

# Dr. Kevin E. McCluney

## Curriculum Vitae

Assistant Professor  
Department of Biological Sciences  
Bowling Green State University

<http://blogs.bgsu.edu/mccluneylab/>  
kmcclun@bgsu.edu

---

## EDUCATION

- **PhD, Biology**, May 2010, **Arizona State University** (ASU). Dissertation: Impacts of altered water resources on terrestrial animal communities using stable water isotopes and a *water web* approach. Advisor: John L. Sabo. Committee: Jim Elser, Julie Stromberg, Stan Faeth, Blair Wolf.
- **BS, Biological Science**, *with Honors, Summa Cum Laude*, May 2003, **Florida State University** (FSU). Honors Thesis: The relationship between ground cover vegetation change and fire history in the longleaf pine/wiregrass ecosystem. Advisor: Fran James

## PUBLICATIONS

Total publications: 24

Peer-reviewed journal articles: 19

Mean ( $\pm$ SE) impact factor of ranked publications: 4.6 ( $\pm$ 0.6)

h-index: 12

Manuscripts nearing publication: 9

\* = undergraduate student

\*\* = graduate student

† = major mentorship

### *Published Journal Articles*

1. Burdine, J<sup>††</sup>, E. Plummer\*, M. Seidel<sup>†††</sup>, and **K. E. McCluney**. 2018. Mass-length relationships for 3 bee species in northwest Ohio. *The Ohio Journal of Science*: 118: 31-33. [Impact Factor (IF) = NA]
2. **McCluney, K. E.**, T. George<sup>††</sup>, and S. D. Frank. 2018. Water availability influences arthropod water demand, hydration, and community composition on urban trees. *Journal of Urban Ecology* 4: juy003. [New Journal, No IF]
3. Lagucki E.\*, J. Burdine<sup>†††</sup>, and **K. E. McCluney**. 2017. Urbanization reduces abundance of pollinator taxa in a medium-sized city. *PeerJ* 5: e3620. [Impact Factor (IF) = 2.2]
4. **McCluney, K. E.** 2017. Implications of animal water balance for terrestrial food webs. *Current Opinion in Insect Science* 23: 13-21. [IF = 3.7; invited as part of a special issue on Global Change Biology]
5. **McCluney, K. E.**, J. Burdine<sup>†††</sup>, and S. D. Frank. 2017. Variation in arthropod hydration across US cities with distinct climate. *Journal of Urban Ecology* 3(1): jux003. doi: 10.1093/jue/jux003 [New Journal, No IF]

6. **McCluney, K. E.** and J. L. Sabo. 2016. Animal water balance drives top-down effects in a riparian forest—implications for terrestrial trophic cascades. *Proceedings of the Royal Society B* 283: 20160881. <http://dx.doi.org/10.1098/rspb.2016.0881> [IF = 4.82]
7. **McCluney, K. E.** and J. L. Sabo. 2014. Sensitivity and tolerance of riparian arthropod communities to altered water resources along a drying river. *PLOS ONE* 9(10): e109276. [IF = 3.5]
8. Auerbach, D.\*\* , D. B. Deisenroth, R. R. McShane\*\*, **K. E. McCluney**, and N. L. R. Poff. 2014. Beyond the concrete: Accounting for ecosystem services from free-flowing rivers. *Ecosystem Services* 10: 1-5. [IF = 4.1]
9. Allen, D. C., **K. E. McCluney**, S. R. Elser\*, and J. L. Sabo. 2014. Water as a trophic currency in dryland food webs. *Frontiers in Ecology and the Environment* 12(3): 156-160. doi: 10.1890/130160 [IF = 8.4]
10. **McCluney, K. E.**, N. L. Poff, J. H. Thorp, G. C. Poole, M. A. Palmer, M. Williams, B. S. Williams\*\*, J. S. Baron. 2014. Riverine macrosystems ecology: sensitivity, resistance, and resilience of whole river basins with human alterations. *Frontiers in Ecology and the Environment* 12(1) 48-58. doi: 10.1890/120367 [IF = 8.4; Part of a special issue on macrosystems ecology]
11. Stromberg, J.C., **K.E. McCluney**, M.D. Dixon, T. Meixner. 2013. Dryland riparian ecosystems in the American Southwest: sensitivity and resilience to climatic extremes. *Ecosystems* 16(3): 411-415. doi: 10.1007/s10021-012-9606-3 [IF = 3.5; My photo used as cover image]
12. Hagen E. M\*\*, **K. E. McCluney**, K. A. Wyant\*\*, C. U. Soykan\*\*, A. C. Keller\*\*, K. C. Luttermoser, E. J. Holmes\*, J. C. Moore, and J. L. Sabo. 2012. A meta-analysis of the effects of detritus on primary producers and consumers in marine, freshwater, and terrestrial ecosystems. *Oikos* 121(10): 1507-1515. doi: 10.1111/j.1600-0706.2011.19666.x [IF = 3.6]
13. **McCluney, K. E.**, J. Belnap, A. L. Gonzalez, J. N. Holland, B. P. Kotler, F. T. Maestre, S. D. Smith, S. L. Collins, B. O. Wolf, and E. M. Hagen\*\*. 2012. Shifting species interactions in terrestrial dryland ecosystems under altered water availability and climate change. *Biological Reviews* 87(3): 563-582. doi: 10.1111/j.1469-185X.2011.00209.x [IF = 9.8]
14. **McCluney, K. E.** and J. L. Sabo. 2012. River drying lowers the diversity and alters the composition of an assemblage of desert riparian arthropods. *Freshwater Biology* 57(1): 91-103. doi: 10.1111/j.1365-2427.2011.02698.x [IF = 2.9]
15. **McCluney, K. E.** and J. L. Sabo. 2010. Tracing water sources of terrestrial animal populations with stable isotopes: laboratory tests with crickets and spiders. *PLoS ONE* 5(12): e15696. doi: 10.1371/journal.pone.0015696 [IF = 3.5]
16. **McCluney, K. E.** and J. L. Sabo. 2009. Water availability directly determines per capita consumption at two trophic levels. *Ecology (Report)* 90(6): 1463-1469. doi: 10.1890/08-1626.1 [IF = 5.0; Editor's Choice in *Science*]
17. Sabo, J. L., **K. E. McCluney**, Y. Y. Marusenko\*, A. C. Keller, and C. U. Soykan\*\*. 2008. Greenfall links groundwater to aboveground food webs in desert river floodplains. *Ecological Monographs* 78 (4): 615-631. doi:10.1890/07-1382.1 [IF = 7.1]
18. **McCluney, K.E.** and R.C. Date\*†. 2008. The Effects of Hydration on Growth of the House Cricket, *Acheta domesticus*. *Journal of Insect Science* 8: 1-9. [IF = 0.9]
19. Gonzalez-Suarez, M.\*\* , **K. McCluney**, D. Aurioles, and L. R. Gerber. 2006. Incorporating uncertainty in spatial structure for viability predictions: a case study of California sea

