Pamela H. Templer, PhD

Distinguished Professor and Chair

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EDUCATION

Ph.D. in Ecology and Evolutionary Biology, Cornell University, Ithaca, NY	2001
B.A. in Environmental Studies and Biology (double major), University of California Santa Cruz, CA	1995

ACADEMIC APPOINTMENTS

Distinguished Professor, Arts & Sciences, Boston University	2024-present
Chair, Department of Biology, Boston University	2022-present
Professor, Boston University	2017-2024
Director, BU URBAN Ph.D. Program, Boston University	2017-present
Director, Ph.D. Program in Biogeoscience, Boston University	2014-2021
Associate Chair, Department of Biology, Boston University	2014-2020
Associate Professor, Boston University	2012-2017
Assistant Professor, Boston University	2005-2012
Co-Director, Stable Isotope Laboratory, Boston University	2007-2025
Postdoctoral Fellow, University California Berkeley	2001-2005
Research Assistant, Cary Institute	1996

OTHER PROFESSIONAL APPOINTMENTS

President-Elect, Ecological Society of America (ESA)	2026-2029
Charles Bullard Fellow, Harvard University	2021-2022
Chair, ESA's Task Force on Diversity, Equity, Inclusion, and Justice	2020-2021
Elected Fellow, Ecological Society of America	2019
Elected Vice President for Education & Human Resources, Ecological Society of America	2018-2021
Faculty Research Fellow, Pardee Center for the Study of the Longer-Range Future, Boston University	2015-present
Associate of the Arnold Arboretum, Harvard University	2015-present
Charles Bullard Fellow and Sustainability Science Fellow, Harvard University	2013-2014
President, Graduate Student Association, Department of Ecology & Evol Bio, Cornell University	1998

HONORS AND AWARDS

Sustainability Champion Award, Boston University Institute Global Sustainability	2024
Provost's Scholar-Teacher of the Year Award, Boston University	2021
Assoc for Advancement Sustainability Higher Educ (AASHE) Campus Sustainability Research Award	2021
National Science Foundation Research Trainee (NRT) Grant, PI	2012-2017
Metcalf Award for Excellence in Teaching, Boston University (University-wide award)	2015
National Science Foundation CAREER Grant, PI	2012-2017
Andrew W. Mellon Foundation's Junior Faculty Research Grant, PI	2007-2011
Teresa Heinz Environmental Scholars Award (Ph.D. Dissertation Research Fellowship)	1999
Polgar Fellowship, Hudson River Foundation	1995
Honors undergraduate senior thesis, University California Santa Cruz	1995
National Science Foundation – Research Experience for Undergraduates (REU), Cary Institute	1994

LEADERSHIP AND SERVICE TO THE COMMUNITY

Co-Lead, Hubbard Brook Long-Term Ecological Research (LTER) Site	2022-present
Invited Author, The Nature Record (First U.S. National Nature Assessment; revised name)	2025-present
Selected Participant, HERS Leadership Institute	2025
Invited Member, U.S. National Committee for International Union of Biological Sciences	2024-2028
Invited Author, First U.S. National Nature Assessment, U.S. Global Change Research Program	2024-2025
Invited Member, Ecological Society of America Fellows/Early Career Fellows Selection Committee	2023-2026
Elected Member, Town of Brookline, Massachusetts Tree Planting Committee	2021-present
Invited Member, Lost Women in Science Advisory Board	2021-present
Invited Member, Task Force on International Nitrogen Management Systems (ILTER-INMS)	2021-2025
United Nations Focal Point & Presenter, Conference of the Parties (COP) annual climate summits	2019-2025

Invited Member, Technical Steering Committee - Executive Office of Energy & Environmental Affairs Massachusetts 2050 Decarbonization Roadmap 2019-2020
Subject Matter Editor, *Ecology* and *Ecological Monographs* peer reviewed journals 2013-2021
Elected member of Scientific Coordinating Committee, Hubbard Brook Experimental Forest 2010-2022

EXAMPLES OF TEMPLER LAB RESEARCH IN THE NEWS

PBS News Hour: https://www.pbs.org/newshour/science/love-it-or-hate-it-winter-plays-an-important-role-heres-how-its-changing
NPR Science Friday: https://www.sciencefriday.com/segments/beech-leaf-disease/
NPR WBUR's Morning Edition: https://www.wbur.org/news/2023/10/24/beech-tree-disease-massachusetts
NPR WGBH, https://www.wgbh.org/news/local/2020-09-08/western-mass-blaze-serves-as-reminder-of-states-rich-history-of-wildfire
HBO Vice News Tonight, https://www.youtube.com/watch?v=-rCHCx6Vz98
Boston Globe, http://www.bostonglobe.com/ideas/2014/11/07/the-city-ecosystem-pipes-and-all/HjLVemBs9nPiuE53PjPSLK/story.html
CBS Boston Evening News, http://boston.cbslocal.com/2014/03/29/eye-on-weather-the-spring-forecast/
Car Talk, www.cartalk.com/content/losing-winter-climate-change-will-hit-new-england-hard
Scientific American, http://www.scientificamerican.com/article.cfm?id=wired-forest-may-reveal-how-new-england-forests-respond-climate-change

TEACHING EXPERIENCE AT BOSTON UNIVERSITY

COURSES TAUGHT

BI303	Ecology (2006)
BI306	Biology of Global Change (2006, 2008-2012, 2014-2020, 2022-2023, 2025)
BI/EE 530	Forest Ecology (2007, 2009-2013, 2015, 2017-2021)
GRS BI/EE 719	Terrestrial Biogeoscience Colloquium (2012)
GRS BI/EE 720	Terrestrial Biogeoscience Practicum (2013)
GRS BI/EE 764	Urban Biogeoscience and Environmental Health Colloquium (Fall 2019)
SPH EH765	Urban Biogeoscience and Environmental Health Colloquium (Fall 2019)
GRS BI/EE 765	URBAN Biogeoscience and Environmental Health Applied Research Methods (Spring 2020)
SPH EH797	URBAN Biogeoscience and Environmental Health Applied Research Methods (Spring 2020)

POSTDOCTORAL FELLOWS AND VISITING SCIENTISTS

Tiphaine Chevallier, PhD (2008-2009), Joanna Carey, PhD (2014-2015), Thomas Dirnboeck, PhD (2015-2017), Alix Contosta (2018-2020), Desneiges Murray (2025-2027)

GRADUATE STUDENTS

Anne Socci (Ph.D., 2006-2011, Impact winter climate change on nutrient & water uptake in northern forest ecosystems)
Andrew Reinmann (Ph.D., 2008-2014, Effects of winter climate change on carbon & nitrogen losses from temperate forest ecosystems)
Patrick Sorensen (Ph.D., 2011-2016, Effects of winter snowpack on microbial activity, community composition, and plant-microbe interactions in mixed-hardwood temperate forests)
Rebecca Sanders-DeMott (Ph.D., 2011-2016, Effects of climate change across seasons on forest ecosystems)
Stephen Decina (Ph.D., 2013-2018, Controls on atmospheric nitrogen deposition and cycling in urban ecosystems)
Jamie Harrison (Ph.D., 2016-2020, Water & carbon uptake & soil nitrogen cycling in a northern hardwood forest under a changing climate))
Jenna Rindy (MS, 2019-2022, Effects of urbanization and forest fragmentation on atmospheric nitrogen inputs)
Steve Gougherty (PhD, 2018-2023, Nutrient allocation and conservation mechanisms in trees: intraspecific variation, reproductive costs, and global scale comparisons)
Erin Pierce (MS. 2017-2019, Effects of tropospheric ozone & nitrogen on carbon cycling in northern forests)
Stephen Caron (PhD, 2019-2024, Drivers of nitrogen oligotrophication in temperate deciduous forests)
Emerson Conrad-Rooney (PhD, 2021-present, Effects of urbanization & climate change on forest ecosystems)
Emma Daily (PhD, 2023-present)
Yu-Qing Chua (PhD, 2024-present)
Visiting Ph.D. graduate students: Dries Huygens (University of Ghent, Belgium, 2005); Lilia L. Roa Fuentes (National University of Mexico, 2010); Christine Bollig (University of Bern, Switzerland, 2011); Maria Moser (ETH Zürich; Swiss Federal Institute of Technology; 2021-22); Robert Weigel (University of Greifswald, Germany, 2016); John Allen (University of Helsinki, Finland, 2018); Chikae Tatsumi (Kyoto University, Japan, 2019); Yihan Cai (Hokkaido University, Japan, 2023)

