

CURRICULUM VITAE

Elena M. Bennett

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Department of Natural Resource Sciences and McGill School of Environment, McGill University,
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RESEARCH INTERESTS:

Sustainable use and management of ecosystem services; multi-functional landscapes; management of tradeoffs among ecosystem services, especially agricultural production and water quality; multifunctional working landscapes, scenarios and futures thinking

EDUCATION:

University of Wisconsin (1999-2002)
Ph.D., Limnology and Marine Sciences
Advisor: Dr. Stephen R. Carpenter

University of Wisconsin (1996-1999)
M.Sc., Land Resources
Advisor: Dr. Stephen R. Carpenter

Oberlin College (1990-1994)
B.A. Cum Laude, Biology and Environmental Studies, Minor in Chemistry
Advisors: Dr. David W. Orr and Dr. Roger H. Laushman

ACADEMIC APPOINTMENTS:

PROFESSOR, *McGill University*, Montreal, QC, Canada (1/2020 - present)
Jointly appointed in the Bieler School of Environment and the Department of Natural Resource Sciences.

ASSOCIATE PROFESSOR, *McGill University*, Montreal, QC, Canada (6/2012 – 12/2019)
Jointly appointed in the Bieler School of Environment and the Department of Natural Resource Sciences.

GLOBAL AFFILIATE, Gund Institute, University of Vermont. Burlington, Vermont (2014 – present)

ASSISTANT PROFESSOR, *McGill University*, Montreal, QC, Canada (6/2005 – 6/2012)
Jointly appointed in the Bieler School of Environment and the Department of Natural Resource Sciences. [On maternity leave September 2007 to September 2008, July 2009 to April 2010.]

POSTDOCTORAL RESEARCHER, *University of Wisconsin*, Madison, WI (1/2002 – 5/2005)
Technical and scientific support for the Millennium Ecosystem Assessment scenarios working group.

PUBLICATIONS:

Lifetime Summary (to date)

- a) H-index: 73 (Google Scholar); 52 (ISI)
- b) Papers in refereed journals (161)
- c) Papers in press (1)
- d) Papers in review (11)
- e) Chapters in books - refereed (24)
- f) Non-Peer Reviewed Publications (22)

SCIENTIFIC PUBLICATIONS (students in my lab are underlined)**In print**

161. Rockstrom, J, J Gupta, D Qin, SJ Lade, JF Abrams, L Andersen, DIA McKay, X Bai, G Bala, SE Bunn, D Ciobanu, F deClerck, K Ebi, L Gifford, C Gordon, S Hasan, N Kanie, TM Lenton, S Loriani, DM Liverman, A Mohamed, N Nakicenovic, D Obura, D Ospina, K Proddani, C Rammelt, B Sakschewski, J Scholtens, B Stewart-Koster, T Tharammal, D van Vuuren, P Verburg, R Winkelmann, C Zimm, **EM Bennett**, S Bringezu, W Broadgate, P Green, L Huang, L Jacobson, C Ndehedehe, S Pedde, J Rocha, M Scheffer, L Schulte-Uebbing, W de Vries, C Xiao, C Xu, X Xu, N Zafra-Calvo, X Zhang. 2023. Safe and just Earth system boundaries. *Nature*. <https://doi.org/10.1038/s41586-023-06083-8>
160. Walker, B, A-S Crepin, M Nystrom, JM Andries, E Anderssono, T Elmquist, C Queiroz, S Barrett, **EM Bennett**, JC Cardenas, S Carpenter, T Cahpin, G Daily, A de Zeeuw, J Fischer, C Folke, S Levin, K Nyborg, S Polasky, K Segerson, K Seto, M Scheffer, J Shogren, A Tavoni, J van den Bergh, E Weber, J Wilen, J Vincent. 2023. Response diversity as a sustainability strategy. *Nature Sustainability*. <https://doi.org/10.1038/s41893-022-01048-7>.
159. Chaplin-Kramer, R, J Chapell, and **EM Bennett**. 2022. Un-yielding: Evidence to build the agricultural transformation we need. *Annals of the New York Academy of Science*. DOI: 10.1111/nyas.14950.
158. Norström, AV, B Agarwal, P Balvanera, B Baptiste, **EM Bennett**, E Brondízio, R Biggs, B Campbell, SR Carpenter, JC Castilla, AJ Castro, W Cramer, GS Cumming, M Felipe-Lucia, J Fischer, C Folke, R DeFries, S Gelcich, J Groth, CI Speranza, S Jacobs, J Hofmann, TP Hughes, DPM Lam, J Loos, A Manyani, B Martín-López, M Meacham, H Moersberger, H Nagendra, L Pereira, S Polasky, M Schoon, L Schultz, O Selomane & M Spierenburg. 2022. The programme on ecosystem change and society (PECS) – a decade of deepening social-ecological research through a place-based focus, *Ecosystems and People*, 18: 598-608.
157. Valencia, V, **EM Bennett**, M Altieri, C Nicholls, AP Schrijver, and RPO Schulte. 2022. Learning from the future: Mainstreaming disruptive solutions for the transition to sustainable food systems. *Environmental Research Letters* 17: 051002.
156. Chrysafi, A, V Villi, J Milka, S Vilma, P Johannes, P Miina, SJ Lade, K La Mere, L Wang-Erlandsson, L Scherer, LS Andersen, **EM Bennett**, KA Brauman, GS Cooper, A De Palma, P Doll, AS Downin, TC DuBois, I Fetzer, EA Fulton, D Gerten, H Jaafar, J Jagermeyr, F Jaramillo, M Jung, H Kahiluoto, L Lassaletta, SW Mackay, D Mason-D'Croz, MM Mekonnen, KL Nash, AV Pastor, N Ramankutty, B Ridoutt, S Siebert, BI Simmons, A Staal, Z Sun, A Tobian, A Usabiaga-

- Liano, RJ Van der Ent, A Van Soesbergen, P Verburg, Y Wada, SC Zipper, M Kummu. 2022. Quantifying Earth system interactions for sustainable food production: an expert elicitation. *Nature Sustainability*.
155. Wang, J, Z Qi, and **EM Bennett**. 2022. Changes in Canada's P cycle 1961-2018: hot spots and deficits. *Global Biogeochemical Cycles*.
154. Winkler, KJ, K Benessaiah, J Botzas-Coluni, ETH Crockett, MA Crowley, M Dade, DEL Hanna, J Garrah, JT Rieb, and **EM Bennett**. 2022. Implications of Panarchy for ecosystem service research: the role of system dynamics in service delivery. *Ecology and Society* 27(2):43.
153. Crockett, E, M Vellend, **EM Bennett**. 2022. Biodiversity change in northern forests at different scales, levels, and dimensions. *Journal of Ecology*. <https://doi.org/10.1111/1365-2745.13956>
152. Berbes-Blasquez, M, M Schoon, K Benessaiah, **E Bennett**, GD Peterson, and R Ghimire. 2022. Resilience in the times of COVID: What the response to the COVID pandemic teaches us about resilience principles. *Ecology and Society*.
151. Chapin, FS, EU Weber, **EM Bennett**, R Biggs, JCJM van den Bergh, WN Adger, A-S Crépin, S Polasky, C Folke, M Scheffer, K Sederson, JM Andries, S Barrett, JC Cardenas SR Carpenter, J Fischer, N Kautsky, SA Levin, JF Shogren, B Walker, J Wilen, A de Zeeuw. 2022. Earth Stewardship: Shaping pathways toward a sustainable future. *AMBIO*.
150. Falardeau, M, **EM Bennett**, B Else, A Fisk, CJ Mundy, ES Choy, MM Ahmed, LN Harris, J-S Moore. 2022. Interweaving biophysical indicators with Indigenous and local knowledge reveals impacts of Arctic marine ecosystem change on Arctic Char. *Global Environmental Change* 74: 102469.
149. Dade, MC, **EM Bennett**, and BE Robinson. 2022. Property rights play a pivotal role in the distribution of ecosystem services among beneficiaries among beneficiaries. *Ecosystems and People*, 18: 131–145.
147. Meacham, M, AV Norstrom, GD Peterson, E Andersson, **EM Bennett**, R Biggs, E Crouzat, AF Cord, E Enfors, M Felipe-Lucia, J Fischer, M Hamann, J Hanspach, C Hicks, S Jacobs, S Lavorel, B Locatelli, B Martin-Lopez, T Plieninger, C Queiroz. 2022. Ecosystem service bundles: insights for assessments and comparisons. *Ecosystems and People* 18: 99-111.
147. Twardek, WM, IG Cowx, NW Lapointe, C Paukert, TD Beard, **EM Bennett**, D Browne, AK Carlson, KD Clarke, Z Hogan, K Lorenzen, AJ Lynch, PB McIntyre, P Pompeu, M Rogers, A Sakas, WW Taylor, TD Ward, Z Basher, and SJ Cooke. 2022. Bright spots for inland fish and fisheries to guide future hydropower development. *Water Biology and Security* doi.org/10.1016/j.watbs.2022.100009.
146. **Bennett, EM, P Morrison, JM Holzer, KJ Winkler**, EDG Fraser, SJ Green, BE Robinson, K Sherren, J Botzas-Coluni, and Wendy Palen. 2022. Scaling up place-based social-ecological science. *Ecosystems and People* 17: 573-589.
145. Chambers, JM, C Wyborn, N Klenk, M Ryan, A Serban, N Bennett, R Brennan, L Charli-Joseph, M Fernandez-Gimenez, K Galvin, B Goldstein, T Haller, R Hill, C Munera, J Nel, H Österblom, RS Reid, M Riechers, M Spierenburg, M Tengö, **EM Bennett**, A Brandeis, P Chatterton, J Cockburn, C Cvitanovic, P Dumrongrojwatthana, A Paz Duran, J-D Gerber, J Green, R Gruby, AM Guerrero, A Horcea-Milcu, J Montana, P Steyaert, JG Zaehringer, A Bednarek, K Curran, SJ Fada, J Hutton, B Leimona, T Pickering, and R Rondeau. 2022. Co-productive agility and four collaborative pathways to sustainability transformations. *Global Environmental Change* 72: 102422.