lions. *Animal Conservation* 9: 219-227. doi: 10.1111/j.1469-1795.2006.00022.x [IF = 2.5]

### **Other Publications**

1. **McCluney, K. E.** 2014. The Web of a Spider. *Cactus Wrendition* (Maricopa Audobon Society Newsletter).  
<http://www.maricopaaudubon.org/Wrendition%20Spring%202014.pdf> [pg. 11]
2. **McCluney, K. E.** 2013. Water wings. *Cactus Wrendition* (Maricopa Audobon Society Newsletter). <http://www.maricopaaudubon.org/Wrendition%20Winter%202013.pdf> [pgs. 12-13]
3. **McCluney, K. E.** 2011. Finding good information on the internet. *Scientific American: Guest Blog*. <http://blogs.scientificamerican.com/guest-blog/2011/07/16/finding-good-information-on-the-internet/> [Most popular on the Scientific American website on July 16<sup>th</sup>, 2011 and received over 600 “likes” on facebook]
4. **McCluney, K. E.** 2010. Impacts of altered water resources on terrestrial animal communities using stable water isotopes and a water web approach. Arizona State University, Tempe.
5. James, F. C., P. M. Richards, C. A. Hess, **K. E. McCluney**, E. L. Walters, and M. S. Schrader. 2003. Sustainable forestry for the red-cockaded woodpecker’s ecosystem. In R. Costa and S. J. Daniels, editors. *Red-cockaded woodpecker: road to recovery*. Hancock House Publishers, Blaine, Washington.

## **GRANTS, FELLOWSHIPS, HONORS, AND AWARDS**

### **Larger Awards (>\$6k)**

1. **McCluney K. E.** 2018-2019. **Building Strength, BGSU:** Disentangling pollinator food web responses to shifts in temperature and moisture associated with climate change. ~\$10k.
2. **McCluney K. E.** 2018-2019. **Lake Erie Protection Fund/Ohio Sea Grant:** Evaluating nutrient retention and removal associated with ditch management and restoration and exploring the role of biota. ~\$15k.
3. **McCluney K. E.** 2016-2018. **Ohio Department of Higher Education:** \$62.8k. Sub-award from Johnson L., **K. E. McCluney**, W. R. Midden, P. Mouser, J. Martin, R. Confesor. **Ohio Department of Higher Education:** Determining sources of phosphorus to western Lake Erie from field to lake. \$199k.
4. **McCluney K. E.** 2015-2017. **Ohio Board Of Regents and Ohio State University:** Tracing phosphorous sources used by Lake Erie algal blooms using stable isotopes. \$80k. Sub-award from Johnson L., R. Confesor, **K. McCluney**, W. R. Midden, P. Mouser, J. Martin. **Ohio Board Of Regents:** Identifying the best strategy to reduce phosphorus loads to Lake Erie from agricultural watersheds. \$451.5k.
5. Frank S., R. Dunn. 2013. **DEB, National Science Foundation:** RAPID: Consequences of extreme weather events for urban arthropod communities: Effects of Hurricane Sandy on ecosystem processes and the spread of exotic species in New York City. [I helped write this grant, along with two other post-docs, A. Savage and E. Youngsteadt, but we were unable to officially be listed as Co-PIs due to university regulations.]