UNDERGRADUATE AND HIGH SCHOOL STUDENTS:

Mentor to more than 50 undergraduate research assistants and 25 students in Boston University's Undergraduate Research Opportunities Program (UROP) and the National Science Foundation's Research Experience for Undergraduates (REU) program. Mentor to more than 25 high school students.

PUBLICATIONS

REFEREED ARTICLES (139 total; Google Scholar h-Index = 55; *Graduate Student; **Undergraduate)

Bergl DD*, MS Carbone, D Hollinger, Y Liu, B Lucas, SV Ollinger, A Ouimette, **P Templer**, AD Richardson. Increasing respiration weakens the carbon sink over two decades in a temperate deciduous forest. 2026. Global Change Biology Communications, *in press.*

Isobe K, R Tateno, K Fukuzawa, N Hosokawa, T Oda, M Green, **PH Templer**, PM Groffman. 2026. Cascading effects of winter climate change in northern forest ecosystems: microclimate, biogeochemical flux, and vegetation. Ecology, *in press.*

Kumar K, M Worosz, SH Shiu, **PH Templer**, KS McNeal. 2026. Lessons learned from interdisciplinary US National Science Foundation Research Traineeship-supported graduate programs. *PLOSOne* 21:e0343307.

Meng L*, A Pourmokhtarian, **PH Templer**, LR Hutyra, CT Driscoll. 2026. Effects of urbanization on the dynamics of carbon, nitrogen, and water cycling in hardwood forests of the Northeastern U.S. Landscape and Urban Planning 267:105541.

Atherton K*, C Tatsumi, I Frenette, D Heaton, I Smith, L Hutyra, **P Templer**, J Bhatnagar. 2025. Disruption of the urban oak tree microbiome with urbanization. Nature Cities 2: 958-968.

Bowser G, K Akamani, M Balgopal, JD Coley, ED Diaz-Clark, WC Funk, B Helmuth, S Henriques, N Grant-Hoffman, T Osborne, A Seshadri, **PH Templer**, MC Urban, K Waddell. 2025. Assessing nature: perceptions, knowledge, and gaps. Frontiers in Ecology & Environment 23:e2846.

Caron S*, J Campbell, CT Driscoll, P Groffman, AB Reinmann, B Leonardi, L Rustad, G Wilson, **PH Templer**. 2025. Shallow snowpack and early snowmelt reduce nitrogen availability in the Northern Hardwood Forest. Biogeochemistry 168:49.

Caron S*, A Bailey, N Cleavitt, C Driscoll, T Fahey, PM Groffman B Leonardi, L Rustad, G Wilson, **PH Templer**. 2025. Impacts of litter quality and climate on nitrogen oligotrophication in northern hardwood forests. Canadian Journal Forest Research 55:1-13.

Conrad-Rooney E*, C Avery, G Bowser, A Crimmins, T Francis, A Grade, P McElwee, **PH Templer**. 2025. Analysis of nature-related themes in U.S. Climate Assessments. Special Issue: Advancements in U.S. Climate Assessments. Climatic Change 178:86.

Conrad-Rooney E*, AB Reinmann. **PH Templer**. 2025. Declining winter snowpack offsets carbon storage enhancement from growing season warming in northern temperate forest ecosystems. Proceedings of the National Academies of Sciences 122:e2412873122.

Cunningham P, R Vesey, H Chaudry-Phipps, TM Fayle, U Diara, G Chomicki, D Lestina, J Tuma, **PH Templer**, P Klimes, LM Henry. 2025. Dietary niche shapes microbiome diversity in Indo-Pacific ants. Microbiology Spectrum 13:e01965-25.

Fahey TJ, NL Cleavitt, **PH Templer**, PM Groffman, AS Bailey, SB Caron*, G Wilson. 2025. Foliar resorption of beech and maple along an elevation gradient in a northern hardwood forest. Forest Ecosystems 13:100304.

Garlick S, JC Besley, K Peterman, A Black-Maier, M R Downs, E Ortiz Franco, PM Groffman, A Lavallee, K O'Connell, M Storksieck, **PH Templer**. 2025. Six elements of effective public engagement with science. Frontiers in Ecology & Environment 23:e70014.

Meng L*, A Pourmokhtarian, **PH Templer**, LR Hutyra, J Thompson. CT Driscoll. 2025. Regional projections of the impacts of future urbanization and climate change on biogeochemical cycles in New England forests. Research 8:1043.

Meng L*, A Pourmokhtarian, **PH Templer**, LR Hutyra, CT Driscoll. 2025. Simulations of historical impacts of climate change and atmospheric chemistry on a Northeastern U.S. forest ecosystem. Ecological Applications 35:e70079.

Meng L*, A Pourmokhtarian, **PH Templer**, LR Hutyra, CT Driscoll. 2025. Response of a northeastern temperate forest to future scenarios of climate change and energy policies through the 21st century. Environmental Modeling and Software 190:106473.

Possinger AR, CT Driscoll, M Green, TJ Fahey, C Johnson, MM Koppers, LD Martel, J Morse, **PH Templer**, A Uribe, GF Wilson, PM Groffman. 2025. Increasing soil respiration in a northern hardwood forest indicates symptoms of a changing carbon cycle. *Communications Earth & Environment* 6:418.

Wilson G, PM Groffman, LD Martel. MB Green. CT Driscoll, J Durán, **PH Templer**, M Fisk. 2025. Changes in soil moisture and its relationships with nitrogen cycle processes in a northern hardwood forest. *Canadian Journal Forest Research* 55:1-15.

Yihan C*, **PH Templer**, M Kobayashi. 2025. Unveiling responses of vascular plant performance and vegetation cover to shifting snow regimes: a meta-analysis. Climatic Change 178:116.

Contosta AR, KA Arndt, HM Baulch, NJ Casson, A Harpold, TL Morelli, APK Sirén, **PH Templer**. 2024. Threshold changes in winter temperature and precipitation drive threshold responses across nine global climate zones and associated biomes. Annual Review of Ecology, Evolution, and Systematics 55:271-300.

Gougherty SW*, **PH Templer**. 2024. Global patterns of nitrogen and phosphorus in reproductive and leaf litterfall. Ecosystems 27:1156-1171.

Nieland MA, P Lacy, SD Allison, JM Bhatnagar, D Doroski, SD Frey, K Greaney, SE Hobbie, SE Kuebbing, DB Lewis, M McDaniel, SS Perakis, SM Raciti, **PH Templer**, A Shaw, CD Sprunger, MS Strickland, LTA van Diepen, C Vietorisz, EB Ward, AD Keiser. 2024. Nitrogen deposition weakens coupled soil carbon and nitrogen dynamics across the continental United States, Global Change Biology 30:e70016.