144. Mitchell, MGE, M Tsuruda, E Hartley, A Gonzalez, **EM Bennett**. 2022. Contrasting responses of soybean aphids, parasitoids, and hyperparasitoids to agricultural landscape structure. *Agriculture, Ecosystems, and Environment* 326: 107752.
143. **Bennett, EM** EDG Fraser, and K Winkler. 2021. Managing Canada's landscapes and seascapes for multiple ecosystem services in the Anthropocene: Introduction to the Special Collection. *FACETS* 6: 1986–1992.
142. Winkler, KJ, HR Chestnutt, and **EM Bennett**. 2021. Mapping social structures for sustainability transformation at McGill University, Canada. *International Journal of Sustainability in Higher Education*. doi.org/10.1108/IJSHE-04-2021-0164.
141. Crockett, E., S. Vennin, J. Botzas-Coluni, G. Laroque, and **EM Bennett**. 2021. Bright Spots of Carbon Storage in Temperate Forests. *Journal of Applied Ecology* 58(12): 3012-3022.
140. Quintas-Soriano, C, J Brandt, CV Baxter, **EM Bennett**, AJ Castro. A framework for assessing coupling and de-coupling trajectories in river social-ecological systems. 2021. *Sustainability Science* 17: 121-134.
139. Botzas-Coluni, J, J Rieb, E Crockett, and **EM Bennett**. 2021. Farmland heterogeneity is associated with gains in some ecosystem services but also potential trade-offs. *Agriculture, Ecosystems, and Environment* 322: 107661.
138. Levin, SA, JM Andries, WN Adger, S Barrett, **EM Bennett**, JC Cardenas, SR Carpenter, A-S Crépin, PR Ehrlich, J Fischer, C Folke, N Kautsky, CL Kling, K Nyborg, S Polasky, M Scheffer, K Segerson, JF Shogren, JCJM van den Bergh, B Walker, E Weber, and J Wilen. 2021. Governance in the shadow of extreme events: Lessons from evolutionary processes for structuring interventions. *Ecosystems* doi://10.1007/s10021-021-00680-2.
137. Caviglia-Harris, J, K Hodges, B Helmuth, **EM Bennett**, K Galvin, M Krebs, K Lips, M Lowman, T Schuur, L Shulte Moore. 2021. The Six Dimensions of Collective Leadership that Advance Sustainability Objectives. *Ecology and Society* 26(3):9.
136. Chambers JM, Wyborn C, Ryan M, Reid RS, Riechers M, Serban A, Bennett N, Cvitanovic C, Fernandez-Gimenez ME, Galvin K, Goldstein B, Klenk N, Tengö M, Brennan R, Cockburn J, Hill R, Munera C, Nel J, Österblom H, Bednarek A, **Bennett EM**, Brandeis A, Charli-Joseph L, Chatterton P, Curran K, Dumrongrojwatthana P, Durán AP, Fada SJ, Gerber JD, Green J, Guerrero A, Haller T, Horcea-Milcu A, Leimona B, Montana J, Rondeau R, Spierenburg M, Steyaert P, Zaehringer JG, Gruby R, Hutton J, Pickering T. 2021. Six modes of co-production for sustainability. *Nature Sustainability* 4: 983-996.
135. Baijnath-Rodino, JA, A Albizua, L Sushama, **E Bennett**, BE Robinson. 2021. Determining Freshwater Lake Communities' Vulnerability to Snowstorms in the Northwest Territories. *Water* 73: 1816.
134. Qiu, J, C Queiroz, **EM Bennett**, AF Cord, E Crouzat, S Lavorel, J Maes, M Meacham, AV Norstrom, GD Peterson, R Seppelt, and MG Turner. 2021. Land-use intensity mediates ecosystem service tradeoffs across regional social-ecological systems. *Ecosystems and People* 17: 264-278.
133. Pereira, L, C Trisos, J Vervoort, N Sitas, A Hsu, P Lucas, **EM Bennett**, AV Norström, G Peterson, J Jabbour, J Nel, O Selomane, DP van Vuuren, J Ward, S Hedden, R Biggs, GR Asrar, AC Köberle, K Calvin, Ana PD Aguiar, N King. 2021. Advancing a toolkit of diverse futures approaches for global environmental assessment scenarios. *Ecosystems and People* 17: 191-204.

132. Hanna, DEL, B Lehner, ZE Taranu, CT Solomon, and **EM Bennett**. 2021. The relationship between watershed protection and water quality: the case of Québec, Canada. *Freshwater Science* 40: 382–396.
131. **Bennett, EM**, R Biggs, GD Peterson, and LJ Gordon. 2021. Patchwork Earth: Navigating pathways to just, thriving, and sustainable futures. *One Earth. One Earth* 4(2):172-176.
130. **Bennett, EM**, J Baird , H Baulch , R Chaplin-Kramer , E Fraser , P Loring , P Morrison , L Parrott, K Sherren , KJ. Winkler , J Cimon-Morin , M-J Fortin , BL. Kurylyk , J Lundholm , M Poulin , JT Rieb , A Gonzalez , G Hickey , M Humphries , Krishna KC , D Lapen. 2021. Ecosystem services and the resilience of agricultural systems. *Advances in Ecological Research* 64: 1-44.
129. Buxton, RT, JR Bennett, AJ Reid, CM Schulman, SJ Cooke, CM Francis, EA Nyboer, G Pritchard, AD Binley, S Avery-Gomm, NC Ban, KF Beazley, **EM Bennett**, LK Blight, LE Bortolotti, AF Camfield, Z Gadallah, AL Jacob, I Naujokaitis-lewis, C Raudsepp-Hearne, DG Roche, F Soulard, D Stralberg, KD Sadler, KA Solarik, CD Ziter, J Brandt, CW McKindsey, DA Greenwood, PC Boxall, CF Ngolah, KMA Chan, D Lapen, S Power, J Girard, C DiBacco, S Hayne, D Orihel, DW Lewis, D Littlechild, SJ Marshall, L McDermott, R Whitlow, D Browne, J Sundaym, PA Smith. 2021. Key information needs to move from knowledge to action for biodiversity conservation in Canada. *Biological Conservation* 256: 108983.
128. Albizua, A, **EM Bennett**, G Larocque, R Krause, U. Pascual. 2021. Social networks influence farming practices and agrarian sustainability. *PLoS ONE* doi.org/10.1371/journal.pone.0244619
127. Mitchell, MGE, R Schuster, AL Jacob, DEL Hanna, C Ouellet Dallaire, C Raudsepp-Hearne, **EM Bennett**, B Lehner, KMA Chan. 2021. Identifying key ecosystem service providing areas to inform national-scale conservation planning. *Environmental Research Letters* 16: 014038.
126. Cooke, S, T Rytwinski, Trina, JJ Taylor, E Nyboer, VM Nguyen, JR Bennett, N Young, S Aitken, G Auld, J-F Lane, KA Prior, KE Smokorowski, PA Smith, A Jacob, DR Browne, J Blais, JT Kerr, B Ormeci, SM Alexander, CR Burn, RT Buxton, DM Orihel, J Vermaire, DL Murray, P Simon, K Edwards, J Clarke, M Xenopoulos, I Gregory-Eaves, **EM Bennett**, J P Smol. 2020. On “success” in applied environmental research – What is it, how can it be achieved, and how does one know when it has been achieved? *Environmental Reviews* 28: 357–372.
125. Galappaththi, E, J Ford, **EM Bennett**, F Berkes. 2020. Adapting to climate change in small-scale fisheries: Insights from indigenous communities in the global north and south. *Environmental Science and Policy* 116:160-170.
124. Adger, WN, A-S Crepin, C Folke, D Ospina Medina, FS Chapin III, K Segerson, KC Seto, JM Andries, S Barrett, **EM Bennett**, G Daily, T Elmqvist, J Fischer, N Kautsky, SA Levin, JF Shogren, J van den Bergh, B Walker, J Wilen. 2020. Urbanisation, migration and adaptation to climate change. *One Earth* 3: 2960299.
123. Rieb, JT, and **EM Bennett**. 2020. Landscape structure as a mediator of ecosystem service interactions. *Landscape Ecology* 14: 2863-2880.
122. Frei, B, D Renard, **EM Bennett**, R Chaplin-Kramer, J Rhemtulla, E Andersson, and C Queiroz. 2020. A brighter future for agricultural landscapes: diversity as a feature of resilience. *Global Food Security* 26: 100407.
121. Albizua, A, **EM Bennett**, U Pascual, G Laroque. 2020. The role of the social network structure on intensive farming practices spread: an example from Navarre, Spain. *Regional Environmental Change* 20: 99.