6. Sabo, J.L. Fall '09 – Summer '12. **DEB, National Science Foundation:** Evaluating the effects of groundwater and hydrology on trophic structure in desert riparian ecosystems. Funding: \$894k. [I helped write this grant, which built on my research, but was unable to officially be listed as a Co-PI due to university regulations.]
7. **McCluney, K.E.** and J.L. Sabo. May '08 – May '10. **Doctoral Dissertation Improvement Grant, National Science Foundation:** Developing methods of using stable water isotopes to trace water sources used by animals. Funding: \$10k.
8. Butterfield, B., C. Bang, B. Cutts, E.M. Hagen, M. Kruse, **K.E. McCluney**, H. Schaafsma, Z. Stahlschmidt. Fall '08 - Spring '09. **Foundations in Life Sciences Grant, School of Life Sciences, ASU:** Organizing the conference *Dynamic Deserts: Resource Uncertainty in Arid Environments*. Funding: \$30k.
9. **McCluney, K.E.** Fall '05 - Summer '08. **STAR Fellowship (Science to Achieve Results), US Environmental Protection Agency:** Effects of Surface Water Decline on Streamside Animal Community Structure Using Stable Water Isotopes and a *Water Web* Approach. Funding: \$111k.

#### ***Smaller Awards (<\$6k)***

1. **McCluney, K.E.** Fall '12. **Research Grant, Maricopa Audubon Society.** Avian diet analysis using stable isotopes to examine covariation in diet and water use. Funding: \$0.8k.
2. **McCluney, K.E.** April '10. **Service Award, Graduate and Professional Student Association.** Funding: \$0.25k.
3. **McCluney, K.E.** Summer '06 - Summer '09. **Travel Grants, School of Life Sciences and Graduate and Professional Student Association:** Funding: \$2k.
4. **McCluney, K.E.** Spring '08. **Citizen Scholar Award, School of Life Sciences, ASU** Funding: \$4.5k
5. **McCluney, K.E.** Spring '06. **Best Student Presentation Award, AZ/NM Wildlife Society and Fisheries Society Joint Meeting** Funding: \$0.1k
6. **McCluney, K.E.** Summer '05. **Dissertation Research Grant, Brian Daniel Corrigan Foundation, through ASU Foundation.** Funding: \$5k.
7. **McCluney, K.E.** Summer '04. **Travel Award, Earl A. and Lenore H. Tripke:** Stable isotope ecology course at University of Utah. Funding: \$0.8k.

#### ***Awards to Students Under my Supervision***

1. Seidel, M. Spring '18. Sigma Xi Grant. Funding: \$0.9k
2. Burdine, J. Spring '18. Oman Scholarship. \$1k
3. Marshall, M. Spring '18. Oman Scholarship. \$1k
4. Burdine, J. Summer '16. Annie's Scholarship. \$6k

## **POSITIONS/AFFILIATIONS**

- **Assistant Professor, Bowling Green State University, Department of Biological Sciences** (January '14 - Present)
  - Teaching: Concepts in Biology I (150 students), Invertebrate Biology (15 students), Isotope Ecology (12 students; Graduate Course), Ecology for Teaching Professionals (Online Graduate Course)
- **“Adapting to City Life” Research Theme Member, Arizona State University, Central Arizona Phoenix Long-term Ecological Research programs** (Spring 2015-Present)
- **Post-doctoral Researcher Associate, North Carolina State University, Department of Entomology, Advisor: Steve Frank** (February '13 – December '13),
  - Examination of how water stress and availability influences urban arthropod communities.
- **Post-doctoral Researcher Associate, Arizona State University, School of Life Sciences, Advisor: John Sabo** (April '11 – February '13)
  - Lab and field based tests of mathematical models of hydro-foraging ecology and implications for desert riparian forest communities and water webs. Funded by an NSF proposal I helped to write.
- **Affiliate Scientist and Postdoctoral Researcher, USGS Contractor, Colorado State University, Natural Resource Ecology Laboratory, Advisors: LeRoy Poff and Jill Baron** (May '10 – April '11)
  - Developing a framework for projecting the consequences of global change and management on riverine macroecosystems
- **Fellow, STAR (Science to Achieve Results), US EPA, Arizona State University, School of Life Sciences** (Fall '05 – Summer '08)
- **Research Assistant, NSF Supported, Arizona State University, School of Life Sciences**
  - Predicting species interactions from energy and water budgets (Spring '10)
  - Tests of food web theory along an urban gradient (Summer '05)
  - Water, carbon, and nitrogen isotopes along the San Pedro River (Summer '04)
- **Research Assistant, Intra-departmental Summer Support, Arizona State University, School of Life Sciences** (Summer '09)
- **Teaching Assistant, Arizona State University, School of Life Sciences** (2003-2009)
  - Introductory Biology for Non-majors (4 semesters), Introductory Biology for Majors (1 semester), Ecology Lab (1 semester), Biometry (1 semester)