Smith I*, **PH Templer**, L Hutyra. 2024. Water sources for street trees in mesic urban environments. Science of the Total Environment 908:168411.

Templer PH, KF Atherton*, A Conrad-Rooney*, H Ho, LR Hutyra, CF Ianniello*, DR Kashian, JI Levy, D Meshoulam, MC Urban. 2024. Strengthening graduate education and addressing environmental challenges through solutions-oriented partnerships and interdisciplinary training. Sustainable Earth Reviews 7:3.

Blake K**, **PH Templer**. 2023. Interacting effects of urbanization and climate on atmospheric deposition of phosphorus around the globe: a meta-analysis. Atmospheric Environment 309:119940.

Bowser G, **PH Templer**, SS Ho, SA Green, S Hautzinger, I Zhu-Maguire, A Connaughton, L Dundon, D Husic, M Urban. 2023. Fierce urgency of now: integrating the youth voice at COP. Frontiers in Ecol & Environment 21:164-165.

Buckley S*, CL Connolly*, JI Levy, **PH Templer**, J Ashmore, L Carvalho, N Phillips, P Fabian. 2023. Carbon, indoor air, energy and financial benefits of coupled ventilation upgrade and enhanced rooftop garden installation: an interdisciplinary climate mitigation approach. Sustainable Cities & Society 97:104792.

Caron S*, S Garvey*, J Gewirtzman, K Schultz*, J Bhatnagar, CT Driscoll, L Hutyra, **PH Templer**. 2023. Urbanization and fragmentation have opposite effects on soil nitrogen availability in temperate forest ecosystems. Global Change Biology 29:2156-2171.

Conrad-Rooney E*, J Gewirtzman, Y Pappas**, VJ Pasquarella, LR Hutyra, **PH Templer**. 2023. Atmospheric wet deposition in urban and suburban sites across the United States. Atmospheric Environment 305:119783.

Contosta A, C Driscoll, J Battles, **PH Templer**, G Likens, R Holmes, NL Rodenhouse, M Vadeboncouer, J Campbell, S Garlick, M Green, S Rogers, P Groffman. 2023. Early warning signals of changing resilience in the biogeochemistry and biology of a northern hardwood forest. Environmental Research Letters 305:119783.

Garvey S*, **PH Templer**, JM Bhatnagar, LR Hutyra. 2023. Soils at the temperate forest edge: an investigation of soil characteristics and carbon dynamics. Science of the Total Environment 891:164320.

Gougherty S*, B Cowart**, **PH Templer**. 2023. Macroscale variation in red maple (*Acer rubrum*) foliar carbon, nitrogen, and nitrogen resorption. Ecosystems 26:937-950.

Green M, L Pardo, J Campbell, E Rosi, E Bernhardt, C Driscoll, T Fahey, N LoRusso, J Matthes, **PH Templer**. 2023. Combination of factors rather than single disturbance drives perturbation of the nitrogen. Biogeochemistry 166:1399-157.

Ho SS, G Bowser, **PH Templer**, SA Green. 2023. Learning for sustainability: partnerships for the goals. Sustainable Earth Reviews 6:8.

Primack R, T Miller, C Terry**, E Marin-Spiotta, **PH Templer**, A Berhe, E Diaz-Vallejo, M Hastings, V Magley, A Mattheis, B Schneider, R Barnes. 2023. Historically excluded groups in ecology are undervalued and poorly treated. Frontiers in Ecology and the Environment 21:363-369.

Reeve C, JA Robichaud, T Fernandes, AE Bates, AJ Bramburger, J Brownscombe, CM Davy, HAL Henry, BC McMeans, ERD Moise, S Sharma, PA Smith, EK Studd, AO Sutton, **PH Templer**, SJ Cooke. 2023. Applied winter biology: threats, conservation, and management of biological resources during winter in cold climate regions. Conservation Physiology 11:1.

Rindy JE*, EA Pierce*, J Geddes, SM Garvey*, J Gewirtzman, C Driscoll, L Hutyra, **PH Templer**. 2023. Effects of urbanization and forest fragmentation on atmospheric nitrogen inputs and ambient nitrogen oxide and ozone concentrations in mixed temperate forests. Journal Geophysical Research Biogeosciences 128.

Tatsumi C, KF Atherton*, S Garvey*, E Conrad-Rooney*, LL Morreale*, LR Hutyra, **PH Templer**, JM Bhatnagar. Urbanization and fragmentation interact to drive mutualism breakdown and the rise of unstable pathogenic communities in the forest soil microbiome. 2023. Proceedings of the National Academy of Sciences 120:e230751920.

Templer PH, J Harrison*, F Pilotto, A Flores-Diaz, P Haase, WH McDowell, R Sharif*, H Shibata, D Blankman, A Avila, U Baatar, HR Bogena, I Bourgeois, J Campbell, T Dirnbock, WK Dodds, M Hauken, I Kokorite, K Lajtha, IL Lai, H Laudon, TC Lin, SRM Lins, H Meesenburg, P Pinho, A Robinson, M Rogora, B Scheler, P Schleppi, R Sommaruga, T

Staszewski, M Taka. 2022. Atmospheric deposition and precipitation are important predictors of inorganic nitrogen export to streams from forest and grassland watersheds: large-scale data synthesis. Biogeochemistry 160:219-41.

Blagden M**, JL Harrison*, R Minocha, R Sanders-DeMott*, S Long, **PH Templer**. 2022. Experimental changes in climate influence foliar nutrition and metabolism of red maple (Acer rubrum) trees in a northern hardwood forest. Ecosphere 13:e03859.

Finestone J**, **PH Templer**, JM Bhatnagar. 2022. Soil fungi exposed to warming temperatures and shrinking snowpack in a northern hardwood forest have lower capacity for growth and nutrient cycling. Frontiers in Forests and Global Change *5*:800335.

Garvey S*, **P Templer**, E Pierce*, A Reinmann, L Hutyra. 2022. Diverging patterns at the forest edge: soil respiration dynamics of fragmented forests in urban and rural areas. Global Change Biology 28: 3094-3109.

Kobayashi M, **P Templer**, A Katayama, O Seki, K Takagi. 2022. Early snowmelt by an extreme warm event affects understory more than overstory trees in Japanese temperate forests. Ecosphere e4182.

Mason R, N Lany, J Craine, M Jonard, S Ollinger, P Groffman, R Fulweiler, J Angerer, Q Read, P Reich, **PH Templer**, A Elmore. 2022. Evidence, causes, consequences of declining nitrogen availability in terrestrial ecosystems. Science 376.

Mason R, J Craine, N Lany, M Jonard, S Ollinger, P Groffman, R Fulweiler, J Angerer, Q Read, P Reich, PH Templer, A Elmore. 2022. Response to "Explanations for nitrogen decline." Science 376:1170.

Guerrieri R, **P Templer**, F Magnani. 2021. Canopy exchange and modification of nitrogen fluxes in forest ecosystems. Current Forestry Reports 7:115-137.

Hundertmark WJ**, M Lee**, IA Smith**, AHY Bang**, V Chen**, C Gately, **PH Templer**, LR Hutyra. 2021. Influence of landscape management practices on urban greenhouse gas budgets. Carbon Balance and Management 16:1.

