

Carly D. Ziter

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EDUCATION

- 2014-2018 **PhD** University of Wisconsin-Madison, Department of Integrative Biology
Dissertation: Ecosystem service supply in an urban landscape: roles of landscape structure, historical land-use, and biodiversity
Advisor: Dr. Monica Turner
- 2011-2013 **MSc** McGill University, Departments of Biology, Natural Resource Sciences
Thesis: The effects of forest fragmentation on aboveground carbon stocks and tree diversity: A case study of the Montérégie, QC.
Advisors: Dr. Andrew Gonzalez and Dr. Elena Bennett
- 2007-2011 **BSc** University of Guelph, Environmental Biology (minor Statistics)
Honours Thesis: Consumer and resource driven impacts on root dynamics and carbon sequestration in a degraded grassland.
Advisor: Dr. Andrew MacDougall

ACADEMIC APPOINTMENTS

- Forthcoming* Assistant Professor, Concordia University, Biology Department
(Dec 2018)
- 2018 Visiting Researcher, Memorial University of Newfoundland, Biology Department

RESEARCH INTERESTS

Landscape ecology; ecosystem services; biodiversity science; urban ecology; multifunctional landscapes; forest ecology; land-use legacies; sustainability

PEER REVIEWED PUBLICATIONS (h-index 8, 220 citations, see [Google Scholar Profile](#))

In Review/Revision (Manuscripts available upon request)

13. **Ziter, C.**, Pedersen, E.J., Kucharik, C.J., Turner, M.G. Scale-dependent interactions between tree canopy cover and impervious surfaces reduce daytime heat in cities during summer (*In Review*)
12. Dyson, K., **Ziter, C.**, Patterson M.S., and Fuentes, T.L. Conducting urban ecology research on private property: advice and lessons learned (*Minor Revisions*)

Published/In Press

11. **Ziter, C.**, and Turner, M.G. No evidence of co-facilitation between a non-native Asian earthworm (*Amyntas tokioensis*) and invasive common buckthorn (*Rhamnus cathartica*) in experimental mesocosms. *Biological Invasions (In Press)*
10. **Ziter, C.**, and Turner, M.G. 2018. Current and historical land use influence soil-based ecosystem services in an urban landscape. *Ecological Applications* 28: 643-654
9. **Ziter, C.**, Graves, R.A., and Turner, M.G. 2017. How do land-use legacies affect ecosystem services in United States cultural landscapes? *Landscape Ecology* 32: 2205-2218
8. Rose, K.C., Graves, R.A., Hansen, W.D., Harvey, B.J., Qiu, J., Wood, S.A., **Ziter, C.**, and Turner, M.G. 2017. Historical foundations and future directions in macrosystems ecology. *Ecology Letters* 20: 147-157
7. **Ziter, C.** 2016. The biodiversity-ecosystem service relationship in urban areas: A quantitative review. *Oikos* 125: 761-768
***Editor's Choice, June 2016**
6. Mitchell, M.G.E, Bennett, E.M., Gonzalez, A., Lechowicz, M., Rhemtulla, J., Cardille, J., Vanderheyden, K., Poirier-Ghys, G., Renard, D., Delmotte, S., Albert, C., Rayfield, B., Dumitru, M., Huang, H.-H., Larouche, M., Liss, K., Maguire, D., Martins, K., Terrado, M., **Ziter, C.**, Taliana, L., Dancose, K. 2015. Montérégie Connection: linking landscapes, biodiversity, and ecosystem services to improve decision making. *Ecology & Society* 20(4):15
5. **Ziter, C.**, Bennett, E., and Gonzalez, A. 2014. Temperate forest fragments maintain aboveground carbon stocks out to the forest edge despite changes in community composition. *Oecologia* 176: 893-902
4. **Ziter, C.**, Bennett, E., and Gonzalez, A. 2013. Functional diversity and management mediate aboveground carbon stocks in small forest fragments. *Ecosphere* 4: art85.
3. Liss, K*, Mitchell, M.G.E.*, MacDonald, G.K., Mahajan, S., Méthot, J., Jacob, A.L., Maguire, D., Metson, G., **Ziter, C.**, Dancose, K., Martins, K., Terrado Casanovas, M., and Bennett, E.M. 2013. Variability in ecosystem service measurement: a case study of pollination service studies. *Frontiers in Ecology and the Environment* 11:414-422
2. **Ziter, C.**, and MacDougall, A.S. 2013. Nutrients and defoliation increase soil carbon inputs in grassland. *Ecology* 94:106-116.
1. **Ziter, C.**, Robinson, E.A, and Newman, J.A. 2012. Climate change and voltinism in California insect pest species: sensitivity to location, scenario and climate model choice. *Global Change Biology* 18:2771-2780.

OTHER PUBLICATIONS

Non-peer reviewed articles

Ziter, C., Mitchell, M., Bardekjian, A., Conway, T., Danyluk, A., Molnar, M., Pachcinski, M.,

- 2015 Phi Kappa Phi National Honor Society
- 2014 Canadian Society for Ecology and Evolution Symposium Award (\$1000 CAD)
- 2013 Honourable Mention Union of Concerned Scientists Ecoservice Award
- 2013 McGill International Research Award (\$2000 CAD)
- 2012 Quebec Center for Biodiversity Science Excellence Award (\$2195 CAD)
- 2011 Graduate Admission Award, McGill Biology Department (\$2500 CAD)
- 2011 Environmental Sciences Academic Prize, University of Guelph (\$1000 CAD)
- 2011 Beth Duncan Gold Medal for extracurricular activity, University of Guelph
- 2011 Best Student Talk, Ontario Biology Day (\$200 CAD)
- 2007-2011 Board of Governors Scholarship, University of Guelph (\$8000 CAD)
- 2009, 10 OAC Dean's Scholarship, University of Guelph (\$2000 CAD)
- 2010 Best Integrative Biology Thesis Proposal, University of Guelph (\$300 CAD)
- 2010 Arthur Latornell Travel Award, University of Guelph (\$1000 CAD)
- 2010 OAC'54 International Study Award, University of Guelph (\$1450 CAD)
- 2009 NSERC Undergraduate Student Research Award (\$4500 CAD)
- 2007 University of Guelph Entrance Scholarship (\$3000 CAD)

SYMPOSIA AND WORKING GROUP INVOLVEMENT

- 2018 Working Group Participant, sUrBio2050 "Assessing globally important areas for biodiversity preservation and human well-being", sDiv, Synthesis Centre for Biodiversity Sciences, Leipzig, Germany
- 2017 Symposium Co-Organizer, "Accelerating urban ecology in Canada: Identifying current research approaches, gaps, and needs in Canadian cities", Canadian Society for Ecology and Evolution, Victoria, BC
- 2014 Symposium Co-Organizer, "Science Communication: hands-on skill building workshops in blogging and radio/podcasting", Canadian Society for Ecology and Evolution, Montreal, QC

INVITED TALKS

- 2018 Invited Speaker, Current and historical land use influence soil-based ecosystem services in an urban landscape. Meet the Author Event, Young Ecosystem Service Specialists. Virtual Presentation
- 2018 Invited Symposium Speaker, Effects of landscape structure, historical land use, and biodiversity on urban ecosystem services. *In symposium: "Diversity and Excellence in Doctoral Research"*. Canadian Society for Ecology and Evolution, Guelph, ON
- 2018 Invited Seminar Speaker, Effects of landscape structure, historical land use, and biodiversity on urban ecosystem services. Concordia University, Biology Department Seminar, Montreal, QC
- 2018 Invited Seminar Speaker, Effects of landscape structure, historical land use, and biodiversity on ecosystem services in urban Madison, WI. University of Wisconsin-Madison, Biology Colloquium, Madison, WI
- 2018 Invited Seminar Speaker, Effects of current and historical land use on urban ecosystem services in the Madison Lakes Region. University of Wisconsin-Madison,

- Center for Limnology Seminar Series, Madison, WI
- 2017 Invited Seminar Speaker, Effects of current and historical land use on urban ecosystem services. Memorial University of Newfoundland, Biology Departmental Seminar Series, St John's, NL
- 2017 Invited Symposium Speaker, Ecosystem service supply of urban green space: effects of land cover, land-use history, within-land-cover variability on soil-based services. *In symposium: "Taking a Landscape Perspective on Green Infrastructure"*. US-International Association of Landscape Ecology, Baltimore, MD * **Runner up best student talk**

CONTRIBUTED TALKS (*presenting author only*)

- Ziter, C.**, Pedersen, E.J., Kucharik, C.J., and Turner, M.G. 2018. Effects of landscape context on fine-scale summer air temperature in Madison, WI. *North American Congress on Conservation Biology*, Toronto, ON
- Ziter, C.**, Pedersen, E.J., Kucharik, C.J., and Turner, M.G. 2018. Bicycle-based measurement of the intra-urban heat island: effects of landscape context on fine-scale summer air temperature in Madison, WI. *US-International Association of Landscape Ecology*, Chicago, IL
- Ziter, C.** and Turner, M.G. 2017. When two invasive species meet: potential interactions between Asian jumping worms and common buckthorn. *Canadian Society for Ecology and Evolution*, Victoria, BC
- Ziter, C.** and Turner, M.G. 2017. Effects of historical and contemporary land use on soil-based urban ecosystem services. *Wisconsin Ecology Symposium*, Madison, WI
* **Winner best talk**
- Ziter, C.** and Turner, M.G. 2016. Effects of land cover, land-use history, and within-land cover variability on soil-based ecosystem services in urban Madison, WI. *Ecological Society of America*, Fort Lauderdale, FL
- Ziter, C.** and Turner, M.G. 2016. Effects of land cover, land-use history, and within-land cover variability on soil-based ecosystem services in urban Madison, WI. *Canadian Society for Ecology and Evolution*, St John's, NL
- Ziter, C.** and Turner, M.G. 2016. Potential impacts of invasive species interactions on ecosystem service provision in the greater Madison area. *Early Career Scientists Meeting – North Temperate Lakes LTER*, Madison, WI.
- Ziter, C.** 2015. Montreal's Ecosystems at your Service: Stories Connecting People and Nature. *ComSciCon 2015: The National Science Communication Leadership Conference for Graduate Students*, Cambridge, MA. (Poster presentation)
- Ziter, C.** 2013. The effects of forest fragmentation on aboveground carbon stocks and tree diversity: A case study of the Montérégie, QC. *McGill Ecology & Evolution Seminar Series*, Montreal, QC
- Ziter, C.**, Bennett, E., and Gonzalez, A. 2013. Functional diversity and management mediate aboveground carbon stocks in small forest fragments, *Quebec Centre for Biodiversity*

Science Annual Symposium, Montreal, QC

Ziter, C, Bennett, E., and Gonzalez, A. 2013. Functional diversity and management mediate aboveground carbon stocks in small forest fragments. *International Ecology Congress (INTECOL)*, London, UK

Ziter, C, Bennett, E., and Gonzalez, A. 2013. Functional diversity and management mediate aboveground carbon stocks in small forest fragments. *Ecological Society of America*, Minneapolis, MN

Ziter, C, Bennett, E., and Gonzalez, A. 2012. The effects of forest fragmentation patterns on carbon stocks and biodiversity in the Montérégie, QC, *Quebec Centre for Biodiversity Science Annual Symposium*, Montreal, QC

Ziter, C, and MacDougall, A.S. 2011. Consumer and resource driven impacts on root dynamics and carbon sequestration in a grassland ecosystem. *Ontario Biology Day*, Waterloo, ON. * **Winner best student talk**

TEACHING, MENTORING, and LEADERSHIP EXPERIENCE

Teaching Assistant

2014, 2017 Introductory Biology (ZOO152), UW-Madison
2016 Ecology, Evolution, and Genetics (Biocore 382), UW-Madison
2013 St. Lawrence Ecosystems (Field Ecology) (ENVB222), McGill University
2012 Population and Community Ecology (ENVB305), McGill University

Guest Lectures

2018 Great Lakes, Rochester Institute of Technology. *Urban Biodiversity and Ecosystem Services*
2016 Biology and Philosophy of Human/Animal Relationships (ZOO335), UW-Madison Department of Zoology. *Environmental impacts of dietary choices*
2014 Research in Sustainability (GEOG460), McGill University Department of Geography. *Sustainability research project showcase*
2012 Population and Community Ecology (ENVB305), McGill University Department of Natural Resource Sciences. *Biodiversity, Connectivity, and Ecosystem Services*
2012 Intro to Environmental Sciences (ENVS1030), University of Guelph School of Environmental Science, *What to expect from graduate studies in enviro sci*

Mentoring

2018 Co-advised 2 undergraduate students in independent research projects (with Dr. Hilary Dugan, UW-Madison Center for Limnology)
2017-2018 PhD student peer mentor "Zoology Introductions for New Students" program
2012-2017 Supervised 4 undergraduate students as field and laboratory assistants

Leadership, North Temperate Lakes Long Term Ecological Research site (NTL-LTER)

- 2016-2018 Responsible for leadership of data collection, processing, and management for a 150-sensor array to study urban heat island effects
- 2017 Organized and led Madison's first "Citywide Jumping Worm Survey", a citizen science census to quantify presence and abundance of an invasive species, jointly sponsored by the NTL-LTER, UW-Madison, UW-Madison Arboretum

PROFESSIONAL ACTIVITIES AND SERVICE

- 2018 Volunteer, North American Congress on Conservation Biology, Toronto, ON
- 2017-now Journal of Urban Ecology Editorial Board – Social Media Editor
- 2015-now Peer Reviewer: BioScience (3), Conservation Letters, Ecology and Society, Frontiers in Ecology and the Environment, Journal of Plant Ecology, Landscape Ecology, Nature Communications, PLOS One (2), SOIL, Urban Ecosystems
- 2015-now International Network of Next Generation Ecologists (INNGE) Working Group member
- 2017 International Grant Reviewer: NRF Singapore CREATE
- 2016 Invited Panelist, "Strategies for securing grants as a student", Ecological Society of America, Fort Lauderdale, FL
- 2015-2016 President, UW-Madison Zoology Graduate Student Organization
- 2015-2016 Graduate student representative, Instructional Programs Committee, Department of Zoology, UW-Madison
- 2014 Volunteer, Genomes to/aux Biomes Conference, Montreal, QC
- 2012-2013 Organismal Seminar Graduate Representative, McGill Department of Biology; responsible for representing graduate student interests in the selection and hosting of weekly invited faculty speakers
- 2012-2013 Conservation, Ecology, Evolution and Behavior Seminar Representative, McGill Biology Graduate Student Association; responsible for organization and speaker recruitment for weekly student and post-doctoral seminars
- 2012-2013 Councilor, McGill Biology Graduate Student Association
- 2012-2013 Organizing Committee, Conservation, Ecology, Evolution and Behavior Graduate Student Symposium, McGill Department of Biology

OUTREACH AND EDUCATION ACTIVITIES

Invited Public and K-12 Lectures

- 2017-2018 Public lecture (x4), "Get the jump on Asian jumping worms", Dane County Community Gardens Coalition, Madison Christian Community, Madison Public Library, University Woods Oakwood Village
- 2018 Invited speaker, 18th Annual Science Day, University of Wisconsin-Madison Arboretum, "Citizen Science for Invasive Species Monitoring: Madison's First Citywide Jumping Worm Survey"
- 2017-2018 Invited speaker (x2), PEO International "Urban Ecology and Ecosystem Services", Chapters DH and AE
- 2017 Invited speaker, 17th Annual Science Day, UW-Madison Arboretum, "When

- two invasive species meet: potential interactions between Asian jumping worms and common buckthorn”
- 2017 Guest Lecture, La Follette High School, “Madison’s Urban Heat Island”
- 2015 Guest Instructor, UW-Madison Preschool Laboratory, “Hands on ecology ”
- 2011-2013 Presenter (x10), Let’s Talk Science, McGill University. Various ecology talks
- 2012 Invited speaker, Curieux de Nature Lecture Series, Centre de la Nature du Mont Saint Hilaire, “Le stockage de carbone et la biodiversité dans les fragments de forêt, en Montérégie, QC”

Additional outreach and education activities

- 2015-2017 Outreach volunteer, UW-Madison’s Science Expeditions (Annually, x3 years)
- 2014-2016 Outreach volunteer, Wisconsin Science Festival (Annually, x 3 years)
- 2016 Presentation to UW Arboretum staff on invasive earthworm research
- 2016 Invasive earthworm demonstration, U-Maine Field Natural History class
- 2016 Invasive earthworm demonstration, Forest Health workshop UW-Arboretum
- 2016 Outreach volunteer, “Teen Science Cafés”
- 2015-2016 Outreach volunteer, UW-Madison Darwin Day (Annually, x2 years)
- 2015 Outreach volunteer, Dane County Farm Technology Days, Sun Prairie, WI.
- 2015 Invited Panellist, UW-Madison Undergraduate Zoological Society, “What to expect in graduate school”
- 2013-2014 Blogger, Jane Goodall Institute of Canada
- 2014 Project Manager “Linking Action & Research on Sustainability”. A bilingual science communication initiative through McGill’s Office of Sustainability, focused on training and supporting scientists in publicizing their research
- 2013 Social Media Coordinator, Project Manager “Montreal’s Ecosystems at your Service”. A bilingual science communication initiative through McGill’s Office of Sustainability, using storytelling to connect Montrealers with nature.
- 2013 Panelist, Canadian Science Writer Association Annual Meeting, Montreal, QC.

ADDITIONAL PROFESSIONAL EXPERIENCE, CONTRIBUTIONS, AND TRAINING

- 2018 Participant, How to use your science to inform and influence policy for concrete conservation outcomes. Workshop organized by Dr. Katie Gibbs, Executive Director Evidence for Democracy
- 2017 Workshop facilitator, Meeting our future water needs: A technical workshop for stakeholders by Water, Sustainability and Climate project at UW-Madison
- 2017 Participant, Breaking the prejudice habit: Creating Inclusion and Overcoming Bias. Workshop led by Dr. Patricia Devine, Dr. William Cox, UW-Madison
- 2017 Diversity and Inclusivity Training for Teaching Assistants, UW-Madison
- 2017 Participant, COMPASS Workshop: Communicating your Science, UW-Madison
- 2016 Invited Participant, National Geographic Storytelling Bootcamp, UW-Madison
- 2015 Participant, Data Carpentry Workshop, UW-Madison
- 2015 Invited participant, ComSciCon 2015: The National Science Communication Leadership Conference for Graduate Students. One of 50 selected STEM graduate students (970 applicants)

- 2014 DIVERSITAS Youth Reporter. One of four international graduate students selected (and funded) to attend and report on the 2014 DIVERSITAS Annual Meeting and transition to Future Earth, in Seville, Spain
- 2014 Ecosystem Service Analyst, Environment Canada, National Wildlife Research Centre, Landscape Science and Technology Division, Ottawa, ON
- 2014 Workshop lead, "Social Media, Websites, and Technology in Science Communication". UW-Madison Graduate Student Informal Seminar Series
- 2013 Workshop lead, "Using functional biodiversity metrics in forest ecology research". McGill Tropical Forest Ecology Women's Working Group
- 2013 Research Technician, McGill University, Montreal, QC
- 2012 Participant, Biodiversity Science Intensive Course, Quebec Center for Biodiversity Science, Mont St. Hilaire, QC

SELECTED MEDIA COVERAGE

- 2018 Trees make cities cool. THE SAINT CROIX COURIER by Brian Owens
- 2018 A secret superpower, right in your backyard. THE NEW YORK TIMES by Kendra Pierre-Lois ([link](#))
- 2018 Green spaces in cities help control floods, store carbon. UW-MADISON NEWS, by Adam Hinterthuer ([link](#)) *also covered in PREVENTIONWEB, NATURAL CAPITAL COALITION, VRT BELGIUM, TIMES COLONIST, elsewhere
- 2017 Citizen scientists scour Madison area for invasive jumping worms. UW-MADISON NEWS, by Eric Hamilton ([link](#))
- 2017 Science day spotlights research at the arboretum. ARBORETUM NEWS, by Brad Herrick ([link](#))
- 2016 Urban Ecosystem Services. Radio interview, EARTHSPEAK RADIO: WSUM ([link](#)) *also played on WORT COMMUNITY RADIO ([link](#))
- 2016 Weather Bikes Stand Out In Urban Studies, Advance Science Dialogue. ENVIRONMENTAL MONITOR, by Daniel Kelly ([link](#))
- 2016 Worming their way into Wisconsin. ISTHMUS, by Doug Hansmann, Denise Thornton ([link](#))
- 2016 What a bicycle can tell us about the urban heat island. YAHARA IN SITU, by Jenny Seifert ([link](#)); *also printed in UWMADSCIENCE ([link](#))
- 2016 When two invasive species meet. YAHARA IN SITU, by Jenny Seifert ([link](#))
- 2015 Green Plan. MCGILL REPORTER: HEADWAY, by Meaghan Thurston ([link - in English](#)) * also printed in MCGILL REPORTER: EN TETE ([link - in French](#))
- 2014 La biodiversité inestimable de la vallée du Richelieu. LAURIER, by Saïd Mahrady ([link](#))

PROFESSIONAL AFFILIATIONS

Canadian Society for Ecology and Evolution (CSEE)
Ecological Society of America (ESA)
The Long-Term Ecological Research Network (LTER)
Quebec Center for Biodiversity Science (QCBS)

US International Association for Landscape Ecology (US-IALE)