

Amanda E. Sorensen

amandaesorensen-at-gmail.com || 402-937-9712 || <http://www.amandaesorensen.com>

EDUCATION

- 2012-2017 PhD in Human Ecology
Graduate Program in Ecology and Evolution
Rutgers University, The State University of New Jersey
- 2008-2012 Bachelors of Science (Magna Cum Laude)
Majors: Ecology, Evolution, and Natural Resources and Psychology
Minor: Biological Sciences
School of Environmental and Biological Sciences and Douglass Residential College
Rutgers University, The State University of New Jersey

APPOINTMENTS

- 2017-Present **Postdoctoral Research and Teaching Associate**
Nebraska Cooperative Fish & Wildlife Research Unit
University of Nebraska-Lincoln
- Investigating the role of identity, personal values, framing and natural resource usership on public valuation of a protected species such as Swift Fox. In tandem, designing and leading an undergraduate course engaging students in citizen science to support the professional Swift Fox researchers.
- 2016-2017 **Research Fellow**
Center for Coastal Resilience
Rutgers University, The State University of New Jersey
- Investigated the capacity of ecological restoration experiments to be a catalyst for new forms of civic engagement and co-production of knowledge. Partnered with USFS and NYC Parks.
- 2014-2017 **Graduate Assistant**
NSF Coupled Natural Human Systems Grant
Rutgers University, The State University of New Jersey
-Public participatory science (citizen science and civic ecology) research and program management in an urban minority community.
- 2014-2017 **Part Time Lecturer**
Program in Science Learning
Rutgers University, The State University of New Jersey
-Independently and co-taught two courses, Environmental Education and Communication and Informal Science Education.
- 2012-2014 **Graduate Assistant**
Program in Science Learning
Rutgers University, The State University of New Jersey
-Research, curriculum development, and curriculum evaluation for the Program in Science Learning and the Curriculum Evaluation Committee at the School of Environmental and Biological Sciences.
- 2009-2012 **Research Assistant**
Cichlid Evolutionary Behavioral Lab

PUBLICATIONS

* *designates undergraduate student co-author*

** *designates graduate student co-author*

RC Jordan, **AE Sorensen**, R Shwom, J Meta-Robinson, C Isenhour, SA Gray, M Nucci, D Ebert-May. 2018. "Using authentic science in climate change education." Applied Environmental Education and Communication. DOI: 10.10880/1533015X.2018.1431162

WD Hansen, JP Scholl, **AE Sorensen**, K Fisher, J Klassen, L Calle, G Kandlikar, N Kortessis, D Kucera, D Marias, D Narango, K O'Keefe, A Planas, W Recart, E Ridolfi*, M Shay. 2018. "How do we ensure the future of our discipline is vibrant? Student reflections on careers and culture of ecology." Ecosphere. 9(2):e02099. DOI: 10.1002/ecs2.2099

AE Sorensen, RC Jordan, S LaDeau. 2017. "Reframing Communication about Zika and Mosquitoes to Increase Disease Prevention Behavior." Cogent Environmental Science. 3(1). DOI: 10.1080/23311843.2017.1402498

RC Jordan, **AE Sorensen**, S LaDeau. 2017. "Citizen Science as a Tool for Mosquito Control." Journal of American Mosquito Control Association. 33(3):241-245. DOI: 10.2987/17-6644R.1

RC Jordan, S Gray, **AE Sorensen**, S Pasewark*, S Sinha, C Hmelo-Silver. 2017. "Modeling with a Conceptual Representation: It is Necessary? Does it Work?" Frontiers in ICT: Digital Education. 4(7). DOI:10.3389/fict.2017.00007

AE Sorensen and RC Jordan. 2016. "Impacts and Implications of Researcher Identity and Academic Practice: Future Directions for Public Engagement and Ecological Research." Human Ecology. DOI: 10.1007/s10745-016-9819-8

RC Jordan, S Gray, **AE Sorensen**, G Newman, D Mellor, C Hmelo-Silver, A Crall, S LaDeau, D Biehler. 2016. "Studying Citizen Science, Adaptive Management, and Learning Feedback as a Mechanism for Improving Conservation Biology." Conservation Biology. 30(3): 485-497. DOI: 10.1111/cobi.12659

DG Clark**, **AE Sorensen**, RC Jordan. 2016. "Characterization of factors influencing environmental literacy in suburban park users." Current World Environment. 11(1): DOI: 10.12944/CWE.11.1.01

J Greenberg*, RC Jordan, **AE Sorensen**. 2016. "The effect of territory quality on male-male interactions and female preference in *Metriaclima zebra*." African Journal of Ecology. DOI: 10.1111/aje.12278

AE Sorensen, RC Jordan, R Shwom, D Ebert-May, C Isenhour, AM, McCright, JM Robinson. 2015. "Model-based reasoning to foster environmental and socio-scientific literacy in higher education." Journal of Environmental Studies and Sciences. 6(2): 287-294. DOI: 10.1007/s13412-015-0352-7

AE Sorensen, D Clark**, RC Jordan. 2015. "Effects of Alternative Framing on the Publics Perceived Importance of Environmental Conservation." Frontiers in Environmental Science: Interdisciplinary Climate Studies. 3(36). DOI:10.3389/fenvs.2015.00036

RC Jordan, **AE Sorensen**, D Clark**. 2015. "Urban/suburban park use: links to personal identities?" Current World Environment. 10(2): 355-366. DOI: 10.12944/CWE.10.2.01

AE Sorensen, D Mellor, RC Jordan. 2015. "The effect of carotenoids on cichlid phenotype and behavior." Ethology, Ecology, and Evolution. 28(1): 77-84. DOI:10.1080/03949370.2015.1018953

RC Jordan, **AE Sorensen**, C Hmelo-Silver. 2014. "A conceptual representation to support ecological systems learning." Natural Science Education. 43(1): 141-146. DOI:10.4195/nse2014.09.0019

R Jordan, W Brooks, **A Sorensen**, J Ehrenfeld (deceased). 2014. "Understanding plant invasions: An example of working with citizen scientists to collect environmental data." *AIMS Environmental Science*. 1(1): 38-44. DOI:10.3934/environsci.2014.1.38

Under Review

S Shuttler, **AE Sorensen**, RC Jordan, C Cooper, A Shwartz. "The role of Citizen Science in combating the Extinction of Experience phenomenon." (*Frontiers in Ecology and the Environment-in revision*).

AE Sorensen, RC Jordan, G Blaise*, J Brown**, M Aronson, L Campbell, M Johnson. "The Role of Identity and Community in Urban Restoration." (*Arboriculture and Urban Forestry-in revision*) (Invited special issue).

AE Sorensen, L Corral**, JJ Fontaine, JM Dauer. "Canid Ecology CURE Impact on Students' Environmental Attitudes and Behaviors." (*Natural Sciences Education-in revision*).

RC Jordan, **AE Sorensen**, S LaDeau, D Biehler. "Civic Ecology and Citizen Science: Bridging the Divide for Adaptive Management in Urban Communities." (in review).

In Prep

AE Sorensen, RC Jordan, S LaDeau, D Biehler. "Community Attitudes towards Mosquitoes and Mosquito Control Issues." (in prep)

AE Sorensen and RC Jordan. "Framing in Ecological Citizen Science Projects: Impacts on Participant Outcomes." (in prep).

OTHER SCHOLARLY WORKS

D Biehler, J Baker, JH Pitas, Y Bode-George, RC Jordan, **AE Sorensen**, H Goodman, S Wilson, S LaDeau, M Saunders, D Bodner, P Leisnham. "Beyond "the mosquito people": The challenges of engaging community for environmental justice in infested urban spaces." Book Chapter in prep for *Critical Physical Geography*.

TEACHING

2017

Science and Decision-Making for a Complex World (SCIL 101)

Instructor, Fall Semester. University of Nebraska-Lincoln (117 students)
3cr. Lecture/Recitation—Undergraduate course serving first-year college students focusing on the scientific, social, economic, political, cultural and ethical dimensions of current socio-scientific issues (food, energy, water and biodiversity). Students work with peers to access and evaluate popular and scientific media, and engage in science-informed decision-making. Lecture is supported, and recitations are led, by 5 undergraduate and graduate Learning Assistants.

CANID Project Class (NRES 498)

Instructor, Fall Semester. University of Nebraska-Lincoln (28 students)
1cr. Lecture/Independent Research—Designed curriculum emphasizing model-based inquiry framework. Content focuses on community ecology, environmental sociology, and uses conceptual modeling to integrate these foundations of complex socio-ecological systems. Conceptual models guide asking and answering research questions they explore through

independent research and engage in policy decision-making scenarios using their data-informed models.

Environmental Education and Communication (374, 216, 300:416)

Co-Instructor, Spring Semester. Rutgers University (30 students)

3cr. Lecture—Undergraduate course serving multiple majors emphasizing foundational theory of environmental education and communication. Application of these ideas through practice in employing sound science teaching techniques by thinking critically about the following themes: Argumentation, Empathy, and Synthesis. Students engage in multiple communication practice opportunities, both formal and informal.

2016

Environmental Education and Communication (374, 216, 300:416)

Co-Instructor, Spring and Fall Semester. Rutgers University (39 students)

3cr. Lecture—See above

2015

Environmental Education and Communication (374, 216, 300:416)

Co-Instructor, Fall Semester. Rutgers University (33 students)

3cr. Lecture—See above

Environmental Education and Communication (374, 216, 300:416) [Hybrid Course]

Co-Instructor, Spring Semester. Rutgers University (31 students)

3cr. Lecture—Class designed as a hybrid online course where students participate in online lecture and come to class for activities and practical application of materials.

2014

Environmental Education and Communication (704, 300:416)

Instructor, Spring Semester. Rutgers University (35 students)

3cr. Lecture—See above

Informal Science Education- Learning and Teaching Science Outside the Classroom (300:335)

Co-Instructor, Fall Semester. Rutgers University (8 students)

3cr. Lecture/Independent Research—Undergraduate course exploring informal education theory and practical application of course content in an independent cumulative project. Students design an educational unit for the Rutgers Geology Museum.

INVITED PRESENTATIONS

2017

AE Sorensen, L Corral, JJ Fontaine, JM Dauer. "Authentic scientific data collection in support of an integrative model-based class: A framework for student engagement in the classroom." American Geophysical Union (AGU) Fall Meeting, New Orleans, LA.

AE Sorensen, RC Jordan. "Framing in Science Communication." Department of Human Ecology Seminar Series, Rutgers University, NJ.

AE Sorensen. "Building public science literacy to foster ecological resilience: Higher education, citizen science, and stewardship." Department Colloquium. University of Nebraska-Lincoln.

PRESENTATIONS

2017

AE Sorensen, RC Jordan, G Blaise, J Brown, LK Campbell, M Aronson, M Johnson. "The role of identity and community in urban ecological restoration programs." Ecological Society of America, Portland, OR. (talk).

AE Sorensen and RC Jordan. "Are Citizen Science and Crowdsourcing the Same? An investigation on the Role of Framing in Participant Outcomes." Citizen Science Association, St. Paul, MN. (talk).

AE Sorensen, D Betz, RC Jordan, S LaDeau. "The Role of Citizen Science and Stewardship: A Case Study of Two Urban Ecological Systems with Minority Stakeholder Groups." Citizen Science Association, St. Paul, MN. (poster).

2016

AE Sorensen and RC Jordan. "A Case Study of Framing and Project Design Impacts on Participant Identity, Views, and Trust of Science in a Phenology Public Participatory Program." AGU. San Francisco, CA. (poster).

AE Sorensen, RC Jordan, S. LaDeau. "Social Justice Framing in Urban Mosquito Citizen Science Program." Baltimore Ecosystem Study Annual Conference. Baltimore, MD. (poster).

AE Sorensen, RC Jordan. "To crowd-source or citizen science ecological research? The implications of framing on broader outcomes of public participatory research." Ecological Society of America. Fort Lauderdale, FL. (talk).

AE Sorensen, RC Jordan. "Engagement in Conservation Science through Citizen Science: Trust and Impacts Across Disciplinary Boundaries." North American Congress for Conservation Biology. Madison, WI. (talk).

AE Sorensen, RC Jordan, R Shwom, D Ebert-May, C Isenhour, AM, McCright, JM Robinson. "Model-based reasoning to foster environmental and socio-scientific literacy in higher education." Association for Environmental Studies and Sciences Annual Conference, Washington, D.C. (talk).

AE Sorensen, RC Jordan, R Shwom, D Ebert-May, C Isenhour, AM, McCright, JM Robinson. "Model-based reasoning to foster environmental and socio-scientific literacy in higher education." Ecology and Evolution Graduate Program Seminar Series, Rutgers University (talk).

2015

A Sorensen, R Jordan, S LaDeau. "Urban Mosquitoes: Citizen Science Program Outcomes for the Community." Baltimore Ecosystem Study Annual Conference. Baltimore, Maryland. (talk).

A Sorensen and R Jordan. "What makes an ecologist?: Unique academic practices of ecologists from the United States." Ecological Society of America Annual Meeting. Baltimore, Maryland. (talk).

A Sorensen and R Jordan. "Citizen Science and Resource Management." The Society for Freshwater Science Annual Meeting. Milwaukee, Wisconsin. (talk).

A Sorensen. "What and who is an ecologist?" The Rutgers, Princeton, Penn, Columbia Annual Graduate Student Conference. Princeton University. Princeton, New Jersey. (talk).

A Sorensen and R Jordan. "Citizen Science as a Mechanism for Environmental Stewardship in Socio-Economically Disadvantaged Communities." AAAS Annual Meeting. San Jose, California. (poster).

A Sorensen and R Jordan. "Social Justice Framing in Urban Mosquito Citizen Science Program." Citizen Science Association Annual Meeting. San Jose, California. (poster).

2014

A Sorensen. "Science, Scientists, and the Public" GREENS Society Meeting, Rutgers University (talk).

A Sorensen and R Jordan. "Citizen Science: A Misnomer of Public Engagement in Science?" Ecology and Evolution Graduate Program Seminar Series (talk).

2013

A Sorensen and R Jordan. "Effects of high versus low carotenoid diets on prepectoral patch reflectance levels in Lake Malawi cichlids." Second Annual Mini-Conference "Pursuing a Successful Career in Science" AWMA and Department of Environmental Sciences, Rutgers University, NJ (poster).

2011

A Sorensen, D Mellor, R Jordan. "Effects of high versus low carotenoid diets on prepectoral patch reflectance levels in Lake Malawi cichlids." Douglass Residential College, S.T.E.M. Summer Research Experience Symposium, Rutgers University, NJ (poster).

A Sorensen, D Mellor, R Jordan. "Female preference towards novel colorations in Mbuna cichlids of Lake Malawi." Aresty Undergraduate Research Symposium, Rutgers University, NJ (poster).

2010

A Sorensen, D Mellor, R Jordan. "Male aggression towards novel colorations in Mbuna cichlids of Lake Malawi." School of Environmental and Biological Sciences Undergraduate Research in Science Presentation, Rutgers University, NJ (poster).

A Sorensen, D Mellor, R Jordan. "Male aggression towards novel colorations in Mbuna cichlids of Lake Malawi." Douglass Residential College, S.T.E.M. Summer Research Experience Symposium, Rutgers University, NJ (poster).

SYNTHESIS AND INTERDISCIPLINARY COLLABORATIONS

- 2015-2017 EcoFutures Working Group Member, Ecological Society of America.
A horizon scanning exercise to stimulate long-term thought about how to 1) ensure ecology remains a successful and fulfilling career path and 2) increase the relevance of ecology to broader society by encouraging and supporting responsible environmental-decision making.
- 2015-2017 Diversity Working Group Co-Founder, Ecology and Evolution Graduate Student Association (EcoGSA), Rutgers University.
Focused on investigating and addressing issues of diversity and inclusion in the ecology graduate program and science departments at Rutgers University.
- 2013-2015 Socio-Environmental Synthesis Center (SESYNC) Pursuit Member.
"Socio-Ecological Framework for Understanding Climate Change Mitigation and Adaptation" Developed a conceptual model of core principle concepts in climate change to allow effective communication to students.

GRANTS AND AWARDS

2017

- Best Talk Award, Second Annual Science Slam, University of Nebraska-Lincoln (\$750)
- Postdoctoral Travel Grant Award, University of Nebraska-Lincoln (\$400)

2016

- Alumnae Scholar, Douglass Residential College, Margaret Denton Wagner Fellowship (\$1,040)
- North American Congress Conservation Biology Student Conference Travel Award (\$200)
- Center for Resilient Landscapes Fellowship (\$5,000)
- Teaching and Graduate Assistant Professional Development Fund Awardee, Rutgers University (\$545)
- Travel Award from the Graduate School of New Brunswick, Rutgers University (\$250)

2015

- Travel Awards from the Graduate School of New Brunswick, Rutgers University (\$1,000)
- Teaching and Graduate Assistant Professional Development Fund Awardee, Rutgers University (\$2,167)
- Ecological Society of America Student Section Real-Brown Travel Award (\$300)
- Alumnae Scholar, Douglass Residential College, Bertha Garber Modell Fellowship (\$2,190)

2014

- Travel Award from the Graduate School of New Brunswick, Rutgers University (\$250)
- Alumnae Scholar, Douglass Residential College, Margaret Denton Wagner Fellowship (\$940)

2013

- Hutchenson Memorial Forest Summer Research Grant (\$2,000)
- Alumnae Scholar, Douglas Residential College (\$2,000)
- AWMA and Department of Environmental Science Mini-Conference: Best Poster Presentation Award (\$400)

2012

- Rutgers University Bevier Fellowship (\$22,000)
- Alumnae Scholar, Douglass Residential College (\$500)

2011

- Douglass Residential College: S.T.E.M. Summer Research Stipend Recipient (\$3,000)
- The Murray & Helen Buell Undergraduate and Graduate Scholarship (\$2,000)
- Rutgers University Aresty Undergraduate Research Symposium: Best Poster Presentation Award (\$200)

2010

- Aresty Research Grant Recipient (\$100)
- Irene Dale and Samuel Goldfarb Douglass Residential College Scholarship (\$350)
- Douglass Residential College: S.T.E.M. Summer Research Stipend Recipient (\$3,000)

GRANT PROPOSALS IN REVIEW

Specialty Crop Research Initiative- USDA

Collaborators: Julie Lockwood (PD), Dina Fonseca (Co-PI), Amanda Sorensen (Co-PI), Anne Nielsen (Co-PI), Rafael Valentin (Key Personnel), Dustin Welborne (Key Personnel)

OUTREACH

- Association for Women in Science at University of Nebraska-Lincoln (2017, 2018)
- Reformed Church of Highland Park Youth Mentor (2015, 2016, 2017)
- Reformed Church of Highland Park, Environmental Justice Committee Co-Leader and Webmaster (2015, 2016, 2017)
- Community Greening Partner of the Year Awardee for Baltimore Mosquito Study. Parks and People Foundation, West Baltimore, MD (2015)
- North Jersey Regional Science Fair (NJRSF)-Judge (2015, 2016, 2017)
- Kids at College Presenter at Rutgers University (2014, 2015)
- Dutch Neck Elementary Science Day Presenter (2013, 2014, 2015)
- Adventures in Animal Behavior at Princeton University for Animal Behavior Society (2014)
- Baltimore Neighborhood Block Party "Take Back the Block" Community Presenter (2014, 2015, 2016)

PROFESSIONAL SERVICE

2018

- Association for Women in Science (AWIS) Working Group Member, University of Nebraska-Lincoln.

2017

- Association for Women in Science (AWIS) Working Group Member, University of Nebraska-Lincoln.
- RiSE Rutgers Scholars, Diversity and Mentorship speaker, Rutgers University.
- Student Section Liaison to Education Section, Ecological Society of America.

- Student Section Executive Board Service- Webmaster, Ecological Society of America.
- Reviewer for Applied Environmental Education and Communication.
- Reviewer for Ecosphere.
- Reviewer for Arboriculture and Urban Forestry.
- Reviewer for Restoration Ecology.
- Reviewer for Frontiers in Ecology and the Environment.
- Reviewer for Vector-Borne and Zoonotic Diseases.

2016

- EcoFutures Working Group Member, Ecological Society of America.
- Student Section Liaison to Education Section, Ecological Society of America.
- Student Section Executive Board Service- Webmaster, Ecological Society of America.
- RiSE Rutgers Scholars, Diversity and Mentorship speaker, Rutgers University.
- Ecology and Evolution Graduate Student Association (EcoGSA), President, Rutgers University.
- NJSGC Inclusion and Diversity Workshop (Entering Mentoring) Speaker, Rutgers University.
- Ecological Society of America Conference Session Moderator.
- Association for Environmental Studies and Sciences Conference Session Moderator.
- Reviewer for Frontiers in Ecology and the Environment.

2015

- Consultant for Woodrow Wilson Fellows Professional Development, Center for Mathematics, Science, and Computer Education.
- Howard Hughes Medical Institute and The National Academies Fellow Summer Institutes on Undergraduate Education in Science, Princeton University.
- Ecology and Evolution Graduate Student Association (EcoGSA) President, Rutgers University.
- Reviewer for Environmental Biology of Fishes.
- Reviewer for Journal of Environmental Studies and Sciences.
- Reviewer for Peer J.

2014

- Ecology and Evolution Graduate Student Association (EcoGSA) President, Rutgers University.
- Reviewer for Natural Sciences Education.

2013

- Ecology and Evolution Graduate Student Association (EcoGSA) Public Outreach Liaison, Rutgers University.
- Reviewer for AQUA-International Journal of Ichthyology.

UNDERGRADUATE ADVISING

- 2016-2018: Gloria Blaise, Cook Honors Senior Thesis, Rutgers University.
- 2016: Dustin Wang, Cook Honors Program, Rutgers University.
- 2016: Nikki Shakamuri, Independent Research, Bryn Mawr College.
- 2014-2016: Erin Conversano, Project Super Scholar, Douglass Residential College, Rutgers University.
- 2012-2014: Joshua Greenberg, Cook Honors Senior Thesis, Rutgers University.
- 2014: Danica Ramos, Project Super Scholar, Douglass Residential College, Rutgers University.

PROFESSIONAL DEVELOPMENT AND CERTIFICATIONS

- “Working with Underprepared Students”, Yale University, Center for Teaching and Learning.
- “Communicating Your Research”, University of Nebraska-Lincoln.
- Alan Alda Science Communication Training, University of Nebraska-Lincoln.

- “Supporting the Success of All Students: Broadening Participation of Underrepresented Groups in the Geosciences” Workshop, American Geophysical Union.
- Entering Mentoring Training, Rutgers University.
- Yale University & Howard Hughes Medical Institute Summer Institutes “Scientific Teaching” Fellow.
- Project WET Instructor, Project WET Foundation.
- Project Learning Tree Instructor, American Forest Foundation.
- Human Dimensions of Environmental Change Certificate, Rutgers University.
- American Association for the Advancement of Science, Science Communication Training.

HONORS

- Best Presentation, 2nd Annual Science Slam, University of Nebraska-Lincoln 2017
- P.E.O. Scholar Award, National Finalist 2017
- Outstanding Student Paper Award (OSPA), AGU Fall Meeting 2016
- George H. Cook Senior Honors Scholar 2012
- Deans List: Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012
- Gamma Sigma Alpha Honors Society, Fall 2010-Present
- Alpha Zeta Honors Fraternity, Fall 2009-Present: 2011. Executive Board Position Scribe (Secretary)
- Psi Chi Honors Society, Fall 2011-Present