Rivero-Villar A, G Ruíz-Suárez, **PH Templer**, V Souza, J Campo. 2021. Nitrogen cycling in tropical dry forests are sensitive to changes in rainfall regime and nitrogen deposition. Biogeochemistry 153:283-302.

Studd EK, AE Bates, AJ Bramburger, T Fernandes, B Hayden, HAL Henry, MM Humphries, R Martin, BC McMeans, ERD Moise, AM O'Sullivan, S Sharma, BJ Sinclair, AO Sutton, **PH Templer**, SJ Cooke. 2021. Nine maxims for the ecology of cold-climate winters. *BioScience* 71:820-830.

Sutton A, E Studd, T Fernandes, A Bates, A Bramburger, SJ Cooke, B Hayden, HAL Henry, M Humphries, R Martin, B McMeans, E Moise, AM O'Sullivan, S Sharma, **PH Templer**. 2021. Frozen out: unanswered questions about winter biology. Environmental Reviews 29.

Tatsumi C; F Hyodo, T Taniguchi, W Shi, F Koba, K Fukushima, S Du, N Yamanaka, **P Templer**, R Tateno. 2021. Arbuscular mycorrhizal community in roots and nitrogen uptake patterns of understory trees beneath ectomycorrhizal and non-ectomycorrhizal overstory trees. Frontiers in Plant Science 11.

Whipple S*, S Tiwari, T Osborne, G Bowser, SA Green, **PH Templer**, S Ho. 2021. Engaging the Youth Environmental Alliance in Higher Education to Achieve the Sustainable Development Goals. Scholarship and Practice of Undergraduate Research 5:4-15.

Bowser G, SA Green, SS Ho, **PH Templer**. 2020. Educating students in solutions-oriented science. Frontiers in Ecology and the Environment 18:171.

Garcia MO*, **PH Templer**, PO Sorensen*, R Sanders-DeMott*, P Groffman, JM Bhatnagar. 2020. Soil microbes trade-off biogeochemical cycling for stress tolerance traits in response to year-round climate change. Frontiers in Microbiology 11:616.

Harrison JL*, K Schultz**, M Blagden**, R Sanders-DeMott*, **PH Templer**. 2020. Growing season soil warming may counteract trend of nitrogen oligotrophication in a Northern hardwood forest. Biogeochemistry 151:139-152.

Harrison JL*, R Sanders-DeMott*, AB Reinmann*, P Sorensen*, **PH Templer**. 2020. Growing season warming and winter soil freeze/thaw cycles increase transpiration in a northern hardwood forest. Ecology 101:e03173.

Harrison JL*, M Blagden**, MB Green, G Salvucci, **PH Templer**. 2020. Water sources for red maple trees in a northern hardwood forest under a changing climate. Ecohydrology 13:e2248.

Harrison JL*, AB Reinmann*, A Socci Maloney*, N Phillips, SM Juice, AJ Webster, **PH Templer**. 2020. Transpiration of dominant tree species varies in response to projected changes in climate: implications for composition and water balance of temperate forest ecosystems. Ecosystems 23:1598-1613.

Winbourne JB, T Jones, SM Garvey, JL Harrison*, L Wang, D Li, **PH Templer**, L Hutyra. 2020. Tree transpiration and urban temperatures: current understanding, implications, and future research directions. BioScience 70:576-588.

Contosta A, N Casson, S Garlick, S Nelson, M Ayres, E Burakowski, J Campbell, I Creed, C Eimers, C Evans, I Fernandez, C Fuss, T Huntington, K Patel, R Sanders-DeMott, K Son, **PH Templer**, C Thornbrugh. 2019. Northern forest winters have lost cold, snowy conditions that are important for ecosystems and human communities. Ecological Applications 29: e01974.

Craine JM, AJ Elmore, L Wang, P Boeckx, S Delzon, Y Fang, A Gray, R Guerrieri, MJ Gundale, P Hietz, DM Nelson, PL Peri, **PH Templer**, C Werner. 2019. Reply to: Data do not support large-scale oligotrophiaction of terrestrial ecosystems. Nature Ecology and Evolution 3:1287-1288.

Decina, L Hutyra, PH Templer. 2019. Hotspots of nitrogen deposition in the world's urban areas: a global data synthesis Frontiers in Ecology & Environment 18:92-100.

Dirnbock T, P Haase, M Mirtl, J Pauw, **PH Templer**. 2019. Contemporary international long-term ecological research (ILTER) from biogeosciences to socio-ecology and biodiversity research. Regional Environmental Change 19:309-11.

Reinmann* AB, J Susser**, EMC Demaria, and **PH Templer**. 2019. Declines in northern forest tree growth following snowpack decline and soil freezing. Global Change Biology 25:420-430.

Song J, S Wan, S Piao, A Knapp, A Classen, S Vicca, P Ciais, M Hovenden, S Leuzinger, Claus Beier, P Kardol, J Xia, Q Liu, J Ru, Z Zhou, Y Luo, D Guo, J. Langley, J Zscheischler, J Dukes, J Tang, J Chen, K Hofmockel, L Kueppers, L Rustad, L Liu, M Smith, **PH Templer**, R Quinn Thomas, R Norby, R Phillips, S Niu, S Fatichi, Y Wang, P Shao, H Han, D Wang, L Lei, J Wang, X Li, Q Zhang, X Li, F Su, B Liu, F Yang, G Ma, G Li, Y Liu, Y Liu, Z Yang, K Zhang, Y Miao, M Hu, C Yan, A Zhang, M Zhong, Y Hui, Y Li, M Zheng. 2019. A meta-analysis of 1119 manipulative experiments on terrestrial carbon cycling responses to global change. Nature Ecology & Evolution 3:1309-1320.

Sorensen* PO, JM Bhatnagar, L Christenson, J Duran, T Fahey, MC Fisk, AC Finzi, PM Groffman, JL Morse, **PH Templer**. 2019. Roots mediate the effects of snowpack decline on soil bacteria, fungi, and nitrogen cycling in a northern hardwood forest. Frontiers in Microbiology 10:926.

Walker J, G Beachley, HM Amos, R Baumgardner, J Baron, J Bash, MD Bell, KB Benedict, X Chen, DW Clow, A Cole, JG Coughlin, K Cruz, RW Daly, SM Decina, EM Elliott, ME Fenn, L Ganzeveld, K Gebhart, SS Isil, BM Kerschner, RS Larson, T Lavery, GG Lear, T Macy, MA Mast, K Mishoe, KH Morris, PE Padgett, RV Pouyat, M Puchalski, H Pye, AW Rea, MF Rhodes, CM Rogers, R Saylor, R Scheffe, BA Schichtel, DB Schwede, GA Sexstone, BC Sive, R Sosa, **PH Templer**, T Thompson, DTong, GA Wetherbee, TH Whitlow, Z Wu, Z Yu, L Zhang. 2019. Toward the improvement of total nitrogen deposition budgets in the US. Science of the Total Environment 691:1328-1352.

Yang Y, L Meng, R Yani, C Driscoll, M Montesdeoca, **PH Templ**er, L Rustad, H Asbjornsen. 2019. Climate change may alter mercury fluxes in northern hardwood forests. Biogeochemistry 146:1-16.

Amos HM, CF Miniat, J Lynch, J Compton, **PH Templer**, LA Sprague, D Shaw, D Burns, A Rea, D Whitall, L Myles, D Gay, M Nilles, J Walker, A Rose, J Bales, J Deacon, R Pouyat. 2018. What goes up must come down: integrating atmospheric air and water quality monitoring. Environmental Science & Technology 52: 11441-11448.