120. Hanna, D, D Roux, B Currie, and **EM Bennett**. 2020. Identifying pathways to reduce discrepancies between ecosystem service demand and provision: *Ecosystem Services* 43: 101119.
119. Lam, DPM, B Martin-Lopez, **EM Bennett**, AI Milcu-Horcea, A Wiek, and DJ Lang. 2020. Scaling the impact of local initiatives in sustainability transformations: an amplifying typology. *Urban Transformations* 2: 3.
118. Lin, M, A Biswas, and **EM Bennett**. 2020. Socio-ecological determinants on spatio-temporal changes of groundwater in the Yellow River Basin, China. *Science of the Total Environment* 731: 138725
117. Galappaththi, E, J Ford, and **EM Bennett**. 2020. Climate change and adaptation to social-ecological change: The case of indigenous people and reservoir aquaculture in Sri Lanka. *Climatic change*. doi.org/10.1007/s10584-020-02716-3.
116. Norstrom, AV, C Cvitanovic, MF Lof, S West, C Wyborn, P Balvanera, AT Bednarek, **EM Bennett**, R Biggs, A de Bremond, BM Campbell, JG Canadell, SR Carpenter, C Folke, EA Fulton, O Gaffney, S Gelcich, J-B Jouffray, M Leach, M LeTissier, B Martin-Lopez, M-F Loutre, AM Meadow, H Nagendra, D Payne, G Peterson, B Reyers, R Scholes, CI Speranza, M Spierenburg, M Stafford-Smith, M Tengo, S van der Hel, I van Putten, and H Osterblom. 2020. Principles for knowledge co-production in sustainability science. *Nature Sustainability* 3: 182-190.
115. Solan, M, **EM Bennett**, PJ Mumby, J Leyland, and JA Godbold. 2020. Benthic-based contributions to climate change mitigation and adaptation. *Philosophical Transactions B* 375: 20190107.
114. Weise, H, H Auge, C Baesler, I Baerlund, **EM Bennett**, U Berger, F Bohn, A Bonn, D Borchardt, F Brand, A Cchatzinotas, R Corstanje, F De Laender, P Dietrich, S Dunker, W Durka, I Fazey, J Groeneveld, CSE Guilbaud, H Harms, S Harpole, J Harris, K Jaz, F Jeltsch, K Johst, J Joshi, S Klotz, I Kuhn, C Kuhlicke, B Muller, V Radchuk, H Reuter, K Rinke, M Schmitt-Jansen, R Seppelt, A Singer, RJ Standish, HH Thulke, B Tietjen, M Weitere, C Wirth, C Wolf, and V Grimm. 2020. Resilience trinity: safeguarding ecosystem services across time horizons and decision contexts? *Oikos* 129: 445-456.
113. Falardeau, M and **EM Bennett**. 2020. Towards integrated knowledge of climate change in Arctic marine systems: a systematic literature review of multidisciplinary research. *Arctic Science* 6: 1-23.
112. Mastrangelo, ME, N Perez-Harguindeguy, L Enrico, **EM Bennett**, S Lavorel, G Cumming, DV Abeygunawardane, B Burkhard, B Egoh, L Frishkoff, L Galetto, S Huber, DS Karp, A Ke, E Kowaljow, B Locatelli, B Martin-Lopez, P Meyfroidt, TH Mwampamba, J Nel, KA Nicholas, C Nicholson, E Otero-Rozas, SJ Rahla, C Raudsepp-Hearne, T Ricketts, U Shrestha, KJ Winkler, and K Zoeller. 2019. Key knowledge gaps to achieve global sustainability goals. *Nature Sustainability* 2: 1115-1121.
111. Chaplin-Kramer, R, RP Sharp, C Weil, and **EM Bennett**, U Pascual, AL Vogl, KK Arkema, KA Brauman, AD Guerrry, NM Haddad, M Hamann, P Hamel, JA Johnson, L Mandel, HM Pereira, S Polasky, M Ruckelshaus, MR Shaw, JM Silver, GC Daily. 2019. Global Modeling of Nature's Contributions to People. *Science* 366: 255–258.

110. Galappaththi, E, J Ford, **EM Bennett**, and F Berkes. 2019. Climate change and community fisheries in the Arctic: A case study from Pangnirtung, Canada. *Journal of Environmental Management* 250: 109534.
109. Garrah, J, B Frei, and **EM Bennett**. 2019. Bright Spots Among Lakes in the Rideau Valley Watershed, Ontario. *Ecology & Society* 24: 22.
108. Singh, GG, G Bassioni, E Ceyhan, V Farjalla, B Chen, M Dominik, E Alisic, A Kemp, **EM Bennett**, N Selin, A Pelling, and KMA Chan. 2019. Science engagement unrewarded by institutions Despite high perceived value and motivated researchers. *Frontiers in Ecology and Environment* 17: 375-382.
107. Hanna, D, C Raudsepp-Hearne, and **EM Bennett**. 2019. The contribution of protected areas to ecosystem service provision and biodiversity. *Conservation Biology* 34: 244-255.
106. Haberman, D and **EM Bennett**. 2019. Ecosystem service bundles in global hinterlands. *Environmental Research Letters* 14: 084005.
105. Raudsepp-Hearne, C, GD Peterson, **EM Bennett**, R Biggs, A Norstrom, L Pereira, J Vervoort, D Iwaniec, T McPhearson, T Hichert, M Falardeau, and A Jimenez-Aceituno. 2019. Seeds of Good Anthropocenes: Developing Sustainability Scenarios for Northern Europe. *Sustainability Science* 15: 605-617.
104. Martin-Lopez, B, M Felipe-Lucia, **EM Bennett**, A Norström, GD Peterson, T Plieninger, C Hicks, F Turkelboom, M García-Llorente, S Jacobs, S Lavorel, and B Locatelli. 2019. A novel telecoupling framework to assess social relations across spatial scales for ecosystem services research. *Journal of Ecosystem Management* 241: 251-263.
103. Lin, M, **EM Bennett**, and A Biswas. 2019. Spatio-temporal dynamics of groundwater level in the Yellow River Basin. *Journal of Environmental Management* 235: 84-95.
102. Lin, Mi, **EM Bennett**, and A Biswas. 2019. Identifying hotspots and representative monitoring area of groundwater changes with time stability analysis. *Science of the Total Environment* 667: 419-426.
101. J-O Goyette, **EM Bennett**, and R Maranger. 2018. The influence of landscape features, dams, lakes, and climate on uncoupling nitrogen and phosphorus transport throughout the watershed. *Biogeochemistry* 142: 155-174.
100. Galappaththi, E, J Ford, and **EM Bennett**. 2018. A framework for assessing community adaptation to climate change in a fisheries context. *Environmental Science and Policy* 92: 17-26.
99. Goyette, JO, **EM Bennett**, and R Maranger. 2018. Low phosphorus buffering capacity and long legacies in watersheds threaten water quality. *Nature Geoscience* 11: 921-925.
98. Treadwell, J, G Clark, and **EM Bennett**. 2018. The role of management instruments in the diversion of organic municipal solid waste and phosphorus recycling. *FACETS* 3: 896–919.
97. Falardeau, M, **EM Bennett**, and C Raudsepp-Hearne. 2018. A novel approach for co-producing positive scenarios that explore agency: Case study from the Canadian Arctic. *Sustainability Science* 14: 205-220.
96. Methot, J and **EM Bennett**. 2018. Reconsidering non-traditional export agriculture and household food security: a case study in rural Guatemala. *PLOS One* 13: e0198113.
95. Frei, B, D Renard, M Mitchell, V Seufert, B Chaplin-Kramer, J Rhemtulla, and **EM Bennett**. 2018. Bright spots in agricultural landscapes: Identifying areas exceeding expectations for multifunctionality and biodiversity. *Journal of Applied Ecology*: 1-13.