## GUEST LECTURES

1. Introduction to Environmental Studies, ENVS1010, BGSU (2x), 2015
2. Freshwater conservation challenges. Ecosystem Restoration and Management (80 students), ASU, Tempe, AZ. Spring 2013.
3. Multi-factor fixed and mixed effects models. Biometry, ASU, Tempe, AZ. Fall 2012.
4. Population Ecology. Sustainable Ecosystems (120 students), ASU, Tempe, AZ. Spring 2010.
5. Ecological entomology. Ecology Lab, ASU, Tempe, AZ. Spring 2010.
6. Water as ecological infrastructure. Water Sustainability Course, ASU, Tempe, AZ. September 2009.
7. Multiple Comparisons in ANOVA (parametric and non-parametric). Biometry, ASU, Tempe, AZ. Fall 2008.

8. Community Embeddedness. ASU 101 course, ASU, Tempe, AZ. Fall 2007.
9. General Linear Models. Biometry, ASU, Tempe, AZ. Fall 2004.

**MENTORING** (\* = primary mentorship, <sup>H</sup> = honors thesis)

- Graduate students
  - Primary Research Advisor
    - Current (6): Melanie Marshall\* (PhD), Justin Burdine\* (PhD), , John Woloschuk\* (MS), Melissa Seidel\* (MS), Rachel Paull\* (MS), Margaret Duffy\* (MS)
    - Graduated (2): Jamie Becker\* (MS), Gabrielle Metzner\* (MS)
  - Committee Member
    - Current (8): Audrey Maran (PhD), Amanda Martin (PhD), Erica Forstater (MS), Haley Meek (MS), Eric Line (MS), Eric Hibbets (MS), Josie Lindsey-Robbins (MS), Meigan Day (MS), Ian Clifton (PhD, Univ. of Toledo)
    - Graduated (10): David Gesicki (PhD), Tyler Turner (MS), Greg Gustafson (MS), Audrey Maran (MS), Rob Baroudi (MS), Christian Nordal (MS), Paige Arnold (MS), Jennifer Hollen (MS), Amanda Winters (MS), Tim Ludington (MS, note: partial), David Edwards (PhD, note: partial), Ana Jurcak (PhD, note: partial), Alex Neal (MS, note: partial)
- Undergraduates
  - BGSU:
    - Current (4): Erin Plummer, Neal Kolonay\*, Lana Neff\*, Kaleigh Obrock
    - Graduated (4): Ashley Everett\*<sup>H</sup>, Andrea Fisher, Nadya Mirochnitchenko\*<sup>H</sup>, Haley Ingram\*<sup>H</sup>, , Matt Zach\*<sup>H</sup>, Edward Lagucki, Lily Murnen\*
  - Earlier:
    - Independent Research Projects (7): Lowell Thompson, Molly Heil\*, Derek Somo\*<sup>H</sup>, Martin Vega\*, LaMarcus Ford\*, Joanna Sblendorio\*, Thomas George\*<sup>H</sup>
    - Other: Yevgeniy Marusenko, Rachel Byers\*, Stephanie Prevost\*, James Davis\*, Amy Cotlow\*, Lisa Huynh\*, Natalie Muillenber\*, Charles Rolsky\*, Marcin Trzaska\*, Denise Johnson, Dustin Wolkis, Martin Vega\*, Ginger Sommerville, Emmerson Kanawi, Trevor Birt, Stephen Elser, Taylor Hanson, Ruben Marchosky\*, Tyna Yost\*, Zachary Lancaster\*, LaMarcus Ford\*, Joanna Sblendorio\*, Michael McCartin\*, Shelby Roland, Mitchell Strong, Ryanna Henderson, Thomas George\*, Danielle Schmidt
- Advanced high school students\* (10)
- Underprivileged middle school students\* (10)
- Elementary students\* (2)

Many of these students are co-authors on manuscripts and posters or have entered graduate programs in Ecology. Eight K-12 students won awards at regional and international science fairs, one mentee won 3<sup>rd</sup> place at the international science fair.

**PRESENTATIONS AND POSTERS** (*\*indicates undergraduate co-author, \*\*indicates graduate student co-author, †indicates major mentorship of co-author*)