Asbjornsen H, JL Campbell, KA Jennings, MA Vadeboncoeur, C McIntire, **PH Templer**, RP Phillips, TL Bauerle, MC Dietze, SD Frey, PM Groffman, R Guerrieri, PJ Hanson, EP Kelsey, AK Knapp, NG McDowell, P Meir, KA Novick, S Ollinger, W Pockman, P Schaberg, S Wullschleger, M Smith, L Rustad. 2018. Guidelines and considerations for designing precipitation manipulation experiments in forest ecosystems. Methods in Ecology & Evolution 9:2310-25.

Craine JM, AJ Elmore, L Wang, J Aranibar, M Bauters, P Boeckx, BE Crowley, MA Dawes, S Delzon, A Fajardo, Y Fang, L Fujiyoshi, A Gray, R Guerrieri, MJ Gundale, DJ Hawke, P Hietz, M Jonard, E Kearsley, T Kenzo, M Makarov, S Marañón-Jiménez, TP McGlynn, BE McNeil, SG Mosher, DM Nelson, PL Peri, JC Roggy, R Sanders-DeMott, M Song, P Szpak, **PH Templer**, DV Colff, C Werner, X Xu, Y Yang, G Yu, K Zmudczyńska-Skarbek. 2018. Isotopic evidence for oligotrophication of terrestrial ecosystems. Nature Ecology and Evolution 2:1735-1744.

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RESEARCH GRANT SUPPORT

Active Grants

WM Keck Foundation. "Rules of Life in the Urban Biome." $1,000,000 total. J Bhatnagar PI, J Geddes, L Hutyra, **PH Templer**, Co-PIs. $200,000 direct costs to PH Templer. $0 indirect costs (01/01/25-12/31/27).

National Science Foundation. "Long-Term ecological research at the Hubbard Brook Experimental Forest." $420,000 total to **PH Templer**, Co-PI; $330,330 direct costs; $86,664 indirect costs (03/01/23-02/28/29).

National Science Foundation. "Climate Leaders Academy: A professional development opportunity in the Geosciences." $301,317 total to **PH Templer**, Co-PI; $182,616 direct costs; $118,701 indirect costs (01/2023-12/31/2026)

Department of Energy. "Linking root and soil microbial stress metabolism to watershed biogeochemistry under rapid year-round environmental change." Bhatnagar, PI, **PH Templer**, Co-PI. $989,201 total; $23,122 direct costs to Templer; $15,029 indirect costs to Templer. (08/15/2021-08/14/2026).

National Science Foundation. "Changing seasonality and declining nitrogen in the northern hardwood forest." $538,487 to **PH Templer**, PI; $$435,662 direct costs; $101,825 indirect costs (10/01/20-05/31/26).

National Science Foundation. "RCN-UBE: Youth Environmental Alliance in Higher Education (YEAH)." $50,000 total to **PH Templer**, Co-PI; $39,682 direct costs; $10,318 indirect costs (8/01/20-07/31/26).

Completed Grants

National Science Foundation. "Advancing public engagement with science across the Long-Term Ecological Research Network." $635,157. Garlick, PI. $29,057 total to **PH Templer**, Co-PI; $23,061 direct costs; $5,996 indirect costs (08/01/2022-07/31/2025).

National Science Foundation. "Long-Term ecological research at the Hubbard Brook Experimental Forest." $269,335 to **PH Templer**, Co-PI; $213,758 direct costs; $55,577 indirect costs (02/01/17-02/29/25).

National Science Foundation. "NRT: Boston UniverCity - Partnering graduate students with cities to tackle urban environmental challenges." **PH Templer**, PI. $2,999,530 total; $2,754,212 direct costs; $245,318 indirect costs; one year no-cost extension (09/01/17-08/31/23).

Charles Bullard Fellowship in Forest Research, Harvard University. "Controls on carbon sequestration by forest ecosystems: implications for forest health and global climate change." $60,000 total funds for entire award to **PH Templer**, PI. (09/01/21-08/31/22).

United States Department of Agriculture. "Coupled carbon and nitrogen cycling under changing land cover and air quality: Improving regional estimates of carbon dynamics for the Northeastern U.S." $634,141 to **PH Templer**, PI (05/15/17-05/14/21).

National Science Foundation. "ADVANCE Partnership: From the classroom to the field: improving the workplace in the geosciences." 01/01/19-12/31/21 $137,950 total, $53,677 subcontract to Boston University.

Boston University Initiative on Cities. "Effects of greenspace structure on urban tree health and human exposure to fine particulate matter: a biogeochemical analysis and exposure assessment." $10,000 to **PH Templer**, Co-PI (06/01/20-05/31/21).

National Science Foundation. "Collaborative Research: Embedding public engagement with science at long-term ecological research sites." $49,450 to **PH Templer**, PI (08/01/17-07/31/21).

National Science Foundation. "A comprehensive regional framework for sustainability." $49,990 to **PH Templer**, Co-PI (05/01/19-10/31/20).

National Science Foundation. "CAREER: Role of plant nutrient uptake in forest nutrient retention and carbon sequestration: an integrated research, teaching and outreach program." $755,640, total funds for entire award (03/01/12-02/28/19). **PH Templer**, PI.

National Science Foundation. "Collaborative Research: IDBR: TYPE A: The NANAPHID: A novel aphid-like nanosensor network for real-time measurements of carbohydrates in live plant tissue." A Lapenis, State University New York Albany, PI; $33,810 total funds to **PH Templer**, Co-PI (02/01/15-01/31/19).

National Science Foundation. "Long-Term ecological research at the Hubbard Brook Experimental Forest." T Fahey, Cornell University, PI with 20 Co-PIs; $101,000 total funds to **PH Templer**, Co-PI (02/01/11-01/31/18).

National Oceanic and Atmospheric Administration. "Quantifying carbon signatures across urban-to-rural gradients: advancing the capacity for monitoring, reporting, and verification through observations, models and remote sensing." Lucy Hutyra, PI. M Friedl, T Nehrkorn, S Raciti, **PH Templer**, S Wofsy, and C Woodcock, Co-PI's. $795,495 total. $78,078 total funds to **PH Templer**. (08/01/14-07/31/17).

United States Department of Agriculture, Northeastern States Research Cooperative. "Understanding impacts of precipitation change and drought on the northern forest." Asbjornsen H, L Rustad and **PH Templer**. $111,926 total funds to H Asbjornsen. (04/01/14-09/30/16).

John Wesley Powell Center for Synthesis and Analysis. U.S. Geological Survey. "Advancing understanding of ecosystem responses to climate change with warming experiments: what have we learned and what is unknown?" $149,460 to fund postdoc (Joanna Carey) and travel for participants to attend two synthesis workshops at Powell Center in Fort Collins, CO. K Kroeger, PI. J Tang and **PH Templer**, Co-PI (09/01/13-08/31/15).

Charles Bullard Fellowship in Forest Research, Harvard University. "Winter climate change and regional estimates of primary productivity of northeastern U.S. forests: using long-term data, remote sensing and future scenarios." $40,000 total funds for entire award to **PH Templer**, PI. (09/01/13-06/01/14).

National Science Foundation. "Collaborative Research: Winter climate change in a northern hardwood forest." P Groffman, Cary Institute, PI; $114,828 total funds to **PH Templer**, Boston University, PI (09/01/10-08/31/13).

National Science Foundation. "STATS4STEM.ORG: Enriching STEM education through real-world data sets, computing and statistical analysis." E Simoneau, Boston Latin School (high school), PI; $14,936 total funds to **PH Templer**, Co-PI (10/01/09-09/30/12).

United States Department of Agriculture, Northeastern States Research Cooperative. "Assessing the role of tree species and nitrogen deposition in mediating carbon storage in northern hardwood forests." GM Lovett, Cary Institute, PI; $5760 total funds to **PH Templer** (10/01/09-09/30/12).

United States Department of Agriculture, Northeastern States Research Cooperative. "Effects of winter climate change on growing season sap flow and carbon exchange in the northern hardwood forest," $131,391, total funds for entire award (09/01/09-08/31/12). **PH Templer**, PI with M Friedl and N Phillips, Co-PI's. All funds allocated to **PH Templer** at Boston University.

Andrew W. Mellon Foundation. "Impacts of winter dynamics on growing season plant nutrient uptake and forest productivity in a northeastern hardwood forest," $300,000 (05/01/07-12/31/11). **PH Templer**, PI.

United States Department of Agriculture, Northeastern States Research Cooperative. "Determination of atmospheric deposition and nitrogen saturation status in Class I wilderness areas of the northeastern United States," $63,730, total funds for entire award (06/01/06-05/31/11) **PH Templer, PI**, with K Weathers, Cary Institute, Co-PI. All funds allocated to PH Templer at Boston University.

Harvard University, Arnold Arboretum. "Impacts of the hemlock woolly adelgid and atmospheric nitrogen deposition on forest nitrogen saturation status," $5,000, total funds for entire award (05/22/06-05/21/07). **PH Templer**, PI.

COMPETITIVE FUNDING AND AWARDS TO GRADUATE STUDENTS AND POSTDOCS IN MY LAB

National Science Foundation Earth Sciences Postdoctoral Fellowship awarded to **D Murray**. "Shifting Paradigms in Atmospheric Deposition: The Rise of Organic Solutes," (09/01/25-08/31/27)**.**

National Science Foundation Graduate Research Fellowship awarded to **E Conrad-Rooney**. "Interacting Effects of Growing Season and Winter Climate Change on Forest Carbon Sequestration," (05/01/23-04/30/26)**.**

Arnold Arboretum of Harvard University, Deland Award for Student Research to **J Rindy**. "Effects of urbanization and forest fragmentation on tree health: removal of fine particulate matter by forest trees." $10,000 (05/01/20-05/01/21).

New England Botanical Club, Graduate Student Research Award to **J Harrison**. "Combined effects of winter and growing season climate on northern hardwood forest ecosystems of New England." $3000 (06/01/19-05/31/20)

Arnold Arboretum of Harvard University, Deland Award for Student Research to **E Pierce**. "Impact of tropospheric ozone and nitrogen deposition on urban forest health and carbon sequestration." $4750 (05/01/18-05/01/19).

Boston University, Research in Biogeoscience Award to **J Harrison**. $500 (05/31/17-04/30/18).

National Science Foundation Graduate Research Fellowship awarded to **S Decina**. "Assessing the effects of soil freezing on populations of arbuscular mycorrhizal fungi associated with *Acer saccharum* in a northern hardwood forest" (06/01/14-05/31/17)**.**

Boston Area Research Initiative Research seed grant awarded to **S Decina**. "Assessing total atmospheric deposition of nitrogen and phosphorus throughout the Greater Boston Area," $5,000 for graduate research (08/01/16-12/31/16).

National Science Foundation Doctoral Dissertation Improvement Grant (DDIG) to **P Sorensen**. "Direct and indirect effects of winter climate change on microbes: implications for nitrogen retention in temperate hardwood forests." $21,254 (06/01/14-05/31/16).

Arnold Arboretum of Harvard University, Deland Award for Student Research to **S Decina**. "Comparing methods of measurement for atmospheric nitrogen deposition and assessing urban dry nitrogen deposition fluxes." $10,000 (05/01/15-05/01/16).

Environmental Protection Agency, Science to Achieve Results (STAR) Program awarded to **A Reinmann**. "Impact of winter climate change on soil, canopy, and ecosystem carbon exchange in a northern deciduous forest," $126,000 (09/01/11-08/31/14).

Boston University, Research in Biogeoscience Award to **R Sanders-Demott**. $500 (05/31/13-04/30/14).

Boston University, Research in Biogeoscience Award to **P Sorensen**. $500 (05/31/12-04/30/13).

Boston University, competitive Dean's Fellowship awarded to **R Sanders-Demott,** $19,800 (09/01/11-05/30/12)**.**

Boston University, Research in Biogeoscience Award to **A Reinmann**. "Coupled response of above- and belowground carbon fluxes in a temperate deciduous forest to reduced winter snowpack," $500 (05/31/11-04/30/12).

National Science Foundation Graduate Research Fellowship awarded to **A Socci**. "Potential effects of climate change-induced soil freezing on plant nutrient uptake and productivity" (06/01/07-05/31/11)**.**

United States Department of Agriculture, Northeastern States Research Cooperative, Northern Forest Scholars Graduate Fellowship awarded to **A Socci**. "Assessing the impacts of climate change-induced soil freezing on plant nutrient uptake and productivity in a northern hardwood forest," $40,000 (09/01/07-12/31/09).

Boston University, competitive Dean's Fellowship awarded to **A Socci,** $16,500 (09/01/06-05/30/07).

PROFESSIONAL SERVICE AND ACTIVITIES

DEPARTMENTAL SERVICE AT BOSTON UNIVERSITY

Chair, Department of Biology	2022-present
Chair, Global Change Biology Faculty Search Committee (Biology)	2018-2019
Associate Chair, Department of Biology (Ecology, Behavior & Evolution)	2014-2020
Chair, Graduate Committee	2012-2013
Member of Microbial Ecologist Faculty Search Committee (Biology)	2012-2013
Member of Belamarich Award Committee to select Outstanding Doctoral Dissertation	2011 & 2012
Member of Department of Biology Graduate Student Committee	2009-2013
Member of Marine Biology Faculty Search Committee (Biology)	2008-2009
Member, Chairman's Advisory Committee	2006-2010
Member, Graduate Admissions Committee, Department of Biology	2005-2007
Coordinator of Spring 2006 Ecology, Behavior & Evolution Seminar Series	2006

UNIVERSITY SERVICE AT BOSTON UNIVERSITY

Member, Framework Research, Innovation & Convergence Working Group	2025-present
Member, BU Photonics Center Academic Advisory Committee	2022-present
Member, BU Institute Global Sustainability Core Faculty	2017-present
Director, NSF NRT Program in Biogeoscience & Environmental Health	2017-present
Co-Director, Boston University Stable Isotope Laboratory	2007-2025
Member, BU Provost's Task Force on Future of PhD Education	2022-2023
Member, BU Initiative on Cities Faculty Advisory Board	2022-2025
Member, BU University Lecture Committee	2019
Member, BU Climate Action Plan Task Force	2016-2017
Member, BU Hub Learning Outcomes Com, Satellite Com on Scientific Social Inquiry	2016
Member, University Council Committee on Research & Scholarly Activity	2016-2021
Member, Provost's Faculty Teaching Awards Committee	2015-2016
Director, Ph.D. Program in Biogeoscience	2014- 2021
Co-Chair, BU Child Care Advisory Committee	2014-2015
Trustee Scholars Selection Committee (BU's top merit-based scholarship)	2011-2013
Member, Biogeoscience Research and Travel Award Committee for PhD students	2011 & 2012
Member, Advisory Committee for Global Ecology Education Masters Program	2011-2015
BioBugs (Biology Inquire and Outreach to High School Students)	2010 & 2011
Member, Marine Biogeochemistry Faculty Search Committee (Earth Sciences)	2008
Member, MMEDIC BA/MD Program Admissions Committee	2008
Member, Seven-Year BU BA/MD Program Admissions Committee	2007-2008
Faculty participant, "Freshman Fridays" orientation events for prospective students	2006-2015
Facilitator, Responsible Conduct of Research Program at Boston University	2005-2006

SERVICE OUTSIDE OF BOSTON UNIVERSITY

Invited Member, U.S. National Committee for the International Union of Biological Sciences	2024-present
Invited Author, First National Nature Assessment, U.S. Global Change Research Program	2024
Ecological Society of America Fellows/Early Career Fellows Selection Committee	2023-2026
Invited Moderator, United Nations Conference of the Parties, Sharm El Sheikh, Egypt	2022
Elected Member, Town of Brookline Tree Planting Committee	2021-present
Invited Member, Lost Women in Science Advisory Board	2021-present
Chair of Diversity, Equity, Inclusion, and Justice Task Force, Ecological Society of America	2020-2021
Invited Member, MA Executive Office of Energy and Environmental Affairs Steering Committee for the MA Decarbonization Roadmap	2019-2020
Member, Rapid Response Team, Ecological Society of America	2019-2022
Elected Vice President for Education and Human Resources, Ecological Society of America	2018-2021
Ph.D. Jury Member, Ghent University, Belgium	2018
Ecological Society of America, Mercer Award Subcommittee	2016-2017
Subject Matter Editor for the journals *Ecology* & *Ecological Monographs*	2013-2021
Invited member, Governing Council of the Science Policy Exchange	2013-2020
Board of Trustees, Hubbard Brook Research Foundation	2012-2024
Co-Chair, Natl Atmos Deposition Program Sub-committee on Urban Atmos Monitoring	2012-2018
Editorial Review Board, Associate Editor for the journal *Biogeochemistry*	2011-2013
Elected member of Scientific Coordinating Committee, Hubbard Brook Exper Forest	2010-2022
Served on National Science Foundation Ecosystem Science Grant Panels	2009-2021

REVIEWER FOR THE FOLLOWING PEER REVIEWED JOURNALS AND PROPOSAL PANELS

Amer Assoc for Advanc Science Program Europe & Central Asia Proposal Review, Analy Chem, Applied Soil Ecology, Atmos Envir, Biogeochemistry, Bio Invasions, Bio & Fert Soils, Can J Forest Research, Ecol Apps, Ecological Monographs, Ecology, Ecosystems, European Journal of Soil Biology, Forest Ecology & Management, Functional Ecology, Global Biogeochemical Cycles, Global Change Biology, Journal Arid Environments, Journal of Plant Nutrition & Soil Science, Journal of Plant Nutrition and Soil Science, Journal of Trop Ecology, Kearney Foundation Proposal Review, Natl Sci Foundation Ecosy Studies & Globe Prop Reviews, Nature, Nature Clim Change, Nature Geoscience, Nature Sust, New Phytologist, Oecologia, Plant and Soil, Plant Biology, Plant Ecology & Diversity, Proceedings of the National Academy of Sciences, Rapid Comm in Mass Spectrometry, Science, Soil Bio & Biochemistry, Soil Science Society America, Tree Phys.

INVITED LECTURES

Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2026
Brookline High School, AP Biology Class, Brookline, MA	May 2026
University Connecticut, Department of Ecology and Evolutionary Biology, Storrs, CT	January 2026
Brookline High School, Climate Solutions Class, Brookline, MA	November 2025
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	July 2025
Brookline High School, Honors Biology Classes, Brookline, MA	June 2025
Boston College, Depts of Biology and Earth & Environmental Sciences, Chestnut Hill, MA	April 2025
Aerodyne Research Inc, Billerica, MA	February 2025
Brookline High School, Climate Science and Social Change Class, Brookline, MA	November 2024
Boston University, Presidential Inauguration Research on Tap, Boston, MA	September 2024
Boston University, Office Sponsored Programs Research Luncheon, Distinguished Speaker	August 2024
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2024
Boston University, Epsilon Eta Pre-Professional Environmental Fraternity, Boston, MA	April 2024
Tennessee State University, Environmental Sciences Department	February 2024
Brookline High School, Climate Leaders Class, Brookline, MA	November 2023
Harvard University, Department of Organismic & Evolutionary Biology	November 2023
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2023
Harvard University, Atmospheric Chemistry Group, Cambridge, MA	February 2023
Brookline High School, AP Environmental Science Class, Brookline, MA	December 2022
Williams College, Department of Biology, Williamstown, MA	September 2022
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	July 2022
Northern Arizona University, EcoInformatics Seminar Series	January 2022
Massachusetts General Hospital Grand Rounds Webinar Series	November 2021
Harvard Forest, Harvard University, Petersham, MA	October 2021

Brookline High School, Environmental Science Class, Brookline, MA	October 2021
City University of New York, Advanced Science Research Center, New York, NY	September 2021
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2021
Brandeis University National Committee, San Fernando Valley, CA Chapter	May 2021
Williams College, Department of Biology, Williamstown, MA	April 2021
Brookline High School, Environmental Science Class, Brookline, MA	April 2021
University of Southern California, Environment & Sustainability Seminar Series	October 2020
City University of New York, Advanced Science Research Center, New York, NY	March 2020
Arlington, MA Public Library, Science for the Public Series	January 2020
Quincy, MA Public Library	October 2019
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2019
Brookline High School, Environmental Science Class, Brookline, MA	March 2019
City University of New York, Advanced Science Research Center, New York, NY	March 2019
Harvard University, Arnold Arboretum, DaRin Butz Internship Program	June 2018
Edward Devotion Public School, Fourth Grade Class, Brookline, MA	May 2018
City University of New York, Advanced Science Research Center, New York, NY	May 2018
Wayne State University, Department of Biological Sciences, Detroit, MI	April 2018
Ghent University, Department of Green Chemistry and Technology, Gent, Belgium	January 2018
Brookline High School, AP Environmental Science Class, Brookline, MA	December 2017
Mothers Out Front, Newton, MA	June 2017
Caitlin Gabel K-12 School, Portland, OR	May 2017
Brookline, MA Public Library	May 2017
Carleton College, Department of Biology, Northfield, MN	April 2017
University of Minnesota, Dept of Ecology, Evol & Behavior, Minneapolis and St. Paul, MN	April 2017
Pierce Public School, Brookline, MA	March 2017
University of Vermont, Rubenstein School of Envir & Natural Resources, Burlington, VT	December 2016
Squam Lakes Natural Science Center, Holderness, NH	July 2016
Tufts University, Department of Biology, Medford, MA	March 2016
University of Western Ontario, Department of Biology, Ontario, Canada	March 2016
University Massachusetts Lowell, Department of Biological Sciences, Lowell, MA	February 2016
Edward Devotion Public School, Brookline, MA	February 2016
University of Granada, Dept de Ecologia Facultad de Ciencias, Granada, Spain	April 2015
University of Connecticut, Nat Resources and the Environment, Storrs, CT	September 2014
Harvard University, Environmental Science and Engineering, Cambridge, MA	April 2014
Boston University Academy, Boston, MA	February 2014
Newton Free Library, Newton, MA	January 2014
Brookline High School, AP Environmental Science Class, Brookline, MA	April and November 2013
Harvard Forest, Harvard University, Petersham, MA	October 2013
Columbia University, Department of Ecology, Evolution & Envir Biology, New York, NY	October 2012
Brown University, Department of Ecology & Evolutionary Biology, Providence, RI	February 2012
Harvard University, Arnold Arboretum, Boston, MA	February 2012
Brookline High School, AP Environmental Science Class, Brookline, MA	December 2011
Cornell University, Program in Biogeochemistry, Ithaca, NY	November 2010
Wellesley College, Department of Biological Sciences, Wellesley, MA	March 2010
Plymouth State University, Department of Biology, Plymouth, NH	February 2010
Hubbard Brook Experimental Forest, Winter Ecology Course, North Woodstock, NH	January 2010
Massachusetts Institute of Technology (MIT), Cambridge, MA	November 2009
Boston College, Department of Biology, Chestnut Hill, MA	November 2009
Boston University, Program in Terrestrial Biogeosciences, Boston, MA	October 2009
Marine Biological Laboratory, Woods Hole, MA	March 2009
Hubbard Brook Experimental Forest, REU Program, North Woodstock, NH	July 2008
University of New Hampshire (*Declined*, on maternity leave)	Fall 2007
Harvard Forest, Harvard University, Petersham, MA	May 2007
University of Connecticut, Storrs, Department of Ecology & Evolutionary Biology	March 2007
Boston University, Department of Biology, Women in Biology Series	October 2006
University of New Hampshire, Department of Plant Biology	April 2006
Marine Biological Lab, Woods Hole, MA	March 2006