94. Talbot, CJ, **EM Bennett**, K Cassell, DM Hanes, EC Minor, H Paerl, PA Raymond, R Vargas, PG Vidon, W Wollheim, and MA Xenopoulos. 2018. Gains and losses of aquatic ecosystem services from small and extreme flooding. *Biogeochemistry* 141: 439-461.
93. Kusmer, AS, JO Goyette, GK MacDonald, **EM Bennett**, R Maranger, and PJA Withers. 2018. Watershed buffering of legacy phosphorus pressure at a regional scale: A comparison across space and time. *Ecosystems* 22: 91-109.
92. Frei, B, **EM Bennett**, and JT Kerr. 2018. Heterogenous, multifunctional agricultural landscapes critical for species of conservation concern in agroecosystems with a long history of agriculture. *Regional Environmental Change* 7: 2105-2115.
91. Nesme, T, GS Metson, and **EM Bennett**. 2018. Global phosphorus flows through agricultural trade. *Global Environmental Change* 50: 133-141.
90. Chillo, V, D Vazquez, M Amoroso, and **EM Bennett**. 2018. Land use intensity indirectly affects ecosystem services mainly through plant functional identity in a temperate forest. *Functional Ecology* 32: 1390–1399.
89. Wironen, M, **EM Bennett**, and J Erikson. 2018. Phosphorus Flows and Legacy Accumulation in an Animal-Dominated Agricultural Region from 1925 to 2012. *Global Environmental Change*. 50: 88–99.
88. Treadwell, JL, OG Clark, and **EM Bennett**. 2018. Dynamic simulation of phosphorus flows through Montreal's food and waste systems. *Resources, Conservation, and Recycling* 131: 122-133
87. Hanna, D, C Ouellet-Dallaire, S Tomscha, and **EM Bennett**. 2017. A review of riverine ecosystem service quantification: shortcomings and recommendations. *Journal of Applied Ecology* 55: 1299–1311.
86. Vermaire, JC, ZE Tararu, GK MacDonald, K Velghe, **EM Bennett**, and I Gregory-Eaves. 2017. Extrinsic versus intrinsic regimes shifts in shallow lakes: Long-term response of cyanobacterial blooms to historical catchment phosphorus loading and climate warming. *Frontiers in Ecology and Evolution* 5:146.
85. Campbell, BM, DJ Beare, EM Bennett, JM Hall-Spencer, JSI Ingram, F Jaramillo, R Ortiz, N Ramankutty, JA Sayer and D Shindell. 2017. Agriculture production as a major driver of the Earth system exceeding planetary boundaries. *Ecology and Society* 22: 8.
84. Spake, R, R Lasseur, E Crouzat, **EM Bennett**, J Maes, M Mulligan, M Mouchet, GD Peterson, CJF Schlup, W Thuiller, MG Turner, PH Verberg, K Parks, M Schaafsma, JM Bullock, S Lavorel, F Eigenbrod. 2017. Unpacking ecosystem service bundles: towards predictive mapping of synergies and trade-offs between ecosystem services. *Global Environmental Change* 47: 37-50.
83. Rieb, JT, R Chaplin-Kramer, GC Daily, PR Armsworth, K Böhning-Gaese, A Bonn, GS Cumming, F Eigenbrod, V Grimm, BM Jackson, A Marques, SK Pattanayak, HM Pereira, GD Peterson, TH Ricketts, BE Robinson, M Schröter, LA Schulte-Moore, R Seppelt, MG Turner, and **EM Bennett**. 2017. When, where, and how much does nature matter? *BioScience* 67: 820-833.
82. Sutherland, IJ, A Villamagna, C Ouellet Dallaire, **EM Bennett**, ATM Chin, A Yeung, KA Lamothe, SA Tomscha, and R Cormier. 2017. Undervalued and under pressure: a plea for greater attention toward regulating ecosystem services. *Ecological Indicators* 94: 23-32.
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 14. **E.M. Bennett** and M. Zurek. Integrating epistemologies through scenarios. 2006. p. 275-293. In W. Reid, F. Berkes, T. Wilbanks, and D. Capistrano, Eds. *Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Environmental Assessments*. Island Press.
 13. Carpenter, S. R., D. E. Armstrong, **E. M. Bennett**, K. Braiser, B. Kahn, R. C. Lathrop, P. Nowak and T. Reed-Andersen. 2005. The ongoing experiment: Restoration of Lake Mendota. In *Lakes in Landscapes*, J. J. Magnuson and T. K. Kratz (Eds).
 12. Lebel, L., P. Thongbai, K. Kok, **E. M. Bennett**, W. Mala, J. Agard, R. Biggs, C. Rumsey, Y. Gokhale, M. Zurek, C. Filer, S. J. Velarde, M. Ferreira.. Sub-global scenarios. In *Millennium Ecosystem Assessment: Multi-scale Assessments*. Washington, D.C.: Island Press.
 11. Nakicenovic, N., J. McGlade, S. Ma, J. Alcamo, **E. M. Bennett**, W. Cramer, J. Robinson, F. L. Toth, and M. Zurek. 2005. Ch12. Synthesis: Lessons learned for scenario analysis. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 10. Rodríguez,, J. P., T. Douglas Beard, Jr., J. Agard, **E. M. Bennett**, S. Cork, G. C. Cumming, D. Deane, A. P. Dobson, D.M. Lodge, M. Mutale, G. Nelson, G. D. Peterson, and T. Ribeiro. 2005. Ch.11. Interactions among ecosystem services. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 9. Alcamo, J., D. van Vuuren, W. Cramer, J. Alder, **E. M. Bennett**, S. R. Carpenter, J. A. Foley, M. Maerker, T. Masui, T. Morita, B. O'Neill, G. D. Peterson, C. Ringler, M. Rosegrant, and K. Schulze. 2005. Ch. 9. Changes in Provisioning and Regulating Ecosystem Goods and Services and their Drivers Across the Scenarios. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 8. S. Cork, G. Peterson and G. Petschel-Held, J. Alcamo, J. Alder, **E. M. Bennett**, E. Carr, D. Deane, G. Nelson, and T. Ribeiro. 2005. Ch. 8. Four Scenarios. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 7. **Bennett, E.M.** and A. Dobermann. 2005. Plant nutrient use, a section in G. C. Nelson et al. Ch.7. Drivers of change in ecosystem condition and services. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 6. Alcamo, J. D. van Vuuren, M.Rosegrant, J. Alder, **E. M. Bennett**, D. Lodge, T. Masui, T. Morita, C. Ringler, O. Sala, K. Schulze, M. Zurek, B. Eickhout, M. Maerker, and K. Kok. 2005. Methodology for developing the Millennium Ecosystem Assessment scenarios. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Washington, D.C.: Island Press.
 5. **Bennett, E. M.**, and S. R. Carpenter. 2005. Forecasting changes in phosphorus cycling and impacts on water quality, a section in P. Kareiva et al., Ch.4. State of the art in describing future changes in ecosystem services. In *Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services*. Island Press, Washington, D.C.

4. **Bennett, E.M.**, S. R. Carpenter, S. Cork, G. D. Peterson, G. Petschel-Held, T. Ribeiro, and M. Zurek. 2005. Ch.5. Scenarios for ecosystem services: Rationale and overview. In Millennium Ecosystem Assessment. Scenarios for the Future of Ecosystem Services. Island Press, Washington, D.C.
3. S. R. Carpenter, **E. M. Bennett**, M. Zurek, and P. Pingali, Eds. 2005. Ecosystems and Human Well-Being: Millennium Ecosystem Assessment Scenarios for the Future of Ecosystem Services. Washington, D. C.: Island Press.
2. Balvanera, P., Ravi Prabhu and others. 2004. Ecosystem Services: The basis for global survival and development. Commissioned Issue Paper of the UN Millennium Project Task Force on Environmental Sustainability.
1. **Millennium Ecosystem Assessment**. 2003. People and Ecosystems: A Framework for Assessment and Action. Washington, D.C.: Island Press.

Other publications

22. Bennett, EM, and B Reyers. 2022. Navigating the dynamics of people-planet relationships: A social-ecological systems perspective. Published online by the UNEP and UNU: <https://cpr.unu.edu/research/projects/human-environment-relationship.html#outline> as part of the Stockholm +50 “Reimagining the human-environment relationship project.
21. Ramankutty, N, E Bennett, and L Silberman. 2019. Opinion: Instead of flight shaming, let's be thoughtful and selective about travel. Ensia. <https://ensia.com/voices/flight-shaming-flying-travel-carbon-co2-emissions-flyless-aviation-cars-trains/>
20. Pereira, L, **EM Bennett**, R Biggs, A Mangnus, A Norstrom, GD Peterson, C Raudsepp-Hearne, M Sellberg, J Vervoort. 2019. Seeding change by visioning good Anthropocenes. Solutions 10 (3).
19. Peterson, GD, Z Harmackova, M Meacham, C Queiroz, A Jimenez Aceituno, J Kuiper, K Malmborg, N Sitas, and **EM Bennett**. 2018. Welcoming different perspectives in IPBES: Nature's Contributions to People and Ecosystem Services. Ecology and Society 23(1):39. <https://doi.org/10.5751/ES-10134-230139>.
18. Peterson, GD, ZV Harmackova, M Meacham, C Queiroz, A Jiménez Aceituno, JJ Kuiper, K Malmborg, NE Sitas 2 and EM Bennett. 18 March 2018. Connecting people's contributions to nature to nature's contributions to people. Science eLetters.
17. Rieb, JT, R Chaplin-Kramer, GC Daily, PR Armsworth, K Böhning-Gaese, A Bonn, GS Cumming, F Eigenbrod, V Grimm, BM Jackson, A Marques, SK Pattanayak, HM Pereira, GD Peterson, TH Ricketts, BE Robinson, M Schröter, LA Schulte-Moore, R Seppelt, MG Turner, and **EM Bennett**. 2018. Response to Kabisch and Colleagues. BioScience 68(3): 167-168.
16. **Bennett, EM**. 2017. Editorial: On slow science. Biogeochemistry. DOI 10.1007/s10533-017-0377-y
15. **Bennett, EM**. 2017. Changing the agriculture and environment conversation. Nature Ecology and Evolution 1: 0018. DOI: 10.1038/s41559-016-0018
14. Potvin **et al.** 2015. Acting on climate change: Solutions from Canadian Scholars. Sustainable Canada Dialogues.
13. H Tallis **et al.** 2014. Towards a diverse conservation ethic. Nature 515: 27-28.
12. Metson, GS, VH Smith, D Cordell, DA Vaccari, JJ Elser, and **EM Bennett**. 2014. Phosphorus is a key component of the resource demands for meat, eggs, and dairy production in the United States. Proceedings of the National Academy of Sciences.

