

SARA KUEBBING

Education

- Ph.D. 2014. Ecology & Evolutionary Biology, University of Tennessee (Knoxville, TN)
Major Professor: Dr. Daniel Simberloff
- B.S. 2005. Wildlife Conservation, *Summa cum laude*. Wildlife Ecology & Entomology,
University of Delaware (Newark, DE)
School for Field Studies, Wildlife Management Studies (Kenya)

Professional Experience

- Director of Research**, Yale Applied Science Synthesis Program, *The Forest School at the Yale School of the Environment* 2022 - present
- Research Associate**, Botany Section, *Carnegie Museum of Natural History* 2018 - present
- Assistant Professor**, Department of Biological Sciences, *University of Pittsburgh* 2018 - 2021
- Smith Conservation Fellow** – Society for Conservation Biology. Home Institution: 2016 - 2018
School of Forestry & Environmental Studies, *Yale University* (New Haven, CT)
- Postdoctoral Fellow** – Yale Institute for Biospheric Studies, Gaylord Donnelley Environmental Fellow, School of Forestry & Environmental Studies, *Yale University* (New Haven, CT) 2014 - 2016
- Graduate Fellow** – NIH Training Fellowship: Program for Excellence & Equity in Research, *University of Tennessee* (Knoxville, TN) 2010 - 2012
- Graduate Teaching Assistant** – Department of Ecology & Evolutionary Biology, *University of Tennessee* (Knoxville, TN) 2009, 2013
- Program Manager**, *The Nature Conservancy Vermont Field Office* (Montpelier, VT) 2007 - 2008
- Assistant Land Steward & Volunteer Coordinator**, AmeriCorps Member, *The Nature Conservancy Vermont Field Office* (Montpelier, VT) 2005 - 2006

Leave

Parental leave for twins, Aviva & Meyer, (12/2016 – 5/2017).

Peer Reviewed Publications [^{*} graduate student, ^{**} undergraduate student, [‡] postdoc, [§] book chapter]

36. Holmes MA[‡] and **SE Kuebbing**. In Press. Species-specific facilitation shapes primary successional communities under nurse trees in an abandoned slag dump. *Urban Ecosystems*.
35. Reeb RA^{*}, NZ Aziz^{**}, S Lapan, J Kitzes, JM Heberling, and **SE Kuebbing**. 2022. Using convolutional neural networks to efficiently extract immense phenological data from community science images. *Frontiers in Plant Science* 12:787407.

34. Holmes MA[‡], J Whitacre, LD Bennion, J Poteet, and **SE Kuebbing**. 2022. Native–exotic richness ratios in second-growth forests differ along a gradient of land-use history. *Landscape Ecology* 37:847-859.
33. Catella SA[‡], CF Olmsted^{*}, SH Markalanda^{**}, CJ McFadden^{**}, CW Wood, and **SE Kuebbing**. 2021. A generalist nematode destabilizes plant competition: no evidence for direct effects, but strong evidence for indirect effects on rhizobia abundance. *New Phytologist* 233: 2561-2572.
32. Ward EM^{*}, MC Duguid, **SE Kuebbing**, JC Lendemer, RJ Warren II, and MA Bradford. 2021. Ericoid mycorrhizal shrubs alter the relationship between tree mycorrhizal dominance and soil carbon and nitrogen. *Journal of Ecology* 109:3524-3540.
31. Stuble KA, LD Bennion and **SE Kuebbing**. 2021. Plant phenological responses to experimental warming. *Global Change Biology* 27:4110-4124.
30. Holmes MA[‡], J Whitacre, LD Bennion, J Poteet, and **SE Kuebbing**. 2021. Land-use history and abiotic gradients drive abundance of non-native shrubs in Appalachian second-growth forests with histories of mining, agriculture, and logging. *Forest Ecology and Management* 494:119296.
29. Chong KY, RT Corlett, MA Nuñez, JH Chiu, F Courchamp, W Dawson, **S Kuebbing**, AM Liebhold, M Padmanaba, L Souza, KM Anderson, S Fei, BPYH Lee, S Lum, MS Luskin, KM Ngo, and DA Wardle. 2021. Are terrestrial biological invasions different in the tropics? *Annual Review in Ecology, Evolution, and Systematics* 52:291-314.
28. Anderson SC, PR Elsen, BB Hughes, RK Tonietto, MC Bletz, DA Gill, MA Holgerson, **SE Kuebbing**, C McDonough MacKenzie, MH Meek, D Veríssimo. 2021. Trends in ecology and conservation over eight decades. *Frontiers in Ecology and the Environment* 19:274-282.
27. Ward EB^{*}, DA Doroski^{*}, AJ Felson, RA Hallett, EE Oldfield, **SE Kuebbing**, and M Bradford. 2021. Positive long-term impacts of restoration on soils in an experimental urban forest. *Ecological Applications* 31:e02336.
26. Nocco MA, BM McGill, C MacDonough MacKenzie, RK Tonietto, J Dudley, MC Bletz, T Young, and **SE Kuebbing**. 2021. Mentorship, equity, and research productivity: lessons from a pandemic. *Biological Conservation* 255:108966.
- 25[§]. **Kuebbing, SE**. How direct and indirect nonnative interactions can promote plant invasions, lead to invasional meltdown, and inform management decisions. 2020. D Richardson and A Traveset (Eds.) in *Plant Invasions: the Role of Biotic Interactions*. CABI Press.
24. McDonough MacKenzie, C, T Chang, M Nocco, R Barak, M Bletz, **S Kuebbing**, and M Dombeck. 2020. Recurrent neural network reveals overwhelming sentiment against 2017 review of U.S. monuments from humans and bots. *Conservation Letters* 13:e12747.

23. Reeb RA*, I Acevedo**, JM Heberling, B Isaac, and **SE Kuebbing**. 2020. Nonnative old-field species inhabit early-season phenological niches and exhibit unique sensitivity to climate. *Ecosphere* 8:e03217.
22. Roddy A, G Theroux-Rancourt, T Abbo, C Brodersen, BM Jensen, GF Jiang, RA Thompson, **SE Kuebbing**, and K Simonin. 2020. The scaling of genome size and cell size limits maximum rates of photosynthesis with implications for ecological strategies. *International Journal of Plant Sciences* 181:75-87. DOI: 10.1086/706186 [Featured “Best Paper of 2019” by the Community Ecology Group at Stanford University <http://web.stanford.edu/~fukamit/papers2018.htm>]
21. Ward EB*, CC Pregitzer*, **SE Kuebbing**, and MA Bradford. 2020. Invasive lianas are drivers and passengers to altered soil nutrient availability in urban forests. *Biological Invasions* 22:935-955. DOI: 10.1007/s10530-019-02134-2
20. **Kuebbing SE** and MA Bradford. 2019. The potential for mass ratio and trait divergence effects to explain idiosyncratic impacts of non-native invasive plants on carbon mineralization of decomposing leaf litter. *Functional Ecology* 33:1156-1171 DOI:10.1111/1365-2435.13316.
19. Sokol* NW, **SE Kuebbing**, E Karlsen-Ayala**, and MA Bradford. 2019. Evidence for the primacy of living root inputs, not root or shoot litter, in forming soil organic carbon. *New Phytologist* 221:233-246. DOI:10.1111/nph.15361.
18. **Kuebbing SE**, AP Reimer, SA Rosenthal, G Feinberg, A Leiserowitz, JA Lau, and MA Bradford. 2018. Long-term research in ecology and evolution: a survey of challenges and opportunities. *Ecological Monographs* 88:245-258. DOI: 10.1002/ecm.1289
17. **Kuebbing SE**, and MA Nuñez. 2018. Current understanding of invasive species impacts cannot be ignored: potential publication biases do not invalidate findings. *Biodiversity and Conservation* 27:1545-1548. DOI: 10.1007/s10531-018-1527-9
16. Doroski DA*, AJ Felson, MA Bradford, MP Ashton, EE Oldfield, RA Hallett, and **SE Kuebbing**. 2018. Factors driving natural regeneration beneath a planted urban forest. *Urban Forestry & Urban Greening* 29:238-247. DOI:10.1016/j.ufug.2017.11.019.
15. **Kuebbing SE**, DS Maynard, and MA Bradford. 2018. Linking functional diversity and ecosystems processes: a framework for using functional diversity metrics to predict the ecosystem impact of functionally unique species. *Journal of Ecology* 106:687-698. DOI: 10.1111/1365-2745.12835
14. Sokol NW*, **SE Kuebbing**, and MA Bradford. 2017. Impacts of an invasive plant are fundamentally altered by a co-occurring forest disturbance. *Ecology* 98:2133-2144. DOI: 10.1002/ecy.1906
13. Delavaux, CS*, LM Smith, and **SE Kuebbing**. 2017. Beyond nutrients: A meta-analysis of the diverse effects of arbuscular mycorrhizal fungi. *Ecology* 98:2111-21119.

DOI:10.1002/ecy.1892 [Featured research on Fred's Ecology and Environmental Tales:
<https://fredsingerecology.com/>]

12. **Kuebbing SE**, and M Nuñez. 2016. Invasive non-native plants have a greater effect on neighbouring natives than other non-natives. *Nature Plants* 16134 DOI 10.1038/NPLANTS.2016.134.
11. **Kuebbing SE**, CM Patterson**, AT Classen, and D Simberloff. 2016. Co-occurring nonnative woody shrubs have additive and non-additive soil legacies. *Ecological Applications* 26: 1896-1906. DOI:10.1890/15-1931.1.
10. Ballari SA*, **SE Kuebbing**, and M Nuñez. 2016. Potential problems of removing one invasive species at a time: Interactions between invasive vertebrates and unexpected effects of removal programs. *PeerJ* 4:e2029; DOI 10.7717/peerj.2029
9. **Kuebbing SE**, AT Classen, NJ Sanders, and D Simberloff. 2015. Above and belowground effects of plant diversity depend on species origin: an experimental test with multiple invaders. *New Phytologist* 208:727-735. DOI:10.1111/nph.13488
8. **Kuebbing SE**, AT Classen, JJ Call, JA Henning and D Simberloff. 2015. Plant-soil interactions promote co-occurrence of three nonnative woody shrubs. *Ecology* 96:2289-2299. DOI:10.1890/14-2006.1
7. **Kuebbing SE** and D Simberloff. 2015. Missing the bandwagon: Nonnative species impacts still concern managers. *Neobiota* 25:73-86.
6. **Kuebbing SE** and MA Nuñez. 2015. Negative, neutral, and positive interactions among nonnative plants: patterns, processes, and management implications. *Global Change Biology* 21:926-934. DOI:10.1111/gcb.12711
5. **Kuebbing SE**, AT Classen and D Simberloff. 2014. Two co-occurring invasive woody shrubs alter soil properties and promote subdominant invasive species. *Journal of Applied Ecology* 51:124-133. DOI:10.1111/1365-2664.12161
4. **Kuebbing SE**, L Souza and NJ Sanders. 2014. Effects of co-occurring non-native invasive plant species on old-field succession. *Forest Ecology and Management* 324: 196-204. DOI:10.1016/j.foreco.2013.10.031
3. **Kuebbing S**, MA Nuñez and D Simberloff. 2013. Current mismatch between ecological research and conservation efforts: the need to study co-occurring invasive plant species. *Biological Conservation* 160: 121-129. DOI:10.1016/j.biocon.2013.01.009
2. **Kuebbing S**, MA Rodriguez-Cabal, D Fowler, L Breza, JK Bailey and JA Schweitzer. 2013. Resource availability and plant diversity explain the invasion of an exotic grass. *Journal of Plant Ecology* 6: 141-149.
1. Nuñez MA, **S Kuebbing**, R Dimarco and D Simberloff. 2012. Invasive species: To eat or not to eat, that is the question. *Conservation Letters* 5: 334-341. DOI:10.1016/j.biocon.2013.01.009

Other Publications & Public Commentary [** graduate student author, ** undergraduate student author*]

23. **Kuebbing SE**, MA McCary, D Lieurance, MA Nuñez, MC Chiuffo, B Zhang, H Seebens, D Simberloff & LA Meyerson. 2022. A self-study of editorial board diversity at *Biological Invasions*. *Biological Invasions* 24:321-332.
22. Nuñez MA, MC Chiuffo, H Seebens, **S Kuebbing**, MA McCary, D Lieurance, B Zhang, D Simberloff & LA Meyerson. 2022. Two decades of data reveal that *Biological Invasions* needs to increase participation beyond North America, Europe, and Australasia. *Biological Invasions* 24:333-340.
21. Lieurance D, **S Kuebbing**, MA McCary and MA Nuñez. 2022. Words matter: how to increase gender and LGBTQIA+ inclusivity at *Biological Invasions*. *Biological Invasions* 24:341-344.
20. **Kuebbing S**, J Poteet, C Moore, and M Heberling. 2021. Studying the future forest health at Barking Slopes. *Allegheny Land Trust VISTA Newsletter*. 16 June 2021. Available online: <https://alleghenylandtrust.org/researchers-study-threats-to-wildflower-diversity-using-barking-slopes-conservation-area/>.
19. Carson WP, **SE Kuebbing**, TL Betras*, AS Campbell*, EW McQueen*, CL Moore*, CF Olmsted*, LB Roberts and NN Washington*. 2021. Advice on applying to graduate school in ecology and evolutionary biology: how to prepare and a step-by-step guide. *The Bulletin of the Ecological Society of America* e01917.
18. *The Allegheny Front* radio program. Interviewed for “Spring is Here, but is Nature In Sync?” aired on 20 March 2020 & throughout March 2021. Available Online: <https://www.alleghenyfront.org/spring-is-here-but-is-nature-in-sync/>
17. *Gastropod* Podcast. Interviewed for “Dinner Plate Invasion: Lionfish, Tiger Shrimp, and Feral Pits, Oh My!” aired on 13 January 2020. Available Online: <https://gastropod.com/dinner-plate-invasion-lionfish-tiger-shrimp-and-feral-pigs-oh-my/>
16. McDonough MacKenzie C, RS Barak, S Bayer, M Bletz, MW Brunson, J Dudley, OG Gaoue, JL Gill, A Harris, **S Kuebbing**, BM McGill, MA Nocco, RK Tonietto, ML Vahsen and EF Waring. 2020. Plant Love Stories: Share your story and grow a movement. *Bulletin of the Ecological Society of America* 101:e01663.
15. McDonough MacKenzie C[†], **S Kuebbing**[†], RS Barak, M Bletz, J Dudley, BM McGill, MA Nocco, T Young, RK Tonietto. 2019. Letter to the Editor: We do not want to “cure plant blindness”, we want to grow plant love. *Plants, People, Planet* 1:139-141. DOI:10.1002/ppp3.10062. [†] joint first authors
14. *Undiscovered* Podcast by Science Friday and WNYC Studios. Interviewed for “Plants and Prejudice” aired on 2 October 2018. Available Online: <https://www.wnycstudios.org/story/plants-and-prejudice>

13. **Kuebbing S.** 2018. Love Jade. *Plant Love Stories*. 14 March 2018. www.plantlovestories.com
12. **Kuebbing S.** 2018. #MySciComm: Sara Kuebbing on transitioning from management to research and SciComm about invasive plants. *Ecological Society of America Communication and Engagement Section*. 20 June 2018. Available online: <https://www.esa.org/communication-engagement/2018/06/20/mysciomm-sara-kuebbing-on-transitioning-from-management-to-research-and-sciomm-about-invasive-plants/>
11. **Kuebbing S**, Serbesoff-King K, and J Randall. 2015. Research scientists advise land managers to adopt practices they have already used for over two decades: a “knowing-doing” gap and how to fix it. *Science Chronicles, The Nature Conservancy*. June Issue.
10. Simberloff D, **S Kuebbing**, MA Nuñez, and R Dimarco. 2014. Why eating invasive species is a bad idea: gastronomy is no silver bullet for controlling invasive species. *Ensia*. Available online: <https://ensia.com/voices/why-eating-invasive-species-is-a-bad-idea/>
9. *On The Environment* podcast, Yale Center for Environmental Law & Policy. Guest Interviewer for “Fighting Invasives: Working Dogs for Conservation (Episode 30). 6 September 2014. Available online: <https://soundcloud.com/yaleuniversity/fighting-invasives-working-dogs-for-conservation>
8. *On The Environment* podcast, Yale Center for Environmental Law & Policy. Guest Interviewer for “Controlling Invasives: Is the Fork Effective? (Episode 31). 16 September 2014. Available online: <https://soundcloud.com/yaleuniversity/controlling-invasives-is-the-fork-effective>
7. **Kuebbing SE.** 2014. Homegrown energy and homeland security. Guest blogger for *On The Environment*, Yale Center for Environmental Law & Policy. 19 June 2014. Available online: <http://environment.yale.edu/envirocenter/post/homegrown-energy-and-homeland-security/>
6. Galperin JU and **SE Kuebbing**. 2013. Eating Invaders: Managing Biological Invasion with Fork and Knife? *Natural Resources & Environment*, Vol 28. No 2.
5. **Kuebbing SE**, JU Galperin, and MA Nuñez. 2013. Book Review: Jackson Landers, Eating Aliens. *Biological Invasions* 15: 2811-2813.
4. **Kuebbing S.** 2013. Like zombies, invasive species come in multiples. *Science Chronicles, The Nature Conservancy*. May Issue.
3. Pfennigwerth A** and **S Kuebbing**. 2012. Direct costs associated with invasive non-native plants in Tennessee. *Wildland Weeds* Summer/Fall Issue p4-6. Available online: <https://www.se-eppc.org/wildlandweeds/>
2. **Kuebbing S**, D Dittrich-Reed, J Galperin, I Juric and R Bernard. 2012. Evolution found uncontroversial. Letter to the Editor, *The Daily Beacon*. Available online: http://www.utdailybeacon.com/opinion/article_e43e140f-cef0-565b-beff-bfa89041c5eb.htm

1. **Kuebbing S**, D Simberloff and JA Lockwood. 2011. Opinion: Species Origins DO Matter! *The Scientist*. Available online: <https://www.the-scientist.com/news-opinion/opinion-species-origins-do-matter-41873>

Data Papers & Data Repository Submissions

3. Reeb R, I Acevedo, M Heberling, and **S Kuebbing**. 2020. Data from: Nonnative old-field species inhabit early-season phenological niches and exhibit unique sensitivity to climate *in Ecosphere*. Dryad Digital Repository: <https://doi.org/10.5061/dryad.mkkwh70wm>
2. **Kuebbing SE** and MA Bradford. 2019. Data from: The potential for mass ratio and trait divergence effects to explain idiosyncratic effects impacts of nonnative invasive plants on carbon mineralization of decomposing leaf litter *in Functional Ecology*. Dryad Digital Repository: <https://doi.org/10.5061/dryad.158g44h>
1. **Kuebbing SE**, DS Maynard and MA Bradford. 2017. Data from: Linking functional diversity and ecosystem processes: a framework for using functional diversity metrics to predict the ecosystem impact of functionally unique species *in Journal of Ecology*. Dryad Digital Repository: <https://doi.org/10.5061/dryad.cb2f5>

Grants and Fellowships

Pennsylvania Department of Natural Resources, Wildlife Resource Conservation Program, “ <i>Floristic inventory and threat assessment of Yellow Oak-Redbud Woodlands in the Allegheny Plateau</i> ” (\$23,876)	2021
National Science Foundation, “ <i>Collaborative Research: Phenological mismatch between trees and wildflowers mediated by environmental variation and plant invasions</i> ” Co-PI (\$205,589)	2020
John C. Mascaro Faculty Scholarship in Sustainability (\$10,000)	2020
Smith Conservation Fellowship (\$175,000)	2016
NSF Long Term Ecological Research Grant “ <i>Collaborative Research: Comprehensive Analysis of Long Term Ecological Research Survey</i> ” with A. Reimer, Michigan State University (20,000)	2015
Gaylord Donnelley Environmental Postdoctoral Fellow (\$135,000)	2014
ESA Soil Ecology Section Travel Grant (\$500)	2013
Yates Dissertation Fellowship, UTK (\$15,000)	2013
Southeast Exotic Pest Plant Council Research Grant (\$1,500)	2012
Southeast Exotic Pest Plant Council Student Travel Grant (\$300)	2012
NSF Graduate Research Fellowship Program, <i>Honorable Mention</i>	2011
PEER Fellowship, National Institute of Health (\$100,000)	2010 – 2012
UTK EEB Summer Research Grants (4 awards totaling \$4,550)	2009 – 2013
J Wallace and Katie Dean Graduate Fellowship, UTK (\$15,000)	2010

Awards

Early Career Fellow (2020-2024), Ecological Society of America	2020
Early Career Centennial Mentoring Program, Ecological Society of America Early Career Ecologist Section	2015
Jim Tanner Award for Outstanding Dissertation, Department of Ecology & Evolutionary Biology, UTK	2014
Ton Damman Award – Best Oral Presentation, Ecological Society of America Vegetation Section	2013
Science Alliance Graduate Student Award, Division of Biology, UTK	2013
Exceptional Graduate Student Performance Award, EEB, UTK	2013
Graduate Student Policy Award, Ecological Society of America	2012

Teaching Experience

<i>Instructor</i> , Urban Ecological Field Studies, University of Pittsburgh	Fall 2019 – 2021
<i>Instructor of Record</i> , Ecology, Economics, and Policy of Species Invasions (graduate seminar, ~12 students), Yale University	Spring 2016 & 2018
<i>Guest Lecturer</i> : Pests, Parasites and Pathogens (graduate seminar with Dr. Liza Comita, ~15 students)	Fall 2015; Spring 2018
<i>Guest Lecturer</i> : Conservation in Practice (graduate course with Amy Vedder, ~40 students)	Spring 2016
<i>Teaching Assistant</i> , Invasive Species: Ecology, Policy and Management, Yale University	Spring 2015
<i>Instructor</i> , Ecosystem Ecology Laboratory, University of Tennessee. Designed and taught a 2-credit lab course that focused on experimental design, data analysis, and science communication.	Fall 2012

Academic Advising

Current Students and Postdoctoral Researchers

Postdoctoral Advisor for Dr. Emily Kyker-Snoman (2022-present, Yale), Dr. Weier Liu (2022-present), Dr. Benjamin Lee (2021-present, Pitt and Carnegie Museum of Natural History), Dr. Marion Holmes (2019-2021, Pitt), and Dr. Samantha Catella (2019-2021, Pitt)

Doctoral Advisor for Rachel Reeb (2018 – present) and Cheyenne Moore (2020-2021).

External Dissertation Committee Member for Taylor Zallek (2019 – present, University of Pittsburgh), Lauren Schricker (2019 – 2021, Committee Chair, University of Pittsburgh), Tiffany Betras (2018 – present, University of Pittsburgh), Elisabeth Ward (2018 – present, Yale School of the Environment), and Joshua Armstrong (2021-present, Virginia Commonwealth University).

Post-Bac Research Student Advisor for Amoi Campbell (Fall 2020), Abby Yancy (2021-2022)

Rotation Student Advisor for Hannah Assour (Spring 2021), Amber Stanley (Winter 2020), Cheyenne Moore (Fall 2020), NyJae Washington (Fall 2020), Rachel Reeb (Fall 2018, Spring 2019) Taylor Zallek (Winter 2018), Lauren Schricker (Winter 2018), Cassie Olmsted (Winter 2018).

Undergraduate Thesis Advisor: Alex Johnson (University of Pittsburgh, May 2021), Isabel Acevedo (Brown University, May 2021)

High School Research Advisee for Molly Potts (2019-2020) and Anna Lecrone (2020-2021) as part of the Pittsburgh Public School District's AP Capstone Program.

Former Research Advisees

Ellen Oordt (BS Biology 2022, Pitt), Naeem Aziz (BS Biology 2021, Pitt), Alex Johnson (BA Environmental Studies, Pitt), Joseph Jaros (BS Biology 2020, Pitt), Elisabeth Ward (MFS 2018, Yale), Danica Doroski (MFS 2018, Yale), Camille Delavaux (MFS 2017, Yale), Jaime Call (MS 2014, UTK), Courtney Patterson (BS 2012, UTK), Alix Pfennigwerth (BS 2011, UTK)

Invited Seminars

2021

Roger E. Wilson Lecture in Botany, Miami University, Department of Biology, Oxford, OH, USA.

Miami University, Department of Biology, Oxford, OH, USA.

Botany Symposia *The Botany of Invasions*. Virtual Conference.

University of Oklahoma, Department of Microbiology and Plant Biology, Norman, OK, USA.

University of British Columbia, Department of Botany, Vancouver, British Columbia, Canada.

University of M

assachusetts, Department of Environmental Conservation, Amherst, MA USA.

University of Notre Dame, Department of Biological Sciences, South Bend, IN, USA.

2020

University of Illinois, Department of Natural Resources and Environmental Sciences, Urbana-Champaign, IL, USA.

Upper Midwest Invasive Species Conference, Virtual Event.

Michigan State University, Department of Plant Biology, East Lansing, MI, USA.

Duke University, Nicholas School for the Environment, Durham, NC, USA.

West Virginia University, Division of Plant and Soil Science, Morgantown, WV, USA.

Mercyherst University, Department of Biology, Erie, PA, USA.

University of Pittsburgh, Department of Biological and Health Sciences, Bradford, PA, USA.

2019

Botanical Society of Western Pennsylvania, Pittsburgh, PA, USA.

USDA Forest Service Northern Research Station Field Office, Morgantown, WV, USA.

Ecological Society of America Organized Oral Session *Bridging the Research Community: Whole Systems Approach for Temperate Deciduous Forests*. Louisville, Kentucky, USA.

Mid-Atlantic Invasive Plant Council Conference (Keynote speaker), Juniata College, Huntingdon, Pennsylvania, USA.

Botanical Society of America Symposia Session *At the Intersection of Applied and Academic Botany: Fertile Ground for an Interdisciplinary Renaissance*. Tucson, Arizona, USA.

Nanyang Technical University, Asian School of the Environment, Singapore.

2017

Ecological Society of America Organized Oral Session: *Plant Soil Interactions in a Changing World: Exploring the interface between Global Change Drivers and Plant-Soil Feedbacks*. Portland, Oregon, USA.

2016

Cornell University. Agriculture, Food & Environmental Systems In-Service, Ithaca, New York, USA.

Indiana University, Department of Biology, Bloomington, Indiana, USA.

University of Pittsburgh, Department of Biological Sciences, Pittsburgh, Pennsylvania, USA.

2015

University of Pennsylvania, Department of Biology, Philadelphia, Pennsylvania, USA.

Midwest Invasive Plant Network Symposium & Conference (Keynote Speaker), Indianapolis, Indiana, USA.

University of Florida, Agronomy Department, Gainesville, Florida, USA.

Ecological Society of America Symposium Session *Beyond Invasional Meltdown: Implications and Impacts of Co-Occurring Invasive Species and Assessing Future Research Needs*. Baltimore, Maryland, USA.

2014

Grupo de Ecología de Invasiones, INIBIOMA, CONICET, Bariloche, Argentina.

Yale University Food Systems Symposium *Can we manage biological invasions with a fork and knife?* New Haven, Connecticut, USA.

2013

Ecological Society of America Organized Oral Session *Long-term legacies of Invasive Shrubs on Forest Ecosystems*. Minneapolis, Minnesota, USA.

International Association for Great Lakes Research Special Session *Developing and implementing risk assessment for invasive species*. Purdue University, West Lafayette, Indiana, USA.

USDA Interagency Research Forum on Invasive Species. Annapolis, Maryland, USA.

2012

University of North Carolina, Biology Department, Asheville, USA.

Invited Workshops

Northeast Regional Invasive Species & Climate Change (RISCC) Management Network Workshop. February 2020. Led by Dr. Bethany Bradley (University of Massachusetts, Amherst)

Ecology of Terrestrial Invasions in the Tropics. February 2018. Invited to participate in symposium and workshop at the Asian School of the Environment hosted by Smithsonian and Nanyang Technical University. Led by Dr. David Wardle (Nanyang Technical University).

Identifying and prioritizing research questions for long-term ecological experiments. February 2015. Invited to participate in a workshop for leading early-career scientists to identify and prioritize the next generation of long-term ecological experiments. Led by Drs. Mark Bradford (Yale University) and Jennifer Lau (Michigan State University).

Boreal Forest Ecology Course, June 2010. Invited to participate in a two-week field intensive course led by Dr. David Wardle and colleagues at the Department of Forest Ecology and Management, Swedish University of Agricultural Sciences (SLU), Umeå, Sweden.

Organized Workshops & Symposia

Plant Love Stories. *Inspire Session Co-organizer* at the 2019 Ecological Society of America Annual Meeting in Louisville, Kentucky, USA. (C McDonough MacKenzie, B Barak, B Tonietto, and M Bletz) August 2019

Plant-Soil Interactions in a Changing World: Exploring the interface between global change drivers and plant-soil feedbacks. *Organized Oral Session Organizer* at the 2017 Ecological Society of America Annual Meeting in Portland, Oregon, USA. Organizer (co-organizer Andrew Kulmatiski, Utah State University). August 2017

Beyond Invasional Meltdown: Implications and impacts of co-occurring invasive species and assessing future research needs. *Symposium Session Organizer* at the 100th Ecological Society of America's Annual Meeting in Baltimore, Maryland, USA. Symposium organizer (Co-organizer: Dean Pearson, USFS). August 2015

Interrupting the Intruders: Strategies for Creating Effective Policy to Prevent the Spread of Invasive Species. *Special Panel Organizer* at the New Directions in Environmental Law Conference in New Haven, Connecticut, USA. Organizer March 2013

Conference Presentations [** graduate student presenter, ** undergraduate student presenter*]

Iriart V*, N Forrester, TL Ashman, and **S Kuebbing**. 2021. The Plant Science Blogging Project: a curriculum to improve undergraduate science communication skills and interest in STEM coursework. Botany 2021, Virtual Meeting, USA.

Moore C*, JM Heberling and **S Kuebbing**. 2021. Invasive hybrid vigor? Niche and trait variation between three knotweed taxa. Botany 2021, Virtual Meeting, USA.

- Holmes, MA*, J Whitacre, LD Bennion, J Poteet, and **SE Kuebbing**. 2020. Land-use legacies shape invasion patterns in forests with histories of agriculture, logging, and mining. Ecological Society of America Annual Meeting, Virtual Meeting, USA
- Heberling, JM, C McDonough MacKenzie, JD Fridley, S Kalisz, **SE Kuebbing**, T Miller, and RB Primack. 2020. Phenological mismatch between trees and wildflowers under climate change and plant invasions. Ecological Society of America Annual Meeting, Virtual Meeting, USA
- Miller, T, JM Heberling, **SE Kuebbing**, and RB Primack. 2020. Are trees more responsive to climate change than wildflowers? Investigating ecological mismatches in eastern North America with herbarium specimens. Ecological Society of America Annual Meeting, Virtual Meeting, USA
- Reeb RA*, I Acevedo, JM Heberling, and **SE Kuebbing**. 2019. Native plants exhibit a historic phenological response to changing temperature. Ecological Society of America Annual Meeting, Louisville, Kentucky, USA.
- Zallek TA*, AT Johnson, JU Galperin, and **SE Kuebbing**. 2019. Is invasivity a recipe for success? Evaluating a trending tool for invasive species management. Ecological Society of America Annual Meeting, Louisville, Kentucky, USA.
- Schricker LE*, JM Heberling, RB Primack, and **SE Kuebbing**. 2019. Growing phenological mismatch in invaded Pennsylvania forest layers. Ecological Society of America Annual Meeting, Louisville, Kentucky, USA.
- Jaros JE** and **SE Kuebbing**. 2019. Limitations to the development of Japanese knotweed (*Reynoutria japonica*) seedlings. Ecological Society of America Annual Meeting, Louisville, Kentucky, USA.
- Johnson A** and **S Kuebbing**. 2019. Evaluating the efficacy of invasive plant lists. Mid-Atlantic Invasive Plant Council Bi-annual meeting, Juniata College, Huntingdon, Pennsylvania, USA.
- Johnson A**, T Zallek, J Galperin and **S Kuebbing**. 2019. Invasivity: a recipe for success? Evaluating a trending tool for invasive species management. University of Pittsburgh Department of Biological Sciences Undergraduate Research Poster Symposium, Pittsburgh Pennsylvania, USA.
- Jaros J** and S Kuebbing. 2019. Understanding the growth and composition of Japanese knotweed stands: implications for management. Natural Areas Conference, Pittsburgh, PA.
- Kuebbing, SE**, D Maynard, MA Bradford. 2018. Linking functional diversity and ecosystem processes: a framework for using functional diversity metrics to predict the ecosystem impact of nonnative species. Ecological Society of America 103rd Annual Meeting, New Orleans, Louisiana.
- Hallett R, ML Johnson, NF Sonti, **S Kuebbing**, E Oldfield, AJ Felson, and MA Bradford. 2016. New York City Afforestation Project: Rapid tree health assessment methods applied to urban afforestation. Ecological Society of America 101st Annual Meeting, Ft. Lauderdale, Florida.
- Sokol N*, **S Kuebbing** and MA Bradford. 2015. Untangling the ecosystem impact of non-native plants: insights from a *Microstegium vimineum* invasion along a logged chronosequence. Ecological Society of America 100th Annual Meeting, Baltimore, Maryland.
- Galperin JU, **S Kuebbing**, MA Nuñez, RD Dimarco and D Simberloff. 2015. Eating invaders: can we manage biological invasions with a fork and knife? Ecological Society of America 100th Annual Meeting, Baltimore, Maryland.

