research needs and recommendations for Canadian cities. *Environmental Reviews*: accepted. doi: 10.1139/er-2016-0027

Duinker, P.N. and L.K. MacLellan. 2016. Whither community forests in Canada? A plea for innovation, creativity, and adaptive policy development. In: Teitelbaum, S. (editor). *Community Forests in Canada*, pp. 329-346. UBC Press, Vancouver, BC.

Nitoslawski, S.A., and P.N. Duinker. 2016. Managing tree diversity: a comparison of suburban development in two Canadian cities. *Forests* 7: 119. doi:10.3390/f7060119

Sinclair, A.J., M. Doelle, and P.N. Duinker. 2016. Looking up, down, and sideways: reconceiving cumulative effects assessment as a mindset. *Environmental Impact Assessment Review*: accepted.

Bailey, J.A., P.N. Duinker, P. Amyotte, M. Adams, and F. Khan. 2016. Measuring energy conservation on Nova Scotia (NS) farms: a 2004 to 2011 comparison. *Energy*: accepted subject to minor revisions.

Ordóñez, C., P.N. Duinker, A.J. Sinclair, T. Beckley, and J. Diduck. 2016. Public values of urban forests in Canada using a sidewalk-interception survey: results for Fredericton, Halifax, and Winnipeg. *Arboriculture and Urban Forestry* 42(1):46–57.

Reports and Other Papers

Quinton, J. and P. Duinker. 2019. The Trees of Camp Hill and Fairview Lawn Cemeteries. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS. (plus three similar reports)

Duinker, P.N. 2019. The blind men and the trees: diverse perspectives on the species composition of Halifax's urban forest. *Atlantic Forestry Review* 25(4):16-17.

Duinker, P.N. 2018. Urban Forest Management and Research in Halifax, NS: Contributions from the School for Resource and Environmental Studies, Dalhousie University. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Van Damme, L. and P.N. Duinker. 2018. Silviculture reporting, progress, and accountability. Chapter 16 in: *An Independent Review of Forest Practices in Nova Scotia: Addendum* (W. Lahey, editor). Nova Scotia Department of Lands and Forestry, Halifax, Nova Scotia.

Duinker, P.N. 2018. Environmental assessment of forest management. Chapter 18 in: *An Independent Review of Forest Practices in Nova Scotia: Addendum* (W. Lahey, editor). Nova Scotia Department of Lands and Forestry, Halifax, Nova Scotia.

Duinker, P.N., J. Williams, and L. Van Damme. 2018. Full-tree harvesting. Chapter 10 in: *An Independent Review of Forest Practices in Nova Scotia: Addendum* (W. Lahey, editor). Nova Scotia Department of Lands and Forestry, Halifax,

Nova Scotia.

Duinker, P.N. 2018. Old forests. Chapter 7 in: *An Independent Review of Forest Practices in Nova Scotia: Addendum* (W. Lahey, editor). Nova Scotia Department of Lands and Forestry, Halifax, Nova Scotia.

Doll, S. and P. Duinker. 2018. The Trees of Old Ashburn Golf Course: Inventory and Management Recommendations. Report to the Managers of Old Ashburn Golf Club. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Doll, S., M. Ristow, J. Quinton, and P. Duinker. 2018. The Street Trees of Bridgewater, Nova Scotia: Inventory and Recommendations for Improvement. Report to the Council of the Town of Bridgewater. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Duinker, P. and J. Charles. 2018. Growing together in Halifax, Canada: A productive partnership helped create a strong master plan for forests in this Nova Scotian city. In "Forests and Sustainable Cities: Inspiring Stories from around the World", pp. 29-34. Food and Agriculture Organization of the United Nations, Rome, IT.

Blakley, J., P. Duinker, L. Greig, G. Hegmann, and B. Noble. 2017. Cumulative Effects Assessment. FasTip Document for International Association for Impact Assessment, Fargo, ND.

Duinker, P.N. 2017. Guest Editorial: Why Care about Urban Forests? *Atlantic Forestry Review* 23(6):6-7.

Duinker, P.N. 2017. Silviculture vs. Arboriculture: The Same or Different? *Atlantic Forestry Review* 23(6):32-33.

Duinker, P. 2017. Trees in the city: why trees in cities are phenomenal investments in urban infrastructure. *Municipal World* 127(1):3-5.

Foster, D. and P. Duinker. 2017. The HRM Urban Forest in 2016. Report to HRM. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Leahey, M. and P. Duinker. 2016. Things You Never Knew about Trees ... and How Pugwash Learned Them. *Municipal World* 126(8):25-26.

Hayden, N., N. Secen, and P.N. Duinker. 2016. Tree Planting Tips & Tricks. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Duinker, P.N. and C. Pilkington. 2016. The Trees of Pugwash, Nova Scotia: Inventory and

Recommendations for Improvement. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.

Duinker, P.N., S. Maasik, and C. Kent. 2015. Invasive Alien Species: Learning Materials for Nova Scotia Envirothon 2016 Participants. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS. 31 pp.

Duinker, P.N. and C. Pilkington. 2016. The Trees of Pugwash, Nova Scotia: Inventory and Recommendations for Improvement. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS.