Sarah R. Supp

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PROFESSIONAL APPOINTMENTS

- 2017 Assistant Professor Department of Data Analytics Denison University
- 2014-2017 National Science Foundation Postdoctoral Research Fellow Intersections of Biology and Mathematical and Physical Sciences *Host Institutions*: University of Maine and University of Vermont *Visiting Institution*: University of Wisconsin-Madison, Department of Geography *Supporting Scientists*: Brian J. McGill, Nicholas J. Gotelli, and John W. Williams
- 2013 2014 Postdoctoral Research Associate Stony Brook University - Ecology and Evolution Department *Advisor*: Catherine H. Graham

EDUCATION

2007 – 2013	Ph.D. in Ecology
	Utah State University - Department of Biology & The Ecology Center
	<i>Dissertation:</i> Local and regional drivers of biodiversity: From life-history traits to system-level properties <i>Advisor</i> : S. K. Morgan Ernest
2007	B.S. Biology, <i>magna cum laude</i> , minors in Chemistry and Spanish Valparaiso University - Department of Biology

Advisor: Laurie S. Eberhardt

Research Experience

2014-2017	National Science Foundation Postdoctoral Fellow. Dynamic Macroecology: Globally assessing body size diversity response in plant and animal communities. NSF Postdoctoral Research Fellowship – Intersections of Mathematical, Physical, and Engineering Sciences and Biology: Sarah R. Supp, P.I.
2013-2014	Postdoctoral Research Associate. Using time-series, ecology, and physiology to predict climate change impacts on hummingbird biodiversity. NASA Biodiversity Grant: Catherine Graham, Scott Goetz, Susan Wethington, and Don Powers, P.I.s
2007-2013	Graduate Research Assistant . Long-term monitoring and manipulation of a desert ecosystem. S. K. Morgan Ernest, P.I.
2010	Graduate Research Assistant . Advancing macroecology using informatics and entropy maximization. Ethan P. White, P.I.
2009	Graduate Research Assistant. Mammalian community database. Ethan P. White, P.I.
2007	ASIANetwork Research Fellow. Water quality in east central China and northwest Indiana: issues, perceptions, and approaches for resolution. Jonathan Schoer, P.I.

PUBLICATIONS

- Bowler, D.E., A. Bjorkman, L. Navarro, A. Niamir, C. Waldock, M. Dornelas, M.I. O'Connor, S.R. Supp, K. Bohning-Gaese, H. Bruelheide, R. Elahi, L. Henriques Antao, J. Hines, F. Isbell, H. Jones, A. Magurran, J. Sarmento Cabral, M. Winter, M. Vellend, A.E. Bates. *In review*. The geography of the Anthropocene differs between the land and the sea. *Science*.
- Bannar-Martin, K.B., C. Kremer, S.K.M. Ernest, M.A. Leibold, H. Auge, J. Chase, S. Declerck, N. Eisenhauer, S. Harpole, H. Hillebrand, F. Isbell, T. Koffel, S. Larsen, A. Narwani, J.S. Petermann, C. Roscher, J. Sarmento Cabral, S.R. Supp. *In review*. Community Assembly and the Functioning of Ecosystems: integrating community assembly and biodiversity to better understand ecosystem function. *Ecology Letters*.
- 3. Dornelas, M., and BioTIME consortium (200+ authors). *in revision*. BioTIME: a database of biodiversity time-series for the Anthropocene. Global Ecology and Biogeography. *data paper*
- 4. Graham, L.J., B.G. Weinstein, **S.R. Supp**, and C.H. Graham. 2017. Future geographic patterns of novel and disappearing assemblages across three dimensions of diversity: A case study with Ecuadorian hummingbirds. Diversity and Distributions. <u>doi: 10.1111/ddi.12587</u>
- Hampton, S.E., M.B. Jones, L.A. Wasser, M.A. Schildauer, S.R. Supp, J. Brun, R.R. Hernandez, C. Boettiger, S.L. Collins, L.J. Gross, D.S. Fernandez, A. Budden, E.P. White, T.K. Teal, S. Labou, J.E. Aukema, J. Regetz . 2017. Skills and knowledge for data-intensive environmental research. BioScience. 67: 546-557. doi: 10.1093/biosci/bix025
- Graham, C.H., S. R. Supp, D.R. Powers, P.A. Beck, M.C.W. Lim, A. Shankar, T.A. Cormier, S.J. Goetz, and S. Wethington. 2016. Winter conditions influence biological response of migrating humingbirds. Ecosphere. doi: 10.1002/ecs2.1470
- Ernest, S.K.M., G.M. Yenni, G. Allington, E.M. Christensen, K. Geluso, J.R. Goheen, M.R. Schutzenhofer, S.R. Supp, K.M. Thibault, J.H. Brown, T.J. Valone. 2016. Long-term monitoring and experimental manipulation of a Chihuahuan Desert ecosystem near Portal, Arizona, USA (1977-2013). Ecology. doi:10.1890/15-2115.1
- Supp, S. R., D. N. Koons, and S. K. Morgan Ernest. 2015. Using life history trade-offs to understand core-transient structuring of a small mammal community. Ecosphere. 6: art187. doi: 10.1890/ES15-00239.1
- 9. Supp, S. R., F.A. La Sorte, T.A. Cormier, M.C.W. Lim, D.R. Powers, S.M. Wethington, S.J. Goetz, and C.H. Graham. 2015. Citizen-science data provides new insight into annual and seasonal variation in migration patterns. Ecosphere 6: art15. <u>doi: 10.1890/ES14-00290.1</u>
- Shaw, A.K., D.E. Stanton, S.R. Supp, A. Budden, S. Eby, P.L. Reynolds, R. Salguero-Gómez, D.R. Scholes, and N.B. Zimmerman. 2015. Ecology postdocs in academia: primary concerns and possible solutions. Bulletin of the Ecological Society of America 96: 140-152.
- Scholes, D.R., D.E. Stanton, and S.R. Supp. 2014. ESA's Early Career Ecologist Section: Supporting the professional development of early career ecologists in all career trajectories. Bulletin of the Ecological Society of America 95: 435-438.
- 12. **Supp, S. R.** and S. K. M. Ernest. 2014. Species-level and community-level responses to disturbance: a cross-community analysis. Ecology 95: 1717-1723.
- 13. White, E. P., E. M. Baldridge, Z. T. Brym, K. J. Locey, D. J. McGlinn, and S. R. -Supp. 2013. Nine simple ways to make it easier to (re)use your data. Ideas in Ecology and Evolution. 6: 1-10.
- 14. **Supp, S. R**. 2013. Local and regional drivers of biodiversity: from life-history traits to system-level properties. Graduate Dissertation. Utah State University. <u>http://digitalcommons.usu.edu/etd/1503</u>
- 15. Supp, S. R., X. Xiao, S. K. M. Ernest, and E. P. White. 2012. An experimental test of the response of macroecological patterns to altered species interactions. Ecology. 93: 2505-2511.
- Cobbold, S. M. and S. R. Supp. 2012. Patch shape alters spider community structure: links between microhabitat choice and sensitivity to increased edge habitat. Journal of Insect Conservation. 4: 581-589.

- 17. Thibault, K. M., S. R. Supp, M. Giffin, E. P. White and S. K. M. Ernest. 2011. Species composition and abundance of mammalian communities. Ecology. 92: 2316.
- 18. Supp, S. R. and E.P. White. 2010. Measures of journal quality should separate reviews from original research. Ideas in Ecology and Evolution. 3: 16-19.
- 19. O'Donnell, R. **S.R. Supp** and S. M. Cobbold. 2010. Hindrance of conservation biology by delays in the submission of manuscripts. Conservation Biology. 24: 615-620.

MANUSCRIPTS

- Supp, S. R., L. Graham, T. A. Cormier, F. A. La Sorte, G. Bohrer, R. Weinzierl, K. Guay, P. Jantz, G. Bohrer, D. R. Powers, S. Wethington, S. J. Goetz, and C H. Graham. *In prep.* Alternate migration scenarios provide novel insights into environmental associations for migrating hummingbird populations in North America. *Royal Society Open Science*.
- 2. **Supp, S.R.**, Blowes, S., M. Dornelas, and sChange working group. *In prep*. Biogeographic patterns of biodiversity change through time are dominated by species replacement rather than species loss or gains. *Nature*.
- 3. O'Connor, M.I., M. Dornelas, B.J. McGill, and **S.R. Supp**, and sChange Working Group, et al. *In prep*. The signature of biodiversity change across scales. *Ecology Letters*
- 4. Supp, S.R. In prep. Predicting community body size distribution response in the Anthropocene.

DATA AND SOFTWARE PRODUCTS

- 1. Data Carpentry R Ecology Lesson. (one of many authors). 2017. zenodo. <u>https://zenodo.org/record/569875</u>.
- 2. MACD: Manipulated Animal Community Database. 2014. figshare. http://dx.doi.org/10.6084/m9.figshare.969831
- 3. METE: Software for Analyzing Harte et al.'s Maximum Entropy Theory of Ecology. E.P. White, D.J. McGlinn, X. Xiao, S.R. Supp, K.M. Thibault. figshare. http://dx.doi.org/10.6084/m9.figshare.815905
- 4. Portal-rodent-dispersal: Accompanies the Supp, Koons, and Ernest project examining individual-level rodent trap data for 10-year time series at the Portal Project. Includes data & code to replicate analyses and figs. S.R. Supp. GitHub https://github.com/weecology/portal-rodent-dispersal/
- 5. Experimental-rads: Accompanies the Supp and Ernest project examining change in the rankabundance distribution (rad), species richness, total abundance, and species composition in a wide variety of manipulated terrestrial animal communities. Includes data and code to replicate analyses and figures. S.R. Supp. GitHub. <u>https://github.com/weecology/experimental-rads/</u>
- 6. PortalExperimentalMacroeEco: Accompanies the Supp, Xiao, Ernest, and White publication in Ecology (doi: 10.1890/12-0370.1). Includes data and code to replicate analyses and figures from the paper. S.R. Supp, X. Xiao. <u>https://github.com/sarahsupp/PortalExperimentalMacroeEco/</u>
- Experiments and the Rank Abundance Distribution (Slides from 2012 Ecological Society of America Conference). S.R. Supp. Figshare.<u>http://dx.doi.org/10.6084/m9.figshare.95835</u>
- Experimental evidence suggests that richness and total abundance primarily determine macroecological patterns (slide deck from 2011 Ecological Society of America Conference). S.R. Supp. Figshare. <u>http://dx.doi.org/10.6084/m9.figshare.95850</u>
- 9. Online Presence for graduate students (presentation from 7 December 2012 Utah State University Ecolunch). S.R. Supp. Prezi. <u>http://prezi.com/yugz4zgdo3qh/onlinepresence/</u>

TEACHING EXPERIENCE

Pedagogy Instruction 2014-2017 NSF Postdoctoral Research Fellowship

	Fellowship includes funding allocated towards instruction, observation, and practice,
	and course development for integrating research with undergraduate learning objectives
	in the classroom.
2017	The Unique Challenges of Engaging and Teaching First Year Students. CIRTL workshop
2016	Undergraduate Research Mentor Training, CIRTL course
	8-week course by Center for Integration of Research, Teaching, and Learning (CIRTL)
	on communicating and guiding as a mentor for undergraduate and graduate students
2016	Data Carpentry Instructor Certification
2015	An Introduction to Evidence-based Undergraduate STEM Teaching
	8-week course by CIRTL on research-based methods for teaching and assessing
2012	undergraduate learning in STEM courses
2013	Software Carpentry Instructor training
	10-week course, read "How Learning Works", wrote lesson plans and learning
2007	objectives, discussed teaching methods and student motivation
2007	Utah State University Teaching Assistant training
	8-week course, read "McKeachie's Teaching Tips", evaluated on core teaching topics
	and methods
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Courses Taugh	
2016	Data Carpentry Workshop (University of Wisconsin-Madison)
2015	Software Carpentry Workshop (Women in Science & Engineering, Univ. of Michigan)
2014	Software Carpentry Bootcamp (Data Science Center, New York University)
2013	Software Carpentry Bootcamp (Women in Science & Engineering, MIT)
2012	Software Carpentry Bootcamp (Washington University at St. Louis)
2012	Evolutionary Biology (BIOL 5250, Utah State University)
Courses Taugh	t as Teaching Assistant
* indicates Utah	State University, [†] Valparaiso University, [‡] Utah Dept of Wildlife Resources
2013	Software Carpentry Programming Bootcamp*
2012	Software Carpentry Programming Bootcamp*
2012	Introduction to R^{*t}
2010	Evolutionary Biology* (BIOL 5250)
2008	Ornithology* (BIOL 5560)
2007	Human Physiology* (BIOL 2420)
2007	Field Biology [†] (BIO 350)
2007	Science of the Indiana Dunes, for non-science majors ^{\dagger} (NS 102)
2006	$Ecology^{\dagger}$ (BIO 440)
Guest Lectures	
2011	Macroecology, Macroecology and Conservation* (BIOL 4750)
2011	Evolution, Speciation and Systematics* (BIOL 5250)
2011	Evolution, speciation and systematics (BIOE 5250)
Student Mento	ring
2013	Andrea Nieto, Biology Undergraduate, University of Azuay, Ecuador
2013	Gabriela Samaniego, Biology Undergraduate, University of Azuay, Ecuador
2013-2014	Marisa Lim, Ecology and Evolution, Ph.D. Student, Stony Brook University
2013-2014	Anusha Shankar, Ecology and Evolution, Ph.D. Student, Stony Brook University
2013-2014	Ben Weinstein, Ecology and Evolution, Ph.D. Student, Stony Brook University
Outreach	
2014	Grades 9-12 Discussion. Female Scientists that Code (Baldwin School, Bryn Mawr, PA)
2014 2011	Grades S-12 Discussion. Female Scientists that Code (Baldwin School, Bryn Mawr, FA) Grades K-6 Science Lesson. What is a Scientist? (District 33, Hastings, NE)
2001 2004 - 2007	Earthtones environmental education team (Valparaiso University)
2004 - 2007	Earthones environmental education team (valparaiso Oniversity)

GRANTS AND AWARDS

Grandistant	
2016-2017	sDiv writing retreat proposal, Biogeography of Biodiversity Change, \$4,000
2016	Early Career Mentoring Program, Ecological Society of America, \$2,850
2015	Centennial Mentoring Program, Ecological Society of America, \$2,000
2014-2015	sDiv workshop proposal, Quantifying Biodiversity Changes, \$20,000
2014-2017	National Science Foundation Postdoctoral Research Fellowship, Intersections of Biology,
	Mathematical and Physical Sciences. "Dynamic Macroecology: Globally assessing body
	size diversity response in plant and animal communities", \$207,000
2013	Graduate Researcher of the Year Nomination, Biology, Utah State University
2012-2013	School of Graduate Studies Fellowship, Utah State University, \$6,000
2012-2013	Ecology Center Fellowship, Utah State University, \$15,000
2012	Graduate Student Senate Travel Grant, Utah State University, \$300
2012	Center for Women and Gender Travel Grant, Utah State University, \$300
2012	Ecology Center Travel Grant, Utah State University, \$600
2012	Ecology Center Travel Grant, Utah State University, \$500
2010	James A. and Patty MacMahon Scholarship, Utah State University, \$500
2010	Biology Department Travel Grant, Utah State University, \$300
2010	Ecology Center Travel Grant, Utah State University, \$1,000
2009	Ecology Center Travel Grant, Utah State University, \$700
2008	Biology Department Travel Grant, Valparaiso University, \$200
2008	Board of Directors' Award, Exceptional Student Research, Valparaiso University
2007	ASIANetwork Research and Travel Grant, \$14,000
2007	Phi Beta Kappa, Valparaiso University
2003-2007	Presidential Scholarship, Valparaiso University

SELECTED PRESENTATIONS

- Supp, S.R. 2017. Experimental Macroecology: a small-scale view for dynamic patterns. 8th Biennial Conference of the International Biogeography Society. Tucson, AZ. *Invited Keynote Presentation*, 11 January 2017
- **2.** Supp, S.R. 2016. Using the macroscope for ecological research and teaching. Colby College, Waterville, ME. *Invited Seminar*, *14 December 2016*.
- **3.** Supp, S.R. 2016. Data-driven approaches for biodiversity change. Denison University. Granville, OH. *Invited seminar*, 9 December 2016.
- 4. Supp, S.R. 2016. Dynamic macroecology for a changing world. Qbio Seminar Series, Systems Biology Theme in the Wisconsin Institute for Discovery. University of Wisconsin-Madison. Madison, WI. *Invited seminar*
- **5. Supp, S.R.** 2016. Using citizen science and remote sensing data to model hummingbird migration. Biomathematics of Ecology and Education Research Conference. Charleston, SC. *Invited symposium*
- 6. Supp, S.R. 2016. Dynamic macroecology for a changing world. University of Maryland Center for Environmental Science, Appalachian Laboratory, Frostburg, MD. *Invited seminar*
- 7. Supp, S.R. 2016. Using citizen science data to track hummingbird migration and its potential drivers. Department of Biology, Valparaiso University, Valparaiso, IN. *Invited undergraduate seminar*.
- **8.** Supp, S.R. 2015. Dynamic macroecology for a changing world. Department of Biology. University of Oklahoma, Norman, OK. *Invited seminar*
- **9.** Supp, S.R. 2015. Macroecology and community ecology approaches for quantifying biodiversity change. School of Biology and Ecology, University of Maine, Orono, ME. *Invited seminar*.
- 10. Supp, S.R. 2015. The role of open science and citizen science in assessing human impacts. Organized Oral Session: New perspectives for ecology during the Anthropocene. Ecological Society of Ameica Annual Meeting. Baltimore, MD. *Invited presentation*

- **11. Supp, S.R.** 2015. Dynamic Macroecology for a changing world. College of Life Sciences and Agriculture, University of New Hampshire, Durham, NH. *Invited seminar*
- Supp, S.R. 2015. Understanding recent biodiversity change across scales. Biodiversity Change Seminar, Biodiversity Research Center, University of British Colombia. Vancouver, B.C., Canada. *Invited lightning talk*
- **13.** Supp, S.R. 2015. Dynamic macroecology for a changing world. Department of Biological Sciences Seminar. Northern Illinois University. DeKalb, IL. *Invited seminar*
- 14. Supp, S.R. 2014. Species-level and community-level diversity responses to disturbance: a crosscommunity analysis. Biodiversity Change workshop. sDiv, German Centre for Biodiversity Research, Leipzig, Germany. *Invited presentation*
- **15.** Supp, S. R., T. A. Cormier, F. A. La Sorte, G. Bohrer, S. Goetz, D. Powers, S. Wethington, M. Lim, and C. H. Graham. 2014. Using citizen-science data to evaluate the drivers of annual and seasonal variation in hummingbird migration. Gordon Research Conference and Seminar, *Unifying Ecology Across Scales*, Biddeford, ME. *Invited poster*
- **16.** Graham, C.G., **S. R. Supp**, D. Powers, S. Goetz, and S. Wethington. 2014. NASA Biodiversity and Ecological Forecasting Team Meeting. Silver Springs, MD. *Invited presentation, co-presented*
- **17.** Supp, S. R., T. A. Cormier, F. A. La Sorte, S. Goetz, D. Powers, S. Wethington, M. Lim, and C. H. Graham. 2014. Using citizen-science data to compare interannual variation in hummingbird migration patterns. Animal Movement Symposium. Raleigh, NC. *Oral presentation*
- **18.** Supp, S. R., T. A. Cormier, F. A. La Sorte, S. Goetz, M. Lim, D. Powers, S. Wethington, and C. H. Graham. 2014. Describing hummingbird migratory patterns and variation using eBird data. Cornell Lab of Ornithology. Ithaca, NY. *Invited presentation*
- **19.** Supp, S. R. and S. K. M. Ernest. 2013. Life-history trade-offs among core and transient species regulate local diversity and community structure. Ecological Society of America Annual Meeting. Minneapolis, MN. *Oral presentation*.
- **20.** Supp, S. R. 29 March 2013. Moving macroecology forward with novel experimental approaches. Utah State University, Logan, UT. *Departmental seminar*
- **21.** Supp, S. R. 8 November 2012. Moving macroecology forward with novel experimental approaches. Washington University at St. Louis. *Invited seminar*
- 22. Supp, S. R., Ernest, S.K.M. 2012. Testing the drivers of the species-abundance distribution: the relative importance of composition and state variables. Ecological Society of America Annual Meeting. Portland, OR. *Oral presentation*
- **23.** Supp, S. R., Ernest, S.K.M. 2012. Experimentally testing the drivers of the species-abundance distribution: the relative importance of composition and state variables. Gordon Research Conference, *Metabolic Basis of Ecology*, Biddeford, ME. *Invited poster*
- 24. Supp, S. R., Ernest, S.K.M. 2012. Experimentally testing the drivers of the rank abundance distribution sensitivity to anthropogenic change? Gordon Research Seminar, *Metabolic Basis of Ecology*, Biddeford, ME. *Invited presentation*
- **25.** Supp S. R., Xiao, X, Ernest, S.K.M., White, E.P. 2011. Experimentally altering biotic interactions has different effects on static and dynamic macroecological patterns. Ecological Society of America Annual Meeting. Austin, TX. *Oral presentation*
- **26.** Supp, S. R., O'Donnell, R. P, Cobbold, S. M. 2010. Hindrance of conservation biology by delays in the submission of manuscripts. Student Conference on Conservation Science. Cambridge, UK. *Invited poster*
- Mohlman, S. R. & Ernest, S. K. M. 2009. Predator influences on prey community structure in a longterm experimental rodent-plant system. Ecological Society of America Annual Meeting. Albuquerque, NM. *Poster*
- **28.** Mohlman, S. R. & Ernest, S. K. M. 2009. Pocket mouse invasion influences desert plant community structure in place of absent Kangaroo rats. American Society of Mammalogist Annual Meeting. Fairbanks, AK. *Poster*

- **29.** Mohlman, S. R., O'Donnell, R. P., Cobbold, S. M. 2008. Is the progress of conservation biology hindered by delays in the submission of conservation manuscripts? Faculty and Graduate Student Research Symposium, Utah State University. Logan, UT. *Poster*
- **30.** Mohlman, S. R., Field, J., Schoer, J. 2008. Water quality in east central China and northwest Indiana: issues, perceptions, and approaches for resolution: Part II. ASIANetwork Annual Conference. San Antonio, TX. *Poster*
- **31.** Eberhardt, L., **Mohlman, S. R.**, Zuercher, R., Lute-Kulaga, M. 2007. Yellow-bellied sapsucker (*Sphyrapicus varius*) feeding preferences for *Carya ovata* in relation to species diversity in Northwest Indiana woods. Indiana Dunes Research Forum. Highland, IN. *Poster*

MEDIA

Supp et al. 2015 highlighted in:

1. Miller, J.E. 2015. Annual changes in hummingbird migration revealed by birders' sightings. The Cornell Lab of Ornithology, All About Birds Blog. <u>http://blog.allaboutbirds.org/2015/03/25/annual-changes-in-hummingbird-migration-revealed-by-birders-sightings/</u>

O'Donnell et al. 2010 highlighted in:

- 1. Dolgin, E. 2009. Endangered papers. Nature. 461: 831. doi: 10.1038/nj7265-831c.
- 2. Dolgin, E. 2010. Research Remand. The Scientist. <u>http://www.the-scientist.com/?articles.view/articleNo/27889/title/Research-remand/</u>

Related Professional Experience and Training

2017-present	Invited participant for USGS Powell Center working group, <i>Estimating abundance-impact curves for invasive plants: effects on biodiversity and ecosystem function</i> , meet twice 2018-2019, Fort Collins, CO USA
2014-present	Co-PI for sDiv working group on Quantifying Biodiversity Change, sChange, Leipzig, Germany
2014-present	Invited participant for sDiv working group on Community Assembly and the Functioning of Ecosystems, sCAFE, Leipzig, Germany
2014-present	Contributing Member of International Network of Next Generation Ecologists (INNGE), Open Science working group
2012-present 2016-present	Instructor for the Software Carpentry Foundation and Mozilla Science Lab Instructor for Data Carpentry Foundation
2016 present	Women and Leadership Symposium, University of Wisconsin, Madison, WI
2016	Biotic Novelty and Ecosystem Function IGERT Seminar, University of Wisconsin-
2010	Madison, participant
2015-2016	Chair of Early Career Ecologist Section, Ecological Society of America
2015-2016	Ecological Society of America (ESA) Mentor representing early career ecologists
2015	Invited participant for NCEAS working group on Data Intensive Training, 9-11
	September 2015, Santa Barbara, CA
2015	Co-organizer for ESA Special Session, Challenges in professional development for early career ecologists, Baltimore, MD
2014-2016	Project lead for ESA Early Career Mentoring Program, Baltimore, MD
2014-2015	Invited participant for working group on Understanding Recent Biodiversity Change,
	Canadian Institute of Ecology and Evolution, Regina, Saskatchewan
2014	Invited participant for Biodiversity Change workshop, German Centre for Integrative
	Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany
2014	NIMBioS Tutorial invited participant, Computing in the Cloud, Knoxville, TN
2013-2015	Vice-Chair of Early Career Ecologist section, Ecological Society of America

2012-2014	Chair of Gordon Research Seminar, Unifying Ecology Across Scales, 2014
2012	Instructor Certification. Teaching Software Carpentry, teaching.software-carpentry.org -
	a group committed to teaching scientists how to program
2010-2011	Advanced Programming for Biologists. Utah State University
2010	Ecology Center Director Student Search Committee. Utah State University.
2009	Hantavirus Safety Training. Utah State University.
2009-2010	Ecology Seminar Series Committee Co-Chair. Utah State University.
2008-2011	Biology Department Student Representative. Utah State University.
2008-2010	Ecology Seminar Series Committee & Graduate Student Host. Utah State University.
2008-2010	Biology Graduate Student Association President. Utah State University.
2008	Introduction to ArcGIS interactive course with ESRI Certification. Utah State University.
2006	Resource Management, Invasive plant species control. Indiana Dunes National
	Lakeshore, Student Conservation Association and Americorps.

SERVICE

Manuscript reviewer for Methods in Ecology and Evolution, Journal of Biogeography, Ecology and Evolution, Ecology Letters, Ecological Applications, Ecology, Ecosphere, Journal of Field Ornithology, Oecologia, Estuaries and Coasts, Global Ecology and Biogeography, Axios Review, Journal of Arid Ecosystems, Frontiers in Applied Mathematics and Statistics, BioScience

Grant reviewer for *Graduate Women in Sciences, Cards Against Humanity Science Ambassador* Scholarship for Undergraduate Women, iDiv synthesis center (sDiv) for workshop proposals

Conference organizer for Gordon Research Seminar-Unifying Ecology Across Scales, Ecological Society of America's (ESA) Centennial Mentoring Program, Proposal reviewer for ESA sessions

Founding officer and Chair for Ecological Society of America Early Career Ecologist Section

Member of International Network of Next Generation Ecologists, Ecological Society of America, Early Career Ecologist Section of ESA, Open Science Section of ESA, Inclusive Ecology Section of ESA, British Ecological Society, Software Carpentry Foundation, Data Carpentry Foundation, International Biogeography Society