Harvard University, Cambridge, MA	February 2006
Boston University, Department of Geography, Boston, MA	October 2005
United States Department of Agriculture, Davis, CA	April 2004
University of Pennsylvania, Department of Biology, Philadelphia, PA	April 2004
California State University, Department of Biology, Northridge, CA	February 2004
University of Granada, Department of Animal Biology and Ecology, Granada, Spain	November 2003
University of Calif, Dept of Ecology, Evolution, & Marine Biology, Santa Barbara, CA	February 2003

INVITED CONFERENCE LECTURES AND PANELS

Invisible Impacts: Soc & Long-Term Ecosystem Change Virtual Conf. Keynote speaker	June 2026
Food Project Career Panel, Dorchester, MA	May 2026
Coolidge Corner Theatre – Coolidge Classroom, Brookline, MA	March 2026
University of Massachusetts Insects & Climate Change Education Day, Virtual	February 2026
eLTER Science Conference, Tampere, Finland. Keynote speaker	June 2025
American Geophysical Union Annual Meeting, Washington DC	Dec 2024
NPR WBUR CitySpace, Choose Your Own Climate Disaster Panelist, Boston, MA	April 2024
United Nations Conference of the Parties (COP28), Dubai, United Arab Emirates	Dec 2023
Young Voices of Science (Virtual)	March 2023
United Nations Conference of the Parties (COP27), Sharm El-Sheikh, Egypt	Nov 2022
National Science Foundation Research Traineeship (NRT) Annual Meeting	Oct 2022
Harvard Forest Symposium, Harvard Forest, Petersham, MA	Oct 2022
Technical University of Madrid Environmental Leaders Program, Boston, MA	July 2022
2022 Winter Biology Virtual Symposium (Virtual)	June 2022
U.S. Congressional Briefing (Virtual)	June 2022
Harvard Arnold Arboretum Annual Plant Biology Symposium, Boston, MA	May 2022
Boston University Experiential Learning for Social Impact Summit, Boston, MA	May 2022
Coolidge Corner Theatre – Science on Screen Series, Brookline, MA	April 2022
Harvard Forest Symposium, Harvard Forest, Petersham, MA	March 2022
Forests and Climate Science Briefing for the British Consulate (Virtual)	March 2022
Ecological Society of America – COP26 Debrief	January 2022
Climate Change & Health, Boston University Research on Tap, Boston, MA	January 2022
Road to COP26: Climate Negotiations	October 2021
Pushing Boundaries – Women Scientists at the Forefront of Comm Engaged Research	October 2021
Ecological Society of America, Annual Meeting in Long Beach, CA (Virtual)	August 2021
Greater Boston Area K12 Teacher Training	August 2021
Climate Science Symposium, Brookline High School	June 2021
Quincy, MA Public Library – Your Big Backyard - Quincy's Fabulous Trees Panel	January 2021
Ecological Society of America, Annual Meeting in Salt Lake City, UT (Virtual). Session titled "Research Agenda for Tackling Global Change"	August 2020
Forest Stewards Guild "Forest Adaptation" Webinar Series	March 2020
University of California, Berkeley, Berkeley Atmospheric Science Conference	February 2020
Climate Change Adaptation in New England Forested Watershed Management	November 2019
CO_2-URBAN Synthesis & Analysis Meeting, Boston, MA	October 2019
National Atmospheric Deposition Program, Annual Meeting, Albany, NY	November 2018
500 Women Scientists Meeting, Boston, MA	September 2018
Harvard University, Arnold Arboretum Science Institute, Boston, MA	August 2018
Climate Smart Land Network, 2nd Annual Member Gathering, North Woodstock, NH	May 2018
Harvard Forest Ecology Symposium, "Synthesizing, evaluating, and learning from long-term ecological data", Harvard University, Petersham, MA.	March 2018
ILTER-Nitrogen Initiative International Training course titled "Long-term Trends in Nitrogen Cycles in Ecosystems, Field Monitoring and Global Comparisons" at Hokkaido University in Sapporo, Japan.	June 2016
Sustainability Science Symposium, John F. Kennedy School of Government, Harvard University. Cambridge, MA.	May 2016
Environmental History Working Group Panel on "Approaching the Anthropocene: Perspectives from the Humanities and the Sciences", Harvard University, Cambridge, MA.	May 2016
Ecological Society of America, Annual Meeting in Baltimore, MD. Session titled "Using	August 2015

science-policy integration to improve ecosystem science to inform decision-making"	
Conference of the Northeastern Ecosystem Research Cooperative. Saratoga Springs, NY.	March 2015
University Massachusetts Boston, "Dimensions of Sustainability Winter Symposium"	December 2014
National Autonomous University of Mexico (UNAM), Institute of Ecology, "Frontiers in Ecology and Evolution" Symposium in Mexico City, Mexico.	October 2014
INTERFACE workshop on "Using results from global change experiments to inform land model development and calibration" in Beijing, China.	May 2014
Environmental Monitoring, Eval & Protection in NY: Linking Science & Policy, Albany, NY	November 2013
New Hampshire Association of Natural Resource Scientists, Watershed Ecology Workshop	May 2013
Darwin Festival, Salem State University in Salem, MA.	February 2013
Eastern CANUSA Forest Science Conference in Durham, NH. Keynote speaker	November 2012
National Atmospheric Deposition Program, Annual Meeting in Portland, ME.	October 2012
EUROSOIL 2012 in Bari, Italy. "Influence of tree species on forest soils."	July 2012
American Geophysical Union, Annual Meeting in San Francisco, CA. "Controls on nitrogen losses from managed landscapes."	December 2011
National Atmospheric Deposition Program, Annual Meeting in Providence, RI.	October 2011
CLIMMANI/INTERFACE joint workshop. "Nutrient constraints on the net carbon Balance" in Keflavik, Iceland.	June 2011
Symposium at the University of California Davis, "From Sources to Scapes: Contributions of Light Stable Isotopes to Environmental Sciences" in Davis, CA.	December 2010
Soil Science Society of America Meeting in Pittsburg, PA.	November 2009
Annual Meeting of the Ecological Society of Germany, Austria and Switzerland in Bayreuth, Germany.	September 2009