- Classen AT, SK Chapman, **SE Kuebbing**, LC Moorhead, QD Read and NJ Sanders. 2014. Exploring the importance of time and location – when plant genotypes shape biogeochemical cycling. Ecological Society of America 99th Annual Meeting, Sacramento, California.
- Kuebbing S** and AT Classen. 2012. Plant-soil feedback dynamics among co-occurring invasive plants. Ecological Society of America 97th Annual Meeting, Portland, Oregon.
- Souza L and **S Kuebbing**. 2012. Review and synthesis of the early successional stage and invasive plant species. Ecological Society of America 97th Annual Meeting, Portland, Oregon.
- Kuebbing S**. 2012. Plant-soil feedback dynamics among co-occurring invasive woody shrubs *Ligustrum sinense* (Chinese privet) and *Lonicera maackii* (bush honeysuckle). Southeastern Exotic Pest Plant Council Annual Meeting, Auburn, Alabama.
- Pfennigwerth A** and **S Kuebbing**. 2012. The economic expenditures of exotic, invasive plant management in the state of Tennessee. Southeastern Exotic Pest Plant Council Annual Meeting, Auburn, Alabama.
- Kuebbing S**. 2011. Location, Location, Location: the importance of site when assessing the impacts of invasive species. Ecological Society of America 96th Annual Meeting, Austin, Texas.

Journal Activities

Associate Editor, Biological Invasions 2014 - present

Manuscript Reviewer (40 peer-reviewed journals) 2010 – present

Acta Oecologica, American Midland Naturalist, AoB Plants, Applied Soil Ecology, Baltic Forest Review, Basic and Applied Ecology, Biological Invasions, Biological Conservation, BioScience, Biotropica, Conservation Biology, Conservation Letters, Diversity & Distributions, Ecological Monographs, Ecology, Ecology & Evolution, Ecology Letters, Ecosphere, Ecosystems, Ecotoxicology and Environmental Safety, Forest Ecology & Management, Functional Ecology, Functional Plant Biology, Global Ecology & Biogeography, Invasive Plant Science & Management, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Ecology, Journal of Plant Ecology, Journal of Vegetation Science, Mammal Research, Management of Biological Invasions, Neobiota, New Phytologist, Oikos, Photosynthetic, Plant and Soil, Plant Ecology, Plant Ecology & Diversity, and PLoS One.

Professional Service

Chair (2019) & Vice-Chair (2018), Invasion Ecology Section, Ecological Society of America 2018 - 2019

Section Achievements during tenure: secured permanent funding for *Simberloff Outstanding Student Presentation Awards* from Springer publishers (\$500/year).

Proposal Reviewer

National Science Foundation, Division of Environmental Biology	2015, 2018, 2019
Pymatuning Lab of Ecology Student Research Grants	2019
Smith Conservation Postdoctoral Fellowship	2019
Yale Institute for Biospheric Studies, Small Grants Panel	2017
German Research Foundation (DFG)	2016

Book Reviewer

Biological Invasions in South Africa (2020) chapter “Knowing-doing continuum or knowing doing gap?” ed. David Richardson, in Springer Series in Invasion Ecology.	2019
Hubbard Brook: The Story of a Forest Ecosystem (2016) Yale University Press.	2015

<i>President</i> (2012 – 2013) and <i>Treasurer</i> (2010 – 2012), GREBE EEB Graduate Student Organization and 2013 Chancellor’s Award ‘ <i>Extraordinary Community Service for a Campus Organization.</i> ’	2010 - 2013
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University & Departmental Service

<i>Advisory Committee to the Chair (Elected Position)</i>	2019- present
<i>Graduate Recruiting & Advisory Committee</i>	2019 - present
<i>Graduate Curriculum Committee</i>	2018 - 2019
<i>Campus Tree Advisory Committee</i>	2019 - present
<i>Plant 2 Plate, Faculty Advisor (Undergraduate Student Organization)</i>	2019- present

Public Policy & Conservation Science Leadership

<i>Lead Author, International Panel of Biodiversity and Ecosystem Services.</i> Invitation to serve as a Lead Author (1 of 4) for the IP Thematic Assessment of Invasive Alien Species and Their Control. Invitation Declined.	2019
<i>Public Commentary Co-author</i> Co-organized comment from Smith Fellows on the Department of the Interior’s “Review of Certain National Monuments Established Since 1996”. Comment available online www.conbio.org	2018
<i>Ad Hoc Committee Member, National Association of Invasive Plant Councils</i> Organized to write a standardized protocol for creating a list of nonnative, invasive plant species.	2014 - 2016
<i>Participant/Advisor, National Environmental Coalition on Invasive Species</i>	2015

NECIS promotes better invasive species mitigation policies by inviting leaders in conservation and research to Washington DC to meet with policymakers and legislative members.