***Invited Research Presentations***

1. **McCluney, K. E.** Climate-induced changes in animal water demand drive lipid and protein consumption among urban arthropods. Cease Lab, Arizona State University, Tempe, AZ. June 2018.
2. **McCluney, K. E.** Water quality and aquatic-terrestrial linkages. EEOB, Ohio State University, Columbus, OH. April 2018.
3. **McCluney, K. E.**, J. L. Sabo, S. D. Frank, and J.E. Becker<sup>\*\*</sup>. Patterns and consequences of variation in arthropod water balance across ecosystems with divergent climate, land-use, and hydrological alteration. International Congress of Entomology, Orlando, FL. September 2016.
4. **McCluney, K. E.** Ecological implications of animal water balance. Department of Entomology, Ohio State University, Wooster, OH. September 2016.
5. **McCluney, K. E.**, J. L. Sabo, and J. C. Stromberg. Shifts in riparian arthropod assemblages and diversity through direct and indirect effects of decreasing flows along a semi-arid river. Joint Aquatic Sciences Meeting, Portland, OR. May 2014.
6. **McCluney, K. E.** Tracing riparian water webs using stable isotopes. Ecobreak, Bowling Green State University, Bowling Green, OH. April 2014.
7. **McCluney, K.E.**, J.L. Sabo, and S.D. Frank. Water rather than energy demand as a driver of trophic interactions and trophic cascades in terrestrial food webs. Food Web Symposium 2013, Giessen, Germany. November 2013.
8. **McCluney, K. E.** Water limitation in food webs in the southwestern and southeastern US. Department of Biology, University of North Carolina, Greensboro, Greensboro, NC. October 2013.
9. **McCluney, K. E.** and J. L. Sabo. Resistance and resilience of riverine systems in the southwestern US to climate change. Ecological Society of America Annual Meeting, Minneapolis, MN. August 2013.
10. **McCluney, K. E.** and J. L. Sabo. Resistance and resilience of riverine ecosystems in the southwestern US: retaining ecosystem services in water-limited socio-ecological systems. Society for Freshwater Science Annual Meeting, Jacksonville, FL. May 2013.
11. **McCluney, K. E.** Water ecology across scales. Department of Biology, Bowling Green State University, Bowling Green, OH. February 2013.
12. **McCluney, K. E.** Water webs, river drying, and riverine macroecology. Department of Environmental Sciences, University of Toledo, Toledo, OH. February 2012.
13. **McCluney, K. E.** Water webs, river drying, and riverine macroecology. Department of Biological Sciences, University of Denver, Denver, CO. January 2012.
14. **McCluney, K. E.** Water webs, hydro-foraging, and streamside arthropod responses to river drying along the San Pedro River. Departmental Seminar, Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO. April 2011.
15. **McCluney, K. E.**, J. Thorp, G. Poole, N.L. Poff, M. Palmer, J. Baron. Projecting Future Conditions of Riverine Ecosystems. Departmental seminar, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO. February 2011.
16. **McCluney, K. E.**, J. Thorp, G. Poole, N.L. Poff, M. Palmer, J. Baron. Projecting Future Conditions of Riverine Ecosystems. Weekly seminar series, USGS Fort Collins Science Center, Fort Collins, CO. February 2011.

### ***Contributed Presentations***

1. **McCluney K. E.**, C. Patrick, A. Ruhi, A. Gregory, J. Thorp, and J. L. Sabo. Multi-scale biodiversity drives stability in macrosystems. Society for Freshwater Science Annual Meeting, Detroit, MI. May 2018.
2. M. Marshall<sup>†\*\*</sup> and **K. E. McCluney**. Using oxygen isotopes to trace the flow of DRP entering the western basin of Lake Erie. Society for Freshwater Science Annual Meeting, Detroit, MI. May 2018.
3. **K. E. McCluney**, N. Kolonay, K. Obrock, A. Fisher, G. Gustafson, A. Martin, G. Metzner, K. Root, J. Schoen, M. Seidel, T. Turner, J. Woloschuk, T. Davis, R. McKay, M. Marshall. Effects of cyanobacterial algae blooms on shore food webs of Lake Erie and the Maumee River. Society for Freshwater Science Annual Meeting, Detroit, MI. May 2018.
4. M. Marshall<sup>†\*\*</sup> and **K. E. McCluney**. The collective effects of wastewater effluent and individual effects of caffeine on stream biofilms. Society for Freshwater Science Annual Meeting, Detroit, MI. May 2018.
5. Woloschuk, J. and **K.E. McCluney**. Variations in bat activity linked with riparian ecosystem factors. Society for Freshwater Science Annual Meeting, Detroit, MI. May 2018.
6. J.D. Burdine, M. Seidel, and **K. E. McCluney**. Can the bees take the heat? Thermal and hygric limits of bees across an urbanization gradient. Protecting Pollinators in Urban Landscapes Conference, Traverse City, MI. October 2017.
7. M.Marshall<sup>†\*\*</sup>, G. Metzner<sup>†\*\*</sup>, and **K. E. McCluney**. Using  $\delta^{18}\text{O}$  to track P entering the Western Basin of Lake Erie. Society of Freshwater Science Annual Conference, Raleigh, NC. June 2017.
8. G. Metzner<sup>†\*\*</sup>, M.Marshall<sup>†\*\*</sup>, and **K. E. McCluney**. Reducing phosphorus loads in Lake Erie at the subwatershed scale. Society of Freshwater Science Annual Conference, Raleigh, NC. June 2017.
9. E. Lagucki, **K.E. McCluney**, and J.D. Burdine. Arthropod abundance negatively affected along gradient of urbanization. Northwest Ohio Symposium on Undergraduate Research and Scholarship. Findlay, OH. 2017.
10. E. Lagucki, J.D. Burdine, and **K.E. McCluney**. Urbanization reduces abundance of pollinator taxa in a medium-size city. CURS Undergraduate Research Symposium. Bowling Green, OH. 2017.
11. E. Plummer, J.D. Burdine, and **K.E. McCluney**. Measuring functional trait variation in bee communities across an urban environment. CURS Undergraduate Research Symposium. Bowling Green, OH. 2017.
12. Lagucki, J.D. Burdine, and **K.E. McCluney**. Abundance of Diptera, Hymenoptera, and Lepidoptera impact along an urbanization gradient in Toledo, Ohio. Ohio Academy of Sciences. Cincinnati, OH. 2017.
13. M.Marshall<sup>†\*\*</sup>, G. Metzner<sup>†\*\*</sup>, and **K. E. McCluney**. The use of oxygen isotope ratios to differentiate sources of P contributing to Lake Erie algal blooms. Water Management Association of Ohio Conference, Columbus, OH. November 2016.
14. J. E. Becker<sup>†\*\*</sup> and **K. E. McCluney**. Water limitation alters arthropod protein and lipid intake targets. International Congress of Entomology, Orlando, FL. September 2016.
15. N. A. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. The influence of beached harmful algal blooms on terrestrial arthropods on the shore of Lake Erie. North America Congress for Conservation Biology, Madison, WI. July 2016.
16. H. Ingram<sup>†\*</sup>, M. Marshall<sup>†\*\*</sup>, and **K.E. McCluney**. The effects of framing devices on the perception of environmental quality. Annual Undergraduate Research Conference, Bowling Green State University. April 2016.
17. N. A. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. The influence of beached harmful algal blooms on terrestrial arthropods on the shore of Lake Erie. BGSU Undergraduate Symposium for Research and Scholarship, Bowling Green, OH. April 2016.



18. Burdine, J.D.<sup>†\*\*</sup>, and **K.E. McCluney**. Utilizing urban gardens to improve education and food access. Shanklin Colloquium, Bowling Green, OH. April 2016.
19. Burdine, J.D.<sup>†\*\*</sup>, and **K.E. McCluney**. Examining pollination services across urban environments. Midwest Graduate Research Symposium, Toledo, OH. March 2016.
20. Marshall, M.M.<sup>†\*\*</sup> and **K.E. McCluney**. Using 18O:16O isotope ratios to discover the major sources of phosphates in the main rivers flowing into the Western Basin of Lake Erie. Midwest Ecology and Evolution Conference, Miami University, Oxford, Ohio. March 2016.
21. Burdine, J.D.<sup>†\*\*</sup>, and **K.E. McCluney**. Examining urban greenspace in Northwest Ohio to increase food access. Midwest Ecology and Evolution Conference, Oxford, OH. March 2016.
22. H. Ingram<sup>\*\*</sup>, M. Marshall<sup>†\*\*</sup>, and **K.E. McCluney**. The effects of framing devices on the perception of environmental quality. Minds@Work Undergraduate Research Conference, Heidelberg University. February 2016.
23. N. A. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. The influence of beached harmful algal blooms on terrestrial arthropods on the shore of Lake Erie. Northwest Ohio Undergraduate Symposium for Research and Scholarship/ Minds @ Work Student Research Conference, Tiffin, OH. February 2016.
24. J. E. Becker<sup>†\*\*</sup>, H. Ingram<sup>†\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. Urbanization in mesic environments increases the frequency of terrestrial invertebrate water stress. Entomological Society of America, Minneapolis, MN. November 2015.
25. Marshall, M.M.<sup>†\*\*</sup> and **K.E. McCluney**. The effects of caffeine on linked aquatic-terrestrial food webs. Ohio Water Environment Association Watershed Workshop, The Ohio State University, Columbus, Ohio. November 2015.
26. Marshall, M.M.<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, and **K.E. McCluney**. The effects of caffeine-laden wastewater effluent on linked stream and riparian food webs. Ecological Society of America Annual Meeting, Baltimore, Maryland. August 2015.
27. **McCluney, K. E.** and S. D. Frank. Convergence of arthropod hydration across US cities with divergent climate. Ecological Society of America Annual Meeting, Baltimore, MD. August 2015.
28. Becker, J. E.<sup>†\*\*</sup>, H. Ingram<sup>†\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. Frequency of arthropod water stress across urban, suburban, and undeveloped habitats in a cool, mesic climate. Ecological Society of America Annual Meeting, Baltimore, MD. August 2015.
29. Ingram, H.<sup>†\*</sup>, J. E. Becker<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. Frequency of water stress among ants in northwestern Ohio. Ecological Society of America Annual Meeting, Baltimore, MD. August 2015.
30. Mirochnitchenko, N.<sup>†\*</sup>, M. Marshall<sup>†\*\*</sup>, and **K. E. McCluney**. Effects of widespread trace chemicals on aquatic and riparian communities in the Portage River watershed. Ecological Society of America Annual Meeting, Baltimore, MD. August 2015.
31. Marshall, M.<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, and **K. E. McCluney**. The effects of caffeine-laden wastewater effluent on linked stream and riparian food webs. Ecological Society of America Annual Meeting, Baltimore, MD. August 2015.
32. Mirochnitchenko, N.<sup>†\*</sup>, and **K. E. McCluney**. Chemical contamination suggests rising ecosystem threat in the Portage River watershed. Northwest Ohio Undergraduate Research Symposium, Bowling Green, OH. April 2015. [Received a best poster award]
33. Becker, J. E.<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, H. Ingram<sup>†\*</sup>, and **K. E. McCluney**. Water limitation alters terrestrial arthropod communities in mesic, urban environments. Belle Isle Aquarium Conservation Day Symposium, Detroit, MI. April 2015.
34. Becker, J. E.<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, H. Ingram<sup>†\*</sup>, and **K. E. McCluney**. Frequency of arthropod water stress across urban, suburban, and undeveloped habitats in a cool, mesic climate. Midwest Ecology and Evolution Conference, Bloomington, IN. March 2015

35. Marshall, M.M.<sup>†\*\*</sup>, N. Mirochnitchenko<sup>†\*</sup>, **K.E. McCluney**. The effects of caffeine-laden wastewater effluent on linked stream and riparian food webs. Midwest Ecology and Evolution Conference, Bloomington, IN. March 2015.
36. **McCluney, K. E.** and J. L. Sabo. Water mediated trophic cascades in a riparian forest. Ecological Society of America Annual Meeting, Sacramento, CA. August 2014.
37. **McCluney, K. E.** and S. D. Frank. Arthropod Water Stress and Urban Food Webs. Entomological Society of America Annual Meeting, Austin, TX. November 2013.
38. George, T.<sup>†\*</sup>, **K.E. McCluney**, and S.D. Frank. Herbivory in relation to water availability in urban ecosystem in Raleigh, NC. State of North Carolina Undergraduate Research and Creativity Symposium, Raleigh, NC. October 2013.
39. **McCluney, K. E.**, C. Bang, J. L. Sabo, S. H. Faeth. Bottom-up and direct effects of water availability on an urban food web. Ecological Society of America Annual Meeting, Portland, OR. August 2012.
40. Somo, D.A.<sup>†\*</sup>, **K.E. McCluney**, and J.L. Sabo. Foraging for water: The influence of forage water content on consumption in a riparian arthropod in the field. Ecological Society of America Annual Meeting, Portland, OR. August 2012.
41. Allen, D. C., **K. E. McCluney**, J. L. Sabo. Water limitation structures terrestrial animal communities. Ecological Society of America Annual Meeting, Portland, OR. August 2012.
42. Thorp, J. H., M. D. delong, B. S. Williams, **K. E. McCluney**, N. L. Poff, G. C. Poole, M. A. Palmer, M. Williams, J. S. Baron. Macroecology of riverine landscapes: from conceptual models to empirical tests. Society for Freshwater Science Annual Meeting, Louisville, KY. May 2012.
43. Allen, D. C., **K. E. McCluney**, J. L. Sabo. Surface and ground water availability affect riparian animal community structure. Society for Freshwater Science Annual Meeting, Louisville, KY. May 2012.
44. **McCluney, K. E.**, J. Thorp, G. Poole, N.L. Poff, M. Palmer. Projecting future conditions of riverine ecosystems using a macroecological modeling approach. Ecological Society of America Annual Meeting, Austin, TX. August 2011.
45. **McCluney, K. E.** and J.L. Sabo. Tracing water sources of terrestrial animals with stable isotopes: laboratory tests with crickets and spiders. ISOECOL (International Stable Isotope Ecology) Meeting, Fairbanks, AK. August 2010.
46. **McCluney, K. E.** Water webs, trophic interactions, and river drying along the San Pedro. Graduate Student Brownbag, ASU, Tempe, AZ. March 2010.
47. Wyant, K., **K. E. McCluney**, E.M. Hagen, and J.L. Sabo. River and riparian food web dynamics along the San Pedro River. SAHRA annual meeting, Tucson, AZ. September 2009.
48. **McCluney, K. E.** and J.L. Sabo. The effects of river drying on a terrestrial arthropod community. Ecological Society of America Annual Meeting, Albuquerque, NM. August 2009.
49. **McCluney, K. E.** Science or manual labor, you decide. Graduate Student Brownbag, ASU, Tempe, AZ. March 2008.
50. **McCluney, K. E.** and J.L. Sabo. Water availability directly determines interaction strength between crickets and wolf spiders. Graduates in Earth, Life, and Social Sciences symposium, ASU, Tempe, AZ. February 2008.
51. **McCluney, K.E.**, P. Umaretiya<sup>†\*</sup>, and J.L. Sabo. The water:organic material threshold resource ratio for consumption of crickets by spiders. Ecological Society of America Annual Meeting, Milwaukee, WI. August 2008.
52. Thompson, L.<sup>\*</sup>, **McCluney, K.E.**, and J.L. Sabo. Free water determines trophic structure in a desert riparian forest. Ecological Society of America Annual Meeting, Milwaukee, WI. August 2008.
53. **McCluney, K.E.**, P. Umaretiya<sup>†\*</sup>, and J.L. Sabo. The water:organic material threshold resource ratio for consumption of crickets by spiders. GRC: Metabolic Theory of Ecology, Portland, ME. July 2008.
54. **McCluney, K.E.** and J.L. Sabo. A possible method of correcting for fractionation of animal body water isotope ratios. Isoscapes, Santa Barbara, CA. April 2008.