11. **E.M. Bennett.** 2014. Social media for ecologists. *Frontiers in Ecology and Evolution* (Editorial).
10. Elser, J.J., and **E. M. Bennett.** 2011. Phosphorus cycle: A broken biogeochemical cycle. *Nature* 478: 29-31 Invited Commentary.
9. Raudsepp-Hearne, C., G. D. Peterson, M. Tengo, and **E. M. Bennett.** 2011. The paradox persists: How to resolve it? *BioScience* 61(1): 11
8. Cardille, J.A. and **E. M. Bennett.** 2010. Tropical Teleconnections. *Nature Geoscience* 3: 154-155. (Invited Commentary)
7. **E. M. Bennett.** 2010. Understanding the interactions among ecosystem services can improve ecosystem management. *Bulletin of the British Ecological Society* 41: 4-6.
6. M. B. Zurek, R. Biggs, **E. M. Bennett**, C. Raudsepp-Hearne, K. Kok, S. J. Velarde. Module 5: Exploring Future Implications of Choices about Ecosystem services and Human well-being. World Resources Institute.
5. **Bennett, E. M.** and S. R. Carpenter. P Soup. 2001. World Watch
4. Carpenter, S. R., E. A. Levitt, G. D. Peterson, **E. M. Bennett**, T. D. Beard, J. A. Cardille, and G. S. Cumming. 2003. Future of the Lakes: Scenarios for the future of Wisconsin's Northern Highland Lake District. Illustrations by Bill Feeney. (<http://www.lakefutures.wisc.edu>)
3. **Bennett, E. M.** 2003. Scenario development and resilience: Local and global examples of resilience of social-ecological systems. IHDP [International Human Dimensions of Global Change] Update. February 2003.
2. Lucas, N. and **E. M. Bennett.** 2006. Resilience and Pluralism: Ecosystems and Society in a Great Transition. GTI [Great Transition Institute] Paper Series #14. Boston, MA: Tellus Institute.
1. Evans, K., Velarde, S.J., Prieto, R., Rao, S.N., Sertzen, S., Dávila, K., Cronkleton P. and de Jong, W. 2006. Field guide to the future: Four ways for communities to think ahead. **E. Bennett** and M. Zurek (eds.). Nairobi: Center for International Forestry Research (CIFOR), ASB, World Agroforestry Centre. p.87. URL: <http://www.asb.cgiar.org/ma/scenarios>.

MAJOR GRANTS AND FUNDING: Grants listed only once in the year the grant was first received.

(Listed in parentheses is the amount of funding going to the Bennett lab in case of multiple PIs.)

2023 Bieler School of Environment IGNITE Grant for TLLC, The Landscapes and Livelihoods Collaboratory (2 years, co-lead-PI), **\$50,000**

2022 Climate Action and Awareness Fund, "Solutionscapes: Designing climate and water smart agricultural solutions in complex working landscapes" (5 years, co-PI), **\$3,700,000** (\$40,000)

IDRC (International Development Research Center), "Seeds of Good Anthropocenes: Fostering food system transformation in Africa" (3 years, co-PI) **\$300,000**

NOVA (FQRNT/NSERC for Early Career Researchers, "Challenges and opportunities for the Quebec cranberry industry: towards better management of wild pollinators" (3 years, co-PI) **\$72,000**

2021 NSF Dynamics of Integrated Socio-Environmental Systems, "Resilience in agricultural socio-environmental systems" (co-PI) **\$497,321**

- 2020 NSERC CREATE LEADS: Science leadership for global sustainability (6 years, co-PI) **\$1,750,000** (\$150,000)
- 2019 NSERC Strategic Network (5 years, lead PI) **\$5,500,000** (\$1,500,000)
NSERC Discovery (5 years, sole applicant) **\$275,000**
- 2018 NSERC Funding to support preparation of a full Strategic Network proposal **\$23,576**
- 2016 E.W.R. Steacie Memorial Fellowship (2 years) **\$250,000**
La Ministre Responsable de L'Enseignement Supérieur (1 year, co-PI) **\$91,500**
- 2015 Marine Environmental Observation Prediction and Response Network (MEOPAR) **\$350,000** (\$65,500)
- 2014 NSF/Future Earth. Bright Spots: Seeds of a Good Anthropocene. (2 years, lead PI) **US \$75,000** (approx. CDN \$70,000)
sDiv Synthesis Centre of Biodiversity Sciences. Next generation models for ecosystem services and biodiversity, sESMOD (1 year, lead PI) **€17,544** (approx. CDN \$25,000)
FQRSC Regroupement Stratégiques. (CICADA. Centre pour la conservation et le développement autochtones alternatifs (3 years, co-PI) **\$204,750**
Sustainability Projects Fund. (1 year, co-PI). **\$39,850** (\$15,000)
NSERC CREATE. Enhancing Canada's prosperity through innovative environmental assessment, monitoring, and management (6 years, co-PI) **\$1,750,000** (\$50,000)
SSHRC Partnership. Economics for the Anthropocene (6 years, co-PI) **\$2,495,691** (\$25,000)
- 2013 Sustainability Projects Fund. (1 year, E Bennett, sole PI) **\$31,030**
NSERC Discovery. "Ecosystem service interactions across landscapes" (5 years, sole applicant, **\$200,000**)
- 2012 NSERC Strategic Network Grant. Canadian network for aquatic ecosystem services. (5 years, co-PI). **\$4,416,625.** (\$84,700)
NAKFI (National Academy Keck Futures Initiative). Woody plant encroachment: degradation or just a shift in the portfolio of ecosystem services? (2 years, E Bennett and O Sala, co-PIs) **\$75,000.** (\$37,500)

NAKFI (National Academy Keck Futures Initiative). Assessing the sustainability of agricultural commodity chains: Contrasting ecosystem service impacts of small-scale agriculture and large-scale agribusiness. (2 years, E. Bennett, C. Kremen, K. Carlson, N. Walker, co-PIs). **\$100,000** (\$25,000)

2011 IDRC (International Development Research Centre). Innovating for resilient farming systems in semi-arid Kenya. (3 years, co-PI). **\$1,441,317.** (\$111,927)

2010 USGS. "Spatial Analysis of relations among conservation practices, aquatic ecosystem services, human well-being in the Albemarle-Pamlico basin."(1 year, sole applicant) **\$50,000**

NSERC Strategic Projects. Ecosystem services, biodiversity, and landscape connectivity. (3 years, E Bennett, lead PI) **\$463,483** (\$300,000)

Max Bell Foundation award. Integrating bioindicators of stream water quality into regional planning for peri-urban landscapes. (3 years, co-PI) **\$209,000.** (\$75,000)

Programmation Scientifique PACC-26/OURANOS. Corridors, biodiversité, et services écologiques: un réseau écologique pour le maintien de la connectivité et une gestion résiliente aux changements climatiques dans l'Ouest des Basses-Terres du Saint-Laurent. (3 years, co-PI) **\$250,000** (\$100,000)

2009 USGS. "Spatial Analysis of relations among conservation practices, aquatic ecosystem services, human well-being in the Albemarle-Pamlico basin."(1 year, sole applicant) **\$25,000**

2008 NSERC Discovery. "Understanding resilience across the landscape: mapping, modeling, and managing ecosystem services."(5 years, sole applicant). **\$75,000**

USGS. Quantifying multiple ecosystem services. (1 year, co-PI). **\$20,000** (\$10,000)

2007 CFI Leaders Opportunity Fund. "Understanding resilience across the landscape: mapping, modeling, and managing ecosystem services." 5 years, sole applicant) **\$193,337**

2006 FQRNT. "Soil P and eutrophication: Slowly-changing variables as a possible mechanistic explanation for land use legacies." (2 years, sole applicant) **\$40,000**

Christensen Foundation. A long-range planning process for building the resilience of traditional communities. As a team led by the Conservation Strategy Fund. (1 year, sole applicant) **\$50,000**

HONORS AND AWARDS:

- Elected Fellow, The Royal Society of Canada (2023)

- Elected Fellow, Beijer Institute of Ecological Economics of the Royal Swedish Academy of Sciences (2023)
- Elected Member, US National Academy of Sciences (2022)
- David Thomson Award for Graduate Supervision and Teaching (2022)
- Guggenheim Fellowship (2022)
- Delta Management “Clean16” Award, recognizing leadership in education and thought on sustainability (2021)
- Web of Science Highly Cited Researcher, Clarivate (2020, 2021, 2022)
- Canada Research Chair (CRC) Tier 1 in Sustainability Science, 2019-2026 (with \$200,000/year)
- Ecological Society of America *Innovations in Sustainability Science Award*, 2019, for “Bennett et al. Bright Spots: Seeds of a Good Anthropocene”.
- Member, College of New Scholars, Artists, and Scientists of the Royal Society of Canada (2017 – 2024)
- Alice Johannsen Award, 2016 (given annually by the Mont Saint-Hilaire Nature Centre to a person or a group who has made a significant contribution towards the protection of nature) for the Montérégie Connection Project.
- E.W.R. Steacie Memorial Fellow, 2015 (with \$250,000)
- McGill Catalyst Award for staff contribution to sustainability on campus, 2015
- Trottier Public Policy Fellowship 2013-2014 (with \$80,000 funding to initiate public policy engagement related to the Monterege Connection project)
- Winner, Carrie M. Derick Award for Excellence in Graduate Supervision, 2013
- Selected to be a member of the Global Young Academy, 2013 – 2017
- IAP Young Scientist representative of the Royal Society of Canada at the Summer Davos meeting of the World Economic Forum. Tianjin, China, September 2012
- Faculty of Agriculture and Environmental Science nominee for the Principal’s Award for Teaching Excellence, 2012
- Macdonald Campus Award for Teaching Excellence, 2012
- Invited to attend the 9th Annual National Academies Keck Futures Initiative (NAKFI) conference on Ecosystem Services: Charting a Path to Food Security that is a Win Win for People and the Environment, 2011
- Leopold Leadership Fellow, 2011
- Dane County Lakes and Watershed Commission’s Lake Champion Award, 2005

INVITED CONFERENCE AND PUBLIC PRESENTATIONS

- Honorary commencement speaker. McGill University Macdonald Campus. June 2022.
- Keynote: British Ecological Society, Transformation to a Resilient Agriculture, December 2021
- Global Water Futures Annual Symposium Opening Keynote, May 2021
- PAGSE “Bacon and Eggheads” keynote for parliamentarians and the public. Online, December 2020.
- Opening Plenary Panel. McConnell Foundation Transition: Places, Pathways, and People. Waterloo, Ontario, February 2020

- Keynote: Ecosystem Services Partnership World Conference. Hamburg, Germany, October 2019
- Plenary: Leverage Points. Bright Spots – Seeds of Good Anthropocenes. Luneburg, Germany, February 2019.
- TEDxCERN. Seeds of Good Anthropocenes. Geneva, Switzerland, November 2018
- US National Academy of Science Sackler Forum. Managing working landscapes for multiple ecosystem services as solution to climate change. Washington DC, November 2018
- Public Keynote: Bright Spots-Seeds of a Good Anthropocene. The Long Now Foundation. San Francisco, California, March 2018
- Nature Talks: Cross Country Speaker Series. Montreal, Canada, October 2017.
- Plenary: Canadian Society for Ecological Economics. Montreal, Canada, October 2017.
- Keynote: Joint British Ecological Society and Biodiversity and Ecosystem Services for Sustainability Symposium. Cardiff, Wales, April 2017
- World Economic Forum. IdeasLab: Bright Spots-Seeds of Good Anthropocenes. Davos, Switzerland, January 2017.
- Using resilience thinking to mainstream biodiversity. 3rd Annual Science for Biodiversity Forum at the Convention on Biological Diversity, Cancun, Mexico, December 2016
- Inland Fisheries annual meeting. Plenary lecture on Bright Spots of a Good Anthropocene. Queens University Biological Station. October 2016.
- Opening Plenary: Canadian Society for Ecology and Evolution. Ecosystem services to improve ecological management. St John's, NL. July 2016.
- World Economic Forum. IdeasLab. Bright spots: Exploring Pathways to a Better Anthropocene Tianjin, China. June 2016.
- EM Bennett, R. Biggs, G. D. Peterson, and A. Norstrom. Bright Spots: Exploring Pathways to a Better Anthropocene. Ecological Society of America. Baltimore, MD. August 2015.
- EM Bennett and W. Cramer. Future Directions: Research priorities for landscape management of ecosystem services and biodiversity. International Association of Landscape Ecologists. Portland, OR. July 2015
- L'ère Anthropocène : exploration vers un meilleur futur, à Montréal et dans le monde. Americana Conference. Montreal, QC. March 2015.
- Nesme, T. and E.M. Bennett. Keynote address: Sustainable phosphorus use in agroecosystems: a story of global imbalance and resource recycling. 5th international symposium on Phosphorus in Soils and Plants. Montpellier, France. August 2014.
- The role of ecosystem science in understanding food security. US Congressional briefing. October 25, 2013.
- Bennett, EM, S.R. Carpenter, N. Ramankutty, and L. Gordon. What can resilience thinking tell us about sustainable agricultural development? Ecological Society of America invited Ignite talk. Minneapolis, Minnesota. August 2013.
- Long-term legacies and cross-scale impacts of agriculture on water quality. Ecological Society of America invited Symposium talk. Minneapolis, Minnesota. August 2013.
- Panel Discussion: Engaging Ecologists in Public Policy: Revisiting ESA Recommendations. Minneapolis, Minnesota. August 2013.

- Measuring Multiple Ecosystem Services in Disturbed Landscapes. CNAES (Canadian Network for Aquatic Ecosystem Services) annual meeting. April 29, 2013.
- Reconnecting people to nature: Planning for multi-functional landscapes. February 2013. AAAS. Boston, MA, USA
- L. Gerber and EM Bennett. Overcoming institutional barriers to science communication. February 2013. AAAS. Boston, MA, USA
- Bennett, EM., A. Gonzalez, M. Lechowicz, and J. Rhemtulla. Ecosystem services and the future of production systems. Ecological Society of America, Austin, Texas. August 2011
- MacKay, R., EM Bennett, and A. LeFebvre. 2010. Using a Beneficial Management Practice (BMP) Adoption Index in Agri-Environmental Policy in Canada. OECD Workshop: Agri-environmental indicators: Lessons learned and future directions. 23-26 March 2010. Leysin-Switzerland.
- 2007. Introductory remarks on modeling multiple ecosystem services. Ecological Society of America. San Jose, California.
- Bennett, EM and P. Balvanera. 2006. Ecology in an era of globalization: Production systems. Ecological Society of America, Merida, Mexico.
- Bennett, EM. 2005. Comparing alternate futures of ecosystem services and human well-being: The Millennium Ecosystem Assessment Scenarios. Ecological Society of America, Montreal, QC, Canada.
- Brunson, Mark, and E. M. Bennett. 2004. Developing assessment tools in support of sustainable land use policy: a status report. Ecological Society of America, Portland, OR.
- Bennett, E. M., S. R. Carpenter, P. Pingali, and M. Zurek. 2003. The role of ecology in global scenarios. Ecological Society of America, Savannah, Georgia.
- North American Benthological Society. Phosphorus storage along an urban to rural gradient. June 2001.
- Implications of watershed P budgets for nutrient management. 2000. Statewide nonpoint manager's conference, Wisconsin DNR.
- Agriculture and Lake Mendota water quality. Wisconsin Fertilizer, Aglime, and Pest Management Conference. 2000. Madison, WI.
- A phosphorus budget for the Lake Mendota watershed: management implications. Statewide fisheries managers' conference, Wisconsin Department of Natural Resources. 1999. Eau Claire, WI.

INVITED UNIVERSITY LECTURES (AND SIMILAR):

- Graduate Student Association (GSA) of Cornell University's Department of Natural Resources and the Environment Research Symposium, January 2023.
- Grasslands 2.0. People, nature, and ecosystem services: The role of place-making in conservation and science, October 2022.
- Hopke Lecture, Clarkson University, March 2022
- STEPS (The Science and Technologies for Phosphorus Sustainability) Centre, December 2021
- University of British Columbia-Okanagan, November 2021
- Delaware Valley One Health Center, November 2021
- University of Colorado Ecology and Evolutionary Biology symposium, November 2021

- Wisconsin Ecology Symposium, University of Wisconsin, April 2021
- Carnegie Institute of Science, Department of Global Ecology, April 2021
- University of Saskatchewan School of Environment and Sustainability, May 2020
- University of Nebraska Heuermann Lecture, January 2020
- University of Ottawa Biology Department Seminar, November 2019
- Burba Family Lecture, Northeastern University, April 2019
- Stockholm Seminar (Royal Swedish Academy of Sciences), May 2017
- Université de Sherbrooke, Departement de Biologie, November 2016
- Dalhousie University, Department of Plant, Food, and Environmental Sciences, November 2016
- Columbia University, Department of Ecology, Evolution, & Environmental Biology, Nov 2016
- McGill joint Senate and Board of Governors meeting, November 2016
- Cary Institute for Ecosystem Studies, October 2016
- Université de Quebec à Montréal, Seminar de Biologie, January 2016
- Panelist, Teaching what's important: Educating students for today and tomorrow, McGill University, December 2015
- First annual lecture and panel, the Trottier Institute for Science and Public Policy, Sept 2015
- sDiv (Leipzig, Germany) public seminar, April 2015
- University of Virginia Environmental Sciences seminar, November 2014
- Duke University Mega-trends in Ecology seminar, October 2014
- Muskoka Summit on the Environment public forum, May 2014
- Iowa State Graduate Program in Sustainable Agriculture Symposium, April 2014
- Carleton College Environmental Studies Lecture Series, March 2014
- The Baker Center Energy and Environment Forum University of Tennessee, January 2014
- Gund Institute for Ecological Economics, University of Vermont. October 2013
- MAUT (McGill Association of University Teachers) Retirees Luncheon. June 2013.
- McGill University. McGill School of Environment 5th Annual Symposium. April 2013.
- University of Hawaii. Geobiology and Geophysics seminar. April 2013
- Arizona State University. Ecology Seminar. March 2013
- 2013 Hammond Lecture in Environment at the University of Guelph. March 2013
- Guelph University. School of Environmental Science. March 2013
- Virginia Tech. Multiple ecosystem services in agricultural landscapes. December 2012.
- Fairfield University. Multiple ecosystem services in agricultural landscapes. March 2012.
- Michigan State University (Kellogg Biological Station). Provision of multiple ecosystem services in an agricultural landscape in Quebec. January 2012.
- McGill University. Cutting Edge Science lecture. Feeding the world without destroying it: What we can learn from the agricultural areas around Montreal. December 2011.
- Podcast interview about “virtual ecosystem services” with Joe Palca (NPR) for the NAFKI conference on Ecosystem services.
- Pennsylvania State University. 2010. Earth Talks Series: Embracing Change: Resilience and Adaptation in Turbulent Times
- Quebec Centre for Biodiversity Science. 2010. Ecosystem services and biodiversity in QC
- Cornell University. 2009. Keynote Speaker, Natural Resource Sciences Annual Symposium.

- McGill University. 2008. Classes without Quizzes (MSE homecoming presentation).
- McGill University. 2007. ReThink Campus Sustainability Seminar. Synthesis Speaker.
- Queen's University. 2006. Ecology and Evolutionary Biology Seminar Series
- University of Washington. 2006. Rising stars in Aquatic Sciences, School of Aquatic and Fisheries Science
- McGill University. 2006. Food for Thought (FAES evening seminar series).

TEACHING (2005 TO PRESENT)

ENVR 201. Society and Environment- as team member (2005-2010)
ENVR 201. Society, Environment, and Sustainability – as course coordinator (2010-2016)
ENVR 401. Environmental Research– as team member (2006)
ENVR 401. Environmental Research – as course coordinator (2008)
ENVB 415. Ecosystem Management: Capstone Course (2011 – 2015)
NRSC 430. GIS for Natural Resource Management- sole instructor (2006-2013)
ENVR 480. Unearthing Montreal. The ecological history of Montreal Island and its impact on the environmental sustainability of modern Montreal. (2012-2016)
NRSC 680/ENVR 680. Special Topics: The Ecology and Environment of Food – sole instructor (Winter 2009)
NRSC /751 Graduate Proposal Seminar. (2012, 2014 - 2016)
ENVR 614. Mobilizing research for sustainability (2020 - 2021)
ENVR 200. Global Environment. (2020 -)

Undergraduate Supervision

Honors:

- Andrea Rawluk (MSE, 2006)
- Sophie Mazowita (MSE, 2006-2007)
- Helene Higgins (MSE, 2006-2007)
- Phil Potter (Geography, with Navin Ramankutty, 2007-2008)
- Valerie Francella (MSE, 2008-2009)
- Maggie Knight (MSE, 2010-2011)
- Emery Hartley (NRS, 2012-2013)
- Susanna Klassen (MSE, 2013-2014)
- Stephanie Cotnoir (MSE, 2015-2016)
- Jacob Garrah (MSE, 2017-2018)
- Ella Martin (NRS, 2018-2019)
- Noemie Roy (NRS, 2018-2019)
- Samuel Collin-Latour (NRS, 2018-2019)
- Sarah Armstrong (2020-2021)
- Marilou Binder (2021)
- Andrew Blackwell (2022)
- Ela Vermette-Furst (2023-2024)
- Léa Vadez (2023-2024)

- Sophie Weider (2023-2024)

Independent Studies:

- Sarah Booth (NRS, 2005)
- Meghan Collins (MSE and NRS, 2006)
- Naomi Robert (MSE, 2011)
- Emily Pedersen (MSE, 2012)
- Tereza Jarnikova (Math, Biology, 2012)
- Matthew Henry (Math, MSE, 2012)
- Morgan Crowley (MSE, 2012)
- Claudia Atomei (Geography, 2012)
- Cecile Tang (Biology, 2012)
- David Chen (Geography, 2015 (USRA))
- Freeman Taylor (Biology, 2021)
- Maya Willard-Stepan (BSE, 2022)
- Tali Pukier (BSE, 2022)
- Sarahlilly Stein (BSE, 2022)
- Andrew Blackwell (2022)
- Anna Pieper (2022)
- Ela Vermette-Furst (2022)
- Maya Willard-Stepan (2022-2023)

Graduate Supervision

Completed

PhD

- Ciara Raudsepp-Hearne, PhD, Geography. NSERC-PGSD. 2004-2009. Managing ecosystem services: tools and theory for understanding and managing the dynamics of multiple ecosystem services (Co-supervised with Dr. Garry Peterson)
- Graham MacDonald, PhD. NRS 2009 – 2012. Human impact on large-scale P Cycling. NSERC-PGSD.
- Matt Mitchell, PhD, NRS. NSERC-CGSD. 2009 – 2013. The effects of landscape structure on biodiversity and ecosystem services. (Co-supervised with Dr. Andy Gonzalez)
- Genevieve Metson. PhD, NRS. NSERC-CGSD 2011-2014. Urban phosphorus sustainability: how human diet, urban agriculture, and socioecological context influence phosphorus cycling and management
- Dorothy Maguire. PhD, NRS. 2011-2015. The effect of landscape structure on insect herbivory and biodiversity: implications for forest ecosystem services in the Montereigie, Quebec. (Co-supervised with Chris Buddle)
- Jean-Olivier Goyette. 2012-2018. Influence des flux anthropiques de nutriments et des caractéristiques du territoire sur la qualité de l'eau: une perspective historique du bassin du Saint-Laurent. Biologie (U de Montreal. Co-supervised with Roxanne Maranger.)
- Jacob Zeigler. PhD, NRS. 2014-2018. Social-ecological interactions in inland fisheries

management. (Co-supervised with Chris Solomon)

- Marianne Falardeau. PhD, NRS. 2014-2019. The Arctic Ocean under multiple pressures: Linking impacts on marine ecosystem processes, ecosystem services, and human well-being.
- Mi Lin, PhD, NRS. 2015-2019. Spatio-temporal changes in groundwater and its management in the Yellow River Basin, China.
- Jesse Trueman Rieb, PhD, NRS. 2014-2019. The dynamics of multiple ecosystem services: Improving models for the management of multifunctional landscapes.
- Dalal Emily Lucia Hanna, PhD, NRS. 2015-2020. Watershed protection and the provision of multiple ecosystem services.
- Eranga Galappaththi, Geography. 2017-2020. Opportunities for adaptation to climate change: A comparative analysis of Indigenous fisheries systems in the Canadian Arctic and Eastern Sri Lanka.
- Erin Crockett, NRS. 2015-2021. Co-supervised with Mark Vellend. Linking changes in biodiversity and ecosystem services across space and time.

MSc

- Graham MacDonald, MSc, NRS. 2006-2008. "Long-term trends in agriculture and water quality in the St. Lawrence River sub-basin, Canada." NSERC PGSM.
- Laura Pfiefer, MSc NRS (Environment Option). 2007-2009. "Physical, biological, and social drivers of urban stream chemistry in Montreal, Canada." NSERC CGSM.
- Rachel Laurin, Bioresource Integrated Water Resource Management (Non-thesis MSc). 2010.
- Robin MacKay, MSc, NRS. 2007-2010. "Development of a Beneficial Management Practices Adoption Index for Canada." Funded by Agriculture and Agri-foods Canada.
- Kate Liss, MSc. NRS (2010 – 2012) NSERC – Julie Payette. The role of configuration and composition in determining the provision of ecosystem services in multifunctional agricultural landscapes.
- Carly Ziter, MSc, Biology (co-supervised with Andy Gonzalez). (2011-2013) NSERC-CGSM. The effect of forest fragmentation on above ground carbon stocks and tree diversity: A case study of the Monteregie, Quebec.
- Josee Methot. MSc, NRS (MSE Option). NSERC-CGSM. (2010 – 2013) A multidimensional approach to food security and non-traditional export agriculture: a case study in rural Guatemala
- Ira Sutherland, MSc, NRS. NSERC-PGSM. (2013-2015). Long-term recovery of ecosystem services following forest harvest in coastal temperate rainforests of Vancouver Island, British Columbia, Canada
- Dan Haberman, MSc NRS. NSERC-PGSM (2014-2016). Ecosystem services in hinterlands: How cities connect to their resource base.
- Jillian Treadwell, Bioresource Engineering. NSERC-PGSM. (2014-2016). Phosphorus and waste management: Investigating the potential for recovery and recycling. Co supervised with Grant Clark
- Anna Kusmer, NRS. E4A Fellow. (2014-2016). Watershed buffering of anthropogenic

phosphorus pressure: landscape and legacy.

- Isabella Boushey, NRS (2017-2019). Evaluation of Aboveground Forest Carbon Sequestration for Climate Change Mitigation Targets: A Case Study on McGill University Properties.
- Julie Botzas-Coluni, NRS. NSERC-PGSM (2017 – 2019). The effects of farmland heterogeneity on ecosystem service provision.
- Juno Garrah, NRS. NSERC-PGSM (2018-2020). Connecting local environmental stewardship and social-ecological bright spots in New York City.

In progress

- Peter Morrison, MSc (2019 –)
- Catherine Destrempe, MSc (2020 –)
- Elson Ian Neil Galang, PhD (2020 -)
- David Ferguson, MSc (2021 -)
- Jacqueline Hamilton, PHD (2021 -)
- Olivia St-Laurent, MSc (2022-)

Postdoctoral Fellows and Visiting Scientists

- Dr. Jeff Liebert, co-supervised with Navin Ramankutty, June 2022-
- Dr. Yves Zinnegrebe, 2022
- Dr. Rachelle Gould, Fulbright Scholar, 2022
- Dr. Andrew Kadykalo, co-supervised with Adam Ford, May 2022-2023
- Dr. Christopher Lyon, May 2021-July 2022
- Dr. Jesse Rieb, co-supervised with Brian Robinson, July 2020 – May 2022
- Dr. Marie Dade, co-supervised with Brian Robinson, September 2018 – December 2021
- Dr. Karina Bennesaiah, Banting Fellow, September 2018 – May 2022
- Dr. Klara Winkler, September 2018 – 2020
- Dr. Amaia Albizua, December 2017 – 2019
- Dr. Luz Martinez, December 2014 – 2019
- Dr. Barbara Frei, September 2014 – July 2018
- Dr. Sylvestre Delmotte, 2013 – 2015
- Dr. Delphine Renard, 2012 – 2016 (co-supervised with Dr. Jeanine Rhemtulla)
- Dr. Shelby Riskin, Summer 2014
- Dr. Thomas Nesme. McGill Visiting Scholar (2013-2014)
- Dr. Veronique Chillo, 2013 – 2014 (Primary supervision by Diego Vasquez)
- Dr. Cheikh Sadibou Sakho, January - September 2012
- Dr. Marta Terrado-Casanovas, 2012
- Dr. Amy Villamagna. 2011-2012. (Supervised by Dr. Paul Angermeier, Virginia Tech)
- Dr. Meaghan Schipanski. . 2009-2010. MacDonald Agricultural Research Fellow
- Dr. Bronwyn Keatley. 2007-2008. Tomlinson Fellow. (Co-supervised by Rene Gregory-Eaves)
- Vicky Shaw, Fullbright Scholar. 2009-2010. (Co-supervised by Rene Gregory-Eaves)

UNIVERSITY AND DEPARTMENTAL SERVICE²

University Activities

- Jury, David Thomson Award for Graduate Supervision and Teaching (2023)
- Mentor, Provost's Faculty Mentorship Network (2022 -)
- Ad-Hoc University Tenure Committee, Faculty of Arts (2021)
- University Tenure Committee (Faculty of Science (2021)
- University Tenure Committee (Faculty of Engineering) (2020)
- McGill Advisory Council on Sustainability (2019- 2022)
- McGill EWR Steacie (Andrew McDonald) review committee (2019- 2023)
- University Tenure Committee (Faculty of Medicine) (2019)
- Task Force of Academic Experts on Carbon Neutrality (2017)
- Advisory committee, Sustainability Sciences and Technologies Initiative (2016 - 2019)
- Selection Committee, Trottier Institute for Science and Public Policy (2015)
- Adjudication Committee - Lifetime Achievement Award for Leadership in Learning (2015)
- Director, McGill Net Positive (2013-2014)
- Chair, search committee for the selection of the MSE Director (2014)
- Advisory Committee for the Selection of the Dean of Science (2014)
- Vision 2020. (2012-2014)
 - Vision 2020 Steering Committee (2012-2014)
 - Vision 2020 Subcommittee to develop the situational analysis (2012-current)
- MSE representative, McGill Senate Subcommittee on Environment (2006-2010)
- Member, Provost's Working Group on Environment at McGill (2007-2008)

Faculty Activities

- Member, Strategic Research Plan Development Team, Theme 1 (Environment, Ecology, and Sustainability) (2018-2019)
- Member, Steering Committee of The McGill Institute for Global Food Security (Fall 2017)
- Chair FAES Faculty Planning Committee (Fall 2015 – Fall 2016)
- FAES CFI-9 internal review board (Winter 2016)
- Faculty Search, “Social Innovation” position (Fall 2014)
- FAES Environment Committee (2011 – 2013)
- FAES Library Committee (2011 – 2014)
- Macdonald Scholarships Committee (Fall 2006 – April 2011)
- Member, Information Technologies Committee (Winter 2010 – Winter 2011)
- Environmental Biology Major Program Development (Fall 2006-Spring 2008)
- Leader, with Caroline Begg, of development of Applied Ecosystem Sciences specialization within the Environmental Biology Major (2007-2008)
- Specialization Coordinator, Applied Ecosystem Sciences and Design (Fall 2009 - 2012)
- Member, BioResource Engineering search committee, hydrologist position, (Winter 2009)

² Note that I did not participate in most committee work while on maternity leave (September 2007 to September 2008, July 2009-April 2010), but continued service upon returning to my regular position.

Departmental Activities – BSE

- Chair, Bieler Pillar 2 (Research) Committee (2021 – present)
- Chair, Space Committee (2014 – 2016)
- Member, Graduate Affairs Committee (2011 –2013)
- Member, search committee urban sustainability position (Fall 2010)
- MSE Executive Committee member (2008 –2011, sustained during maternity leave)
- MSE Undergraduate Affairs Committee (2006-2010)
- Participated in MSE planning retreats in Fall 2005, (reviewing undergraduate domains), Winter 2008, and Spring 2008 (developing an MSE graduate program)
- Academic advisor – Sustainability, science, and society (2010 – 2012)

Departmental Activities – NRS

- Member, hiring committee, McGill Writing Centre Faculty Lecturer (2021-2022)
- Member, NRS Seminar Committee (2020 -)
- Member, NRS Executive Committee (2019 -)
- NRS Tenure and Promotions Committee (2012-2013, 2022-2023)
- NRS Graduate Affairs Committee (Winter 2011 – 2015)
- NRS Vision Committee (Fall 2010)
- NRS Computer Committee (Fall 2006)
- Academic advisor – Environmental Biology (Fall 2006 – 2009)
- Academic advisor – Applied Environmental Sciences specialization (2009 – 2011)
- NRS Seminar series coordinator (Fall 2008 – Fall 2009)
- Member, search committee fish/fisheries biologist position (Winter 2009)

PROFESSIONAL ACTIVITIES AND EXTERNAL AND PUBLIC SERVICE

- External Advisory Council, Statistics Canada Census on Environment (2022-2024)
- CLA (Coordinating Lead Author), Chapter 3, IPBES Transformations Assessment (2022-2025)
- Co-chair, Programme on Ecosystem Change and Society (PECS), (2020-2023)
- Chair, International Scientific Advisory Council, Stockholm Resilience Centre (2022- current)
- Vice Chair, International Scientific Advisory Council, Stockholm Resilience Centre (2019-2022)
- Senior Editor, FACETS (July 2022-July 2025)
- Editorial Board, *Global Environmental Change* (2021 - current)
- Interim Editor-in-Chief Board Member, *Frontiers in Ecology and Environment* (2020-2021)
- Editorial Board, *One Earth* (2018 - current)
- Editorial Board, *Environmental Research Letters* (2019 - 2021)
- Advisory Board, Resilience Alliance (2018 - current)
- Board of Directors, Beijer Institute of Ecological Economics (2017 -)
- Development Team, Natural Assets Knowledge Action Network, Future Earth (2017 - 2019)
- IPBES Global Report Lead Author, Ch 3 (SDGs and Aichi targets)
- IPBES Regional Report (Americas), Lead Author, Ch 1 (Overview)

- GEOBON (the Group on Earth Observations Biodiversity Observation Network) Working Group 6 (Ecosystem Services (2016 - 2020)
- OPERAs (Operational Potential of Ecosystem Research Applications) advisory (2014-2018)
- Science Advisory Council, SNAPP (Science for Nature and People Partnership) (2015 - 2018)
- Advisory Board, Leopold Leadership Program (2015 -)
- Editorial board member, *Frontiers in Ecology and Environment* (2010 - current)
- Interim Editor in Chief Team Member, *Frontiers in Ecology and Environment* (2020)
- Advisory Board, Sustainable Phosphorus Alliance (2014 - 2017)
- Member, Ecological Society of America Science Committee (2014 – 2018)
- Co-Chair, EcoSERVICES, a FutureEarth project (2014-2019)
- Science Leadership Team for Bioversity's Agriculture and Conservation Initiative (2013 - 2015)
- Team member Biogeochemistry Theme, Goldschmidt Meeting 2014
- Editorial Advisory Board, *Global Food Security*, 2012-2015
- Senior editorial board member, *Regional Environmental Change*, 2011- 2015
- Member, Ecological Society of America Rapid Response Team, 2010 – 2015
- Member. Expert panel on 'The Sustainable Management of Water in Agricultural Landscapes of Canada. Council of Canadian Academies. (2011-2012)
- Editorial board member, *Regional Environmental Change*, 2008-2010
- Member, Faculty of 1000 Biology, Ecosystem Ecology section, 2008-2015
- Member, Ecological Society of America Public Affairs Committee, 2007-2009
- Editorial board member, *Ecology and Society*, 2004-2007, 2010
- Reviewer for: Science, Nature, Proceedings of the National Academy of Science, Landscape Ecology, Ecology Letters, Journal of Ecology, Ecosystems, Global Biogeochemical Cycles, Journal of Applied Ecology, Conservation Biology, Biogeochemistry, Ecological Applications, Environmental Management, Philosophical Transactions: Biological Sciences, Rangeland Ecology and Management, Journal of Plant Nutrition and Soil Science, Aquatic Sciences, Global Environmental Change, Regional Environmental Change, Science of the Total Environment
- Reviewer for scholarships and grants: WWF Kathryn Fuller Fellowship for postdoctoral scholars, NSF Ecosystems Division, The Swedish Governmental Agency for Innovation Systems and Formas on "Sustainable Use of Natural Resources", and NSERC, FQRNT.

SOCIETIES

- Ecological Society of America
- International Society of Landscape Ecology
- Resilience Alliance
- Groupe de Recherche Interuniversitaire en Limnologie et en environnement (GRIL)
- Quebec Centre for Biodiversity Science (QCBS)