Board Member, Discover Life In America 2013 – 2017

DLIA’s mission is to discover and understand America’s species through science and education for conservation. As a board member I assist with strategic planning and fundraising.

Board Member, Tennessee Exotic Pest Plant Council 2010 – 2014

TN EPPC is a state-wide non-profit dedicated to raising public awareness, facilitating management, and providing a forum on issues concerning invasive plants in Tennessee. As board member, I managed a Research Intern and served as Treasurer from 2012 to 2014.

Participant, Biological Ecological Science Coalition 2012

As an Ecological Society of America Graduate Policy Awardee, I visited Washington, DC to learn about environmental advocacy and engage with lawmakers about the importance of science funding.

Science Outreach Activities

Judge & Challenge Developer “Plant Love Stories Challenge”, Fairchild Challenge at Phipps Conservatory, Pittsburgh PA. November 2021

The Fairchild Challenge is an environmental education program for middle and high school students to creatively explore

Interactive Exhibitor Table at Market Science (local farmer’s market). October 2019

Interactive Exhibitor Table and Hike Leader at Phipps BioBlitz Days, teaching about local invasive plants and native alternatives. June 2019

Interactive Exhibitor Table at SciTech Days, Carnegie Science Center, Pittsburgh PA. Educational booth for middle and high school students teaching about invasive plant species. March 2019

Judge, Fairchild Challenge at Phipps Conservatory, Pittsburgh PA. January 2019
The Fairchild Challenge is an environmental education program for middle and high school students to creatively explore

Interactive Exhibitor Table at Ecological Society of America’s Communication and Engagement Section booth. August 2018
Collected and shared Plant Love Stories with ESA Meeting attendees.

Editor & Co-Founder, Plant Love Stories 2018 – present

Plant Love Stories is a public outreach campaign whose mission is to share stories to celebrate the importance of plants in the humanity of our lives. See our curated stories at www.plantlovestories.com.

Co-coordinator, Darwin Day Teachers Workshop 2009 – 2011

Organized annual workshop for Knox and Blount County (TN) secondary school teachers that focused on meeting state- standards on evolutionary biology education.

Professional Development Workshops & Trainings

<i>Allies Network Training</i> (3-hours)	July 2021
Objective: improve visibility and support to LGBTQIA+ students and staff by training allies to recognize and respond to homophobic comments and behaviors.	
<i>Different Like You: Recognizing Stereotypes and Removing Barriers</i> (2-hours)	June 2021
Objective: To understand how microaggressions, implicit bias, and stereotypes manifest in the workplace	
<i>Individuals with Disabilities: Creating an Accommodating and Inclusive Environment</i> (2-hours)	April 2021
Objective: To understand the impact of disabilities on student learning and how to provide accommodations in the classroom	
<i>Microaggressions: Recognizing and Challenging a Subtle Form of Bias</i> (2-hours)	December 2020
Objective: To understand microaggressions, how they manifest, and how to respond as an ally	
<i>Gender Theory, Gender Diversity, and Trans-Inclusive Spaces</i> (2-hours)	December 2020
Objective: To understand basic concepts in gender theory, articulate differences between gender and sex, and how to make the academic environment more inclusive for LGBTQIA+ colleagues and students	
<i>Fostering Diversity: Why and How</i> (2-hours)	December 2019
Objective: To understand the importance of diversity and core components of improving diversity in academic settings	
<i>Intersectionality: Marginalized Identities in the Classroom</i> (4-hours)	June 2019
Objective: To understand the concept of intersectionality and how to apply it in the classroom	
<i>Business Management for Scientists</i> (2-days)	May 2018
Objective: To better understand how the application of business management principles can be applied to conservation science research and NGOs.	
<i>Conservation Policy Training</i> (2-days)	January 2018
Objectives: (1) To understand how science is used for developing national and international policy; (2) to understand how to work with Congressional delegations and committees to communicate science effectively for policymaking.	
<i>Media Training</i> (2-days)	January 2018
Objective: To develop and practice tools, skills and communication techniques for communicating scientific content the media.	

Diversity, Equity, Inclusion, & Justice (DEIJ) (2-days)

October 2017

Objectives: (1) Build a sophisticated understanding of DEIJ, how these terms intersect and affect personal and professional lives; (2) Understand the role of unconscious bias and its implications on relationships, structures and processes; (3) Develop and test out responses/interventions to comments and requests.

Facilitation Training (2-days)

January 2017

Objective: To build familiarity with basic, comprehensive toolkit of process design and facilitation concepts and skills that can be applied in a variety of settings

Diversity in Conservation Sciences (2-days)

April 2016

Objective: To equip scientists to broaden participation and promote diversity in our profession.

Professional Affiliations

Ecological Society of America

(2009 – present)

Society for Conservation Biology

(2016 – present)