55. **McCluney, K. E.** and J.L. Sabo. Water as an ecological currency: water-mediated interactions between crickets and wolf spiders. Ecological Society of America Annual Meeting, San Jose, CA. August 2007.
56. **McCluney, K. E.** and J.L. Sabo. The *water web*: A new approach to community ecology - preliminary identification using stable water isotopes. Ecological Society of America Annual Meeting, Memphis, TN. August 2006.
57. **McCluney, K. E.** and J.L. Sabo. The *water web*: A new approach to community ecology - preliminary identification using stable water isotopes. AZ/NM Wildlife Society and Fisheries Society Joint Meeting, Flagstaff, AZ. February 2006. [Received a best presentation award]
58. **McCluney, K.E.** and J.L. Sabo. Effects of Surface Water Decline on a Streamside Animal Community Using Stable Water Isotopes and a *Water Web* Approach: Preliminary Results. Environmental Protection Agency Graduate Fellowship Conference, Washington, DC. September 2006.

## PROFESSIONAL SERVICE

### *Recent*

- **Co-organizer, Special Session**, The re-eutrophication of Lake Erie, Society for Freshwater Science Annual Meeting, May 2018
- **Peer Review Process:**
  - **Ad-hoc Subject Matter Editor**, *Ecological Applications* (Spring 2017)
  - **Reviewer:**
    - 2018: *Oikos 2x, Aquatic Science, Ecology*
    - 2017: *Bioscience*
    - 2016: *Trends in Ecology and Evolution, Frontiers in Ecology and the Environment, Ecohydrology*
    - 2015: *Science, Ecology, Freshwater Biology, Diversity and Distributions, PLoS One, Ecohydrology*
    - *Past: Freshwater Biology, Diversity and Distributions, River Research and Applications, Conservation Biology, Ecosphere, Rapid Communications in Mass Spectrometry, Ecological Restoration, Ethology, Journal of Zoology, Bioscience, Global Change Biology, Ecological Applications, Ecology, Journal of Insect Science*
- **Supervisory Committee**, Ohio EPA, Definition of Coldwater Stream Habitat (July '17 – Present)
- **Founder and Moderator, Water Sustainability Science, Google+ online community with over 1000 members** (Fall '12 – Present)

## OTHER OUTREACH

- **Supported graduate students in my lab in their outreach activities** (Fall 2014-Present)
- **AIMS summer short-course**; week-long introduction to biology for recipients of a scholarship for first-time and under-represented college students (Summer '18)
- **Participant, STEMPals**; wrote letters with a local 3<sup>rd</sup> grade student (Fall '17 – Present)

- **“Bug” demonstration/talk for 3 Kindergarten classes** (Spring ‘18)
- **Session Organizer, Science Olympiad** (Spring ‘15)
- **Presenter, Research Round Robin, BGSU** (April ‘14)
- **Volunteer, Ask A Biologist, ASU**; award winning outreach website with over 1 million visitors per year (2008-Present)
- **Judge, Central Arizona Regional Science and Engineering Fair** (April ‘06)

## **MEDIA HIGHLIGHTS**

- Blog post about urban hydration paper: <http://ecoipm.org/2017/03/03/new-paper-cities-more-of-the-same-for-people-and-animals/>
- Interviewed on local PBS talk show about research relating to Lake Erie water quality: <http://video.wbgu.org/video/2365840558/>
- Toledo Blade article on research efforts, June 2014: <http://www.toledoblade.com/Education/2014/06/18/BGSU-research-team-studies-insect-damage-to-tree-leaves.html>
- Distillations podcast on water webs, May 2013: <http://www.chemheritage.org/discover/media/distillations/174-water-webs.aspx>
- Sierra Vista Herald article on using isotopes to trace water use by birds and other animals on the San Pedro River, July 2012: <http://www.svherald.com/content/news/2012/07/07/273710>
- Article written about ongoing work relating water and energy demand and supply to species interactions: [http://usatoday30.usatoday.com/news/nation/states/arizona/2010-07-04-421179524\\_x.htm](http://usatoday30.usatoday.com/news/nation/states/arizona/2010-07-04-421179524_x.htm)
- Articles written about McCluney and Sabo 2009 on water determining interaction strength: <http://www.sciencemag.org/content/324/5934/twil.full>  
<http://www.sciencedaily.com/releases/2009/06/090629165112.htm>  
<http://phys.org/news165163648.html>  
<http://esciencenews.com/articles/2009/06/29/water.webs.connecting.spiders.residents.southwest>
- Articles written about mentoring activities: [https://asunews.asu.edu/stories/200705/20070521\\_McCluney.htm](https://asunews.asu.edu/stories/200705/20070521_McCluney.htm)  
[https://sols.asu.edu/sites/default/files/magazines/files/sols\\_vol3\\_no2\\_2007.pdf](https://sols.asu.edu/sites/default/files/magazines/files/sols_vol3_no2_2007